6 November 2019

Inquiry into Waste Management and recycling – City of Yarra post presentation submission

This submission is provided in addition and as an addendum to the submission provided in person to the Inquiry on Tuesday 22 October 2019.

In addition to the 2 specific questions taken on notice, it provides additional context and information about Yarra's experience and perspective.

Intro

Yarra City Council has a history and reputation for being leaders in sustainability. Yarra City Council has declared a Climate Emergency, was the first Council to be Carbon Neutral (since 2012), and invests in a wide range of actions and initiatives to ensure long term sustainability. This includes significant engagement with the local community, and working with a range of stakeholders.

Yarra Demographic context

At 19.5 square kilometres, Yarra is one of Australia's **smallest and most densely populated municipalities;** home to an estimated 100,000 residents.
Household make up – 70% MUDs, 50% renters, 19% no car
Significant diversity of culture, language, religion, education and income

City of Yarra Trial

Yarra City Council is currently undertaking a holistic waste trial of 1300 households including single-dwelling and multi-unit developments (MUDs) in Abbotsford. This trial introduces new collection services for glass and for food and garden organics, separating these materials at the point of collection.

Regular household collection in Yarra

- Weekly Recycling
- Weekly Garbage
- Booked Green Waste
- **104** lifts P/A per household

Trial collection Model

- Fortnightly Recycling
- Fortnightly Glass
- Weekly FOGO
- Fortnightly Garbage
- **130** lifts P/A per household

Details of the Yarra trial were discussed at the submission on 22 October 2019. The below provide additional context and information to complement this submission.

Questions taken on notice;

1. Of the overall council budget, what percentage will go to waste management under your proposed model?

City of Yarra does not have a separate waste charge, and will bear the cost of any increase in waste costs, within the State imposed Rate cap.

Annual Yarra Budget Adopted - $189M

Annual cost of waste and recycling

- Current 2 bin system + Booked Green & Hard Waste - $7.3M p.a. (3.96% of total budget)
- Proposed 4 bin system - $9.44M p.a. (based on a 6 year contract) (4.99% of total budget)

It should be noted that the proposed model is subject to Council approval (STCA), and that this excludes a range of other waste services provided by Council currently, including;

- Street litter bin collection and processing
- Cigarette Butts – Recycled from Butt Bins on Street Litter Bins
- Park bin collection and processing
- At call Green waste collection
- At call Hard rubbish collection
- Public drop off centres to capture textiles and household goods for reuse
- Operations and processing from material accepted at the Yarra Recycling centre
- Waste minimisation and education programs
- Organics Recycling – Council Buildings
- Festivals & Events – Waste Management

Whilst there is likely to be a greater cost to move to a 4 bin collection system (STCA), Officers believe there is an opportunity to balance costs by reducing logistics costs (less frequent collections) and diverting material from landfill (less landfill costs).

Officers also believe there is an opportunity, over time, to recover value from material by moving from treating material as waste, to a valuable resource - glass, paper, metals, organics and some plastics have value that can offset the costs of collection. All Governments should support this move as a priority.

2. What is the breakdown of the waste management budget?

| SERVICE | FREQUENCY | LOGISTICS COST P/A | DISPOSAL COSTS P/A | TOTAL COSTS PER ANNUM |
|---|---|---|---|---|
| Garbage Collection | 80 litre weekly | $2,372,663 | $1,486,084 | $3,858,747 |
| Recycling Collection (includes Street Litter Bins) | 120 litre weekly | $2,120,670 | $874,000 | $2,994,670 |
| Booked Green Waste Collection | Booked service | $379,511 | $39,960 | $419,471 |
| Booked Green Waste Collection | Booked service | $800,000 | $100,000 | $900,000 |
| | **TOTALS** | $5,672,844 | $2,500,044 | **$8,172,888** |

Holistic Waste Trial rationale

Collection/processing

- Glass is non-putrescible, so can be stored at low risk - either at the property or elsewhere, potentially leading to less regular collections (reducing truck movements); Glass is considered to be bottles and jars only - no lids.
- A Container Deposit scheme alone will not resolve the recycling crisis, but could be complementary, and is not inconsistent with the proposed 4 bin system.
- Paper can be maintained as a valuable resource and recycled more easily if not impregnated with glass fragments.
- Taking the organics out of the landfill bin provides the opportunity for less regular collections of residual waste (as this will not smell etc).
- Weekly organics collection removes the majority of the putrescible waste; Yarra has modelled a potential additional Nappy run for households as an opt-in service, as a means to address this.
- We believe this (4 bin) model is replicable across Victoria, and potentially easier in less dense parts of the State, where households have greater capacity to store material prior to collection. NB. Macedon Ranges is trialing a 4 bin system w monthly glass collections.

Holistic Waste Trial Statistics

FOGO

Results have shown a decrease to the amount of waste going to landfill by approximately 43%

- Participation: 60% of households per week
- Contamination: ~2%
- Diversion from Commingled Bin - 1.8kg/household per week
- Equates to 6.500t p.a. diverted from landfill stream if extrapolated across Yarra

Glass

Pre-trial, average glass content in the kerbside recycling bin is approximately 37% by weight and approximately 12% by volume. Yarra collects approximately 9,000 tonnes of kerbside recycling each year. Approximately 3,300 tonnes is made up of glass containers.

- Participation: 70% of households per week
- Contamination: 1.5%
- Diversion from Commingled Bin - 40% by weight
- Equates to approximately 3,500 tonnes p.a. if extrapolated for Yarra

Under trial 90% can be recycled as glass (10% balance for asphalt);
Under current comingled approach ~ 45% is recycled for new glass manufacture
Removing glass avoids contaminating the paper, and makes it more recyclable

Paper

- Participation: 85% of households per week
- Contamination: 6% (unsuitable material that cannot be recycled) - .2% glass (94% can be recycled)
- Percentage of Commingled Bin – 60% by weight
- Equates to approximately 5,500 tonnes per annum if extrapolated for Yarra

Multi-Unit developments (MUDs)

- 70% of residents (by population) in Yarra live in MUDs; Most have shared bins
- Holistic Waste Trial covers 32 MUDs - 350 units across the sites - Incl. 2 large MUDs w Anaerobic digester to process food waste (material to YV Water – used to create energy via gasification)
- First step was to review bin infrastructure; amended to maximise recycling
- Significant engagement by site - education and enforcement including non-collection of contaminated bins
- Most sites operating very well following the education
- Has resulted in a drop in contamination to align with levels in single dwellings
- Data from MUD trial will inform future Waste Mgt Plans for future developments

Commercial

- Small commercial sites have been included in the trial to allow data collection and to test the model; Café's etc
- Results have been similar to household kerbside collection
- Anaerobic digesters in MUDS and large commercial, such as Epworth Hospital and Victoria Gardens working well

Holistic Waste Trial Partners and Local processing

- There is a desperate need for local processing of materials
- CoY has partnered with industry – Four Seasons (collector), APR, Alex Fraser and OI to trial a new model - including local processing. We were unable to satisfy ourselves that this could be done via the existing major 'recyclers' in Victoria.
- Recyclable glass transported to the Polytrade glass beneficiation facility which is sorted into colours ready for use by Owens Illinois (OI) to make new glass containers which are sold to local clients (including at the CUB plant in Abbotsford), creating a genuine circular economy.
- Co-mingled recycling - without glass – is sent to Australian Paper Recycling (APR) for processing for the local market.
- FOGO material from the trial area is being transported to VEOLIA Dandenong for processing into compost for local markets.
- There is limited local processing options for plastics (1 'PET' & 2 'HDPE' only). The options for local large scale processing of other plastics is even more limited, and believe there is a need to develop a local market for these.
- To this end, Yarra Council resolved at a recent meeting to investigate options for and advocate for the establishment of a publicly owned recycling processor.

Tracking material and providing certainty of destination and outcome

Councils currently have very limited ability to gain certainty on where the material collected within its boundaries end up.

To ensure maximum resource recovery, there is a need for certainty on what material is being collected and where it is ending up; there needs to be certainty that recyclable products are being recycled for best and maximum value. That can only be achieved by requiring audits as part of contracts and putting a positive obligation on collectors and processors to demonstrate where the material is going, through legislation and through contractual mechanisms. Whilst some Council

currently seek such inclusions in contracts, this is inconsistent and subject to negotiation. Greater certainty is necessary to provide confidence to Councils and the community that there material is being process appropriately.

Supporting increased consistency

There would be value in greater consistency in the way we collect and process material. This includes consistency of infrastructure (bin types and lid colors), material accepted within each, contract specifications, approaches to processing (processors accepting the same material to avoid some accepting material in bags and others not – which ultimately leads to increased contamination).

There is a need for a consistent Statewide education campaign that is based on standard messages focused on waste reduction, behaviour change, material quality, correct use of the kerbside infrastructure and the collection of materials that have end markets. There would also be great value in providing the public with information about what happens to their recycling and how that links to the development of local markets and the Circular Economy.

Other waste minimisation approaches;
Yarra is aware that education and engagement with the community is a core component of reducing waste and increasing recycling, and has a Waste Minimisation Strategy which includes a broad range of actions to achieve this;

- Waste Minimisation Behaviour Change Program (Ed Garden activation, plus additional collateral focusing on textiles, plastic and food)
- Zero Waste Map (Interactive online map and education) - https://www.yarracity.vic.gov.au/services/recycling-and-rubbish/Yarras-Zero-Waste-Map
- Development of the Recycling Centre at Roseneath Street to accept additional streams of materials
- Working with large MUD's to divert recycling out of the landfill stream into the recycling stream and to minimise recycling contamination; and divert organics from landfill and into onsite food waste processors
- Proudly Plastic Free with North Fitzroy Village and initial development of Yarra Leisure going plastic free.
- E-Waste Education Program
- Waste audits and targeted feedback to the community

Procurement targets
The question of procurement targets was raised during our presentation to the Inquiry.

Yarra has a Procurement Policy that promotes sustainability, and has practices that support the use of recycled products.

Procurement to Support the Circular Economy

Procurement of materials with recycled content is a critical component of driving local markets and creating a circular economy for long term sustainability of the recycling industry. It is imperative that Federal Government, State Government and Local Government commit to procurement practices that support products that contain recycled materials generated within

Australia. This will ensure an industry market pull for recycled materials and create a strong sustainable local Circular Economy.

Procurement Policy

It is Council policy to purchase environmentally preferable products and services whenever they meet Council's needs and are available at a competitive price.
Council's sustainable procurement practices demonstrate to the community that Council is:

- stimulating the market for environmentally preferable products;
- taking responsibility for limiting its impact and use of resources;
- enabling improvement of environmental performance of existing providers;
- using financial resources wisely and ethically.

Requirements

When purchasing any goods and services on behalf of Council, staff are responsible for appropriately considering the environmental impact of those goods and services and factoring this into their decision-making. This means that staff are empowered and expected to give priority to environmentally preferable choices, as long those choices meet Council's needs in terms of performance, fit for purpose, the other requirements of this policy (e.g. meet ethical standards outlined in the Policy), and value for money. Value for money includes both the monetary costs and non-monetary impacts over the whole life of the product or service.

Specifically Council officers must seek products, services and providers that:

- reduce the consumption of resources and minimise waste (e.g. through reuse, recycling, the acquisition of products manufactured from recycled materials and effective waste avoidance and management);
- reduce greenhouse emissions (e.g. through energy efficiency, renewable energy, carbon neutrality and offsets, local purchasing, and emissions management);
- reduce other emissions (e.g. avoid toxic materials; avoid or limit emissions to soil, air or water; seek organic or otherwise sustainably produced options);
- reduce water use (e.g. through water conservation, water quality and emissions management, Water Sensitive Urban Design);
- avoids impacts to habitat and biodiversity (e.g. certified sustainable forestry products, palm-oil free);
- reduce the impact of buildings (e.g. through Environmentally Sustainable Design as identified in the Green Building Green Star Rating tool);
- meet and where possible exceed recognised environmental standards throughout their supply chains (e.g. high Energy, Water and Green Vehicle Star Ratings; Eco-buy preferred; ISO-accredited; Greenhouse Friendly) and demonstrate good environmental practice (e.g. through effective Environmental Management Plans, accreditation, certification, voluntary memberships, providing examples of good practice in operations).
- A range of tools, training and resources have been developed to assist staff to meet these requirements, and are available in the Procurement Manual.

Special mechanisms - procurement

In recognition of the fact that environmentally preferable options sometimes come at a premium, and yet may offer superior value for money, there are also two particular operational mechanisms

designed to empower staff and managers to implement the preferencing of environmentally responsible products and services.
(i) The 10% Price Preference
Whenever a product or service provides the most environmentally preferable option, Staff can and should consider the most environmentally preferable option(s) to be 10% less than the purchase price.
(ii) The 10% Sustainability Weighting
When developing assessment criteria for contracts and tenders, it is expected that Sustainability will be included as one of the criteria and that its weighting will be 10%. If there is a reason why this is not applicable or workable, or does not provide sufficient value for money, this must be detailed in the tender report or Quotation Acceptance Form.

Examples of sustainability in procurement
Yarra uses between 10-20% of recycled material in the construction of Roads and Footpaths.
Yarra also uses products such as Replas that use recycled plastic content.

SV Waste Management Guidelines

Yarra Waste Management practices are in accord with the SV Waste Management Guidelines. Multi-Unit Developments in Yarra require an approved Waste Management Plan as part of the planning permit. In approving the Waste Management Plans Council has a focus on bin room design, storage capacity to reduce vehicle movements, waste minimisation, recycling, waste, appropriate waste infrastructure, education, ingress & egress, collection requirements, safety and the management of all waste streams generated from the site.

Ultimately the focus is to influence the developers so that best practice waste management is designed into the building rather than treated as an afterthought. Consistency across Victoria in the approach to planning and design is critical.