

1. E-waste Management

SF/147

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PURPOSE OF REPORT

This report outlines the impact on the Council's waste management operations of the Victorian Government's commitment in 2014 to ban electronic e-waste from landfill.

BACKGROUND

'E-waste' describes waste electrical or electronic equipment, or anything with a power cord or battery at the end of its useful life. It includes a range of items used and discarded at work and at home. It contains both hazardous materials and valuable materials.

Categories of e-waste include:

- Large household appliances
- TV's, computers and computer peripherals
- Small household appliance, tools, toys, and other end-of-life consumer e-goods
- Lighting and batteries
- Solar (photovoltaic) panels
- Mobile phones and accessories

Available data suggests that e-waste is also growing three times faster than general municipal waste in Australia putting pressure on waste management infrastructure and the environment. In many instances this material is landfilled; either through the kerbside collection system or disposal with other materials.

Analysis performed on the flow of e-waste in Victoria projects the amount of e-waste generated in Victoria will increase from 109,000 tonnes in 2015 to approximately 256,000 tonnes in 2035. Notwithstanding this growth, in tonnage the waste is still less than 2% of all waste.

The ban is due to be implemented from July 2018; however it is recognised that full compliance at all sites may not be possible in the first 12 months. Sites will need to be able to demonstrate to EPA how they are working to full compliance.

A summary of the State's Policy Impact Assessment is provided in **Appendix 1**.

The full document is available for Councillors in Dropbox or on the web at https://engage.vic.gov.au/application/files/9315/0837/1389/FINAL_E-waste_PIA_v3.pdf

DISCUSSION

E-waste ranges from large items such as fridges and washing machines through to electric toothbrushes and children's toys. At the Benalla Landfill and Resource Recovery Centre a range of e-waste is collected and materials recovered. These include:

- Computers, televisions and printers
- Other household equipment such as fans, vacuum cleaners and hairdryers
- Whitegoods – fridges, washing machines and other large appliances (Note these are currently deemed as steel recycling)

The Council has been collecting these items for more than five years; with e-waste collection commencing with a trial run between September 2011 and February 2012. At that time vouchers were issued to all ratepayers to promote the new service. The introduction of the service also coincided with the transition from analogue to digital televisions.

By issuing two free - waste vouchers to each ratepayer officers were able to collect 'real world' data on the actual levels of service usage for the new recycling initiative as limited evidence was available on which to evaluate consumer behaviour or expectations. At that time it was estimated that approximately 25 tonnes of e-waste was generated by the Benalla community each year.

From the trial a total of 843 items (35tonnes) were collected. The majority of these items were of the medium size items including, printers, faxes, kettles, VCR/DVD players and computer monitors. It was noted that the free vouchers were likely to increase initial results as people used them to clean out collected materials.

Since the commencement of the service five years ago the Council has collected almost 3,000 items (excluding whitegoods currently collected as steel):

Table 1: E-waste items collected since 2012/13

Year	# items collected
2012/13	382
2013/14	909
2014/15	886
2015/16	535
2016/17	275
Total	2,987

In 2016/17 the BLRRC collected the following volumes of these materials:

- Approximately 275 electronic items totalling 10.4 tonnes; and
- Approximately 334 tonnes of scrap metal; being a combination of both e-waste and construction materials.

Storage facilities

The proposed new state regulations will require some changes to the collection and storage of e-waste. Currently at the BLRRC the materials are collected in open bins and collections arranged when required through a shared service contract with four other north east Councils. Collected materials are exposed to the weather and have no collection system for any runoff.

Under the proposed changes those specified materials must be collected in a location with:

- a) Impermeable surfaces
- b) Waterproof coverings
- c) Measures to prevent potentially hazardous material entering storm water or drainage

Compliance with Australian and New Zealand standard for the collection, storage, transport and treatment of end-of-life electrical and electronic equipment will be enshrined in the new waste management policy (AS/NZS 5377: 2013).

To achieve this standard improvements will be required at the site; either by way of construction of a shed with a concrete floor and separated drainage system or through the use of alternate collection devices such as shipping containers or similar.

State funding support

The state government has allocated \$15 million to design and implement a program to upgrade Victoria's e-waste collection network, increase community access to e-waste disposal points and expand capacity to receive and safely manage increasing volumes of e-waste. The program will commence with an assessment of the current e-waste collection network across Victoria to identify priority collection points and gaps in e-waste collection capacity, and gauge compliance with the new regulatory requirements. The findings from the assessment will inform how and where the program funding will then be prioritized.

It is understood from a workshop with state agencies in mid-November 2017 that funding will be allocated to the Council to improve its current arrangements. Details of the extent of funds is not yet confirmed; but is expected in February 2018. If the Council is not successful in receiving funding to upgrade its infrastructure residents and businesses will be forced to take materials elsewhere for disposal thus reducing the likely volumes and effectiveness of the ban.

Community understanding of what is e-waste

One of the challenges to be overcome to ensure the success of this change is bringing the term e-waste into the broader community consciousness. Recent survey work indicates that in Victoria found that most residents don't know what "e-waste" is let alone how to safely dispose of it.

The proposed ban introduction allocates \$1.5million to a three-year state-wide education and awareness campaign that builds knowledge about what e-waste is, provides information on what people can do with e-waste, and highlights the environmental benefits of reusing, donating, repairing or recycling e-waste.

Given the low level of current knowledge in the community on e-waste the available funding will need to be supported by efforts by Council to use its various channels to the community to promote the available materials. It is expected that this could be accomplished by using state marketing materials in the Community Newsletter, in the Council column and on the web site. Further the waste app being finalised will allow the Council to promote good waste management practices to those who use it.

Industry capacity

The largest remaining unknown is in relation to the readiness and capacity of e-waste re-processors to deal with a significant and sustained increase in e-waste feedstock. The recycling market is volatile and influenced by a range of global factors. China's recent decision to ban certain waste product importation highlights the exposure of the recycling industry to factors outside of local control.

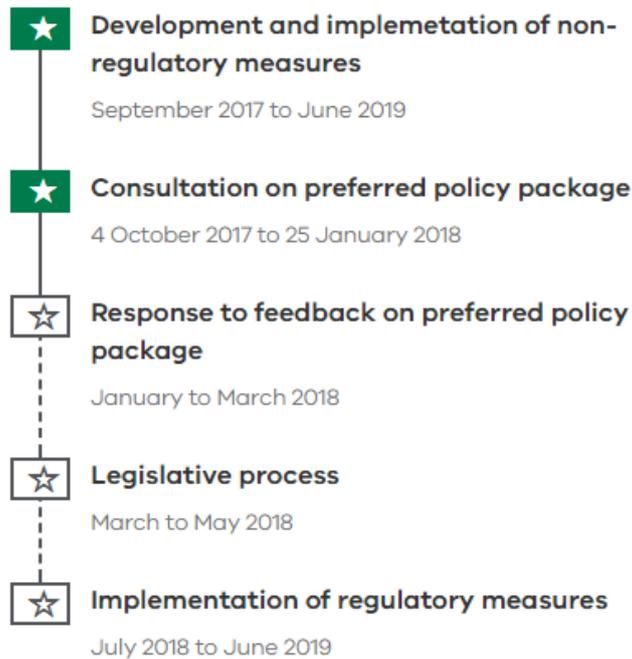
As the collectors of e-waste, the Council (and therefore ratepayers) will carry a significant amount of risk if the market does weaken and collected e-waste is unable to be handled by re-processors at a reasonable cost. State investment in market development that increases both the capacity to process and re-use the collected material is critical to the success and support of this initiative. It is recommended that the Council submission to the current consultation highlight this aspect as essential to community participation and acceptance.

LEGAL IMPLICATIONS

Unless there is a substantive change in state direction the changes to collection and handling will need to be progressively implemented from 1 July 2018. It is unclear at this time precisely how long the Council will have to be compliant with AS 53377-2013 and what funding, if any, the Council will receive to upgrade its facilities to be compliant.

COMMUNITY ENGAGEMENT

The state government has provided the opportunity for community to comment on the proposed ban through the use of its *Engage Victoria* website. The timeline for the development and implementation of the ban is as follows:



Comments from the Council and the community are due by 25 January 2018.

COUNCIL PLAN 2017-2021 IMPLICATIONS

Sustainable Environment

- *Improve efficiencies at the Benalla Landfill and Resource Recovery Centre.*
- *Establish a transfer station at the Benalla Landfill and Resource Recovery Centre*
- *Review, adopt and commence implementation of the Benalla Landfill and Resource Recovery Centre rehabilitation strategy*

ENVIRONMENTAL STRATEGY 2016-2020 IMPLICATIONS

Strategic Direction 3 - Efficient management of waste

- *Council is working collaboratively with other Councils and government agencies to implement new waste solutions.*
- *Waste management services are strategic, designed to meet the needs of urban and rural residents, business and industry, and addresses public spaces as well as residential and commercial areas. (includes e-waste, hard waste, recycling, organics, hazardous waste and waste to landfill)*
- *The community is educated about responsible waste disposal and minimisation in residences, businesses, and public areas.*

FINANCIAL IMPLICATIONS

Waste management and resource recovery is are funded from the landfill operating budget. In 2016/17 the Council spent \$22,000 in the transport and reprocessing of e-waste. It must be noted that this is the net cost after income for receiving these items and excludes the proportion of materials currently processed as steel.

Recommendation:

That the Planning and Development Committee acting under its delegated authority of the Council outline its in-principle support for the proposed e-waste ban subject to financial assistance to upgrade its e-waste collection infrastructure and assurance of an on-going commitment from the state to support the development that increases both the capacity to process materials recovered and re-use the collected material to ensure public confidence.