



# Resource Recovery & Waste Management Strategy 2019-2024

Version: 0.7



Photo: Kerbside bins Source: Halve Waste

*Indigo Shire Council's Resource Recovery and Waste Management Strategy outlines sustainable waste management and resource recovery strategies for the next five years.*

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# Introduction

## Purpose and scope of the strategy

This strategy has been developed to guide Indigo Shire Council's (ISC) waste management and resource recovery activities over the next five years. A background service review report accompanies this strategy that includes further context and discussion, community consultation results, and data analysis for each service and improvement opportunity.

The scope of this strategy includes all waste services, including potential additional waste services that are not currently offered. The purpose of this strategy is to steer future waste and resource recovery efforts, and to consult the community about how ISC intends to respond to current and emerging issues in waste and resource recovery.

## Vision, objectives and measures

***Vision: Indigo Shire Council and the community working together as leaders in resource recovery and landfill minimisation.***

### Primary Objective

Reduce total volume of waste disposed of to landfill (per capita).

### Secondary Objectives

- Encourage innovation and continual improvement in waste services.
- Prioritise the waste management hierarchy when making decisions about waste management.
- Engage the community to achieve behaviour change that reduces waste generation and increases resource recovery.
- Continually improve on diversion and contamination rates.
- Provide an efficient and cost-effective service that meets the community's needs (most of the community's needs, most of the time).
- Leverage partnerships and grant funding to maximise our efforts.
- Plan for future waste and resource recovery infrastructure and service needs of the community.
- Responsibly manage waste facilities to minimise the risk of pollution.

Targets and indicators to support these objectives are listed in Table 1.

**Table 1: Targets and Indicators**

Indicator	Target	How measured
<b>Total waste to landfill is reduced annually (per capita)</b>	<b>0.01t/person/yr</b>	Waste data, census data. (2018 data baseline)
<b>Percentage diversion from landfill is increased year by year (2018 data baseline).</b>	<b>2% point improvement annually</b>	Waste data (2018 data baseline)
<b>Percentage contamination of recyclables is decreased year by year.</b>	<b>1% point improvement annually</b>	Cleanaway quarterly reports (2018 data baseline)
<b>Customer satisfaction with waste services increases.</b>	-	Community engagement survey – repeated when subsequent strategies are developed.

## Council's role in waste management

The *Local Government Act 1989* outlines the roles and responsibilities of Victorian councils, with additional waste management responsibilities set out in the *Public Health and Wellbeing Act 2008*. These responsibilities include maintaining the municipality in a clean and sanitary condition, planning for and providing community services and infrastructure, ensuring that services are delivered in accordance with best value principles, and striving for continuous improvement in service delivery.

The Victorian Government established the Local Government Performance Reporting Framework (LGPRF) in 2014, which is a mandatory system for consistent local government reporting across the state. Councils are required to measure and report annually on 66 performance measures set out in the framework, including waste management services. Council performance levels can be viewed and compared with other councils via the Know Your Council website:

<https://knowyourcouncil.vic.gov.au/>.

Local government's waste responsibilities in Australia is generally limited to municipal waste, with little or no regulatory control over waste generated from commercial and industrial sources. Businesses are not required to report any waste information to governments at any level. This makes it difficult for councils to influence commercial waste generation and reduction or to collect data about waste generation from the commercial sector. The majority of commercial and industrial waste is managed by private operators. Some smaller businesses in the Shire have opted in to ISC's kerbside service.

## Legislative and Policy context

ISC acts within a wider policy framework for waste management. A range of policies, plans and regulations at regional, state and national levels have been considered in the development of this strategy. An overview of the framework for ISC within the Victorian and Commonwealth context is provided in Figure 1. Key policies and regulations are summarised below.

### Commonwealth legislation and policy

- **The National Waste Policy: Less Waste, More Resources** is the overarching policy for waste management and resource recovery in Australia and it complements other government action to deliver greenhouse gas emission reductions, reduce energy and water use, support jobs and invest in future long term economic growth. The Policy was updated in 2018 with a strong emphasis of the need to transition to a circular economy.
- **National Environment Protection Measures (NEPMs)** set the basis for agreed national objectives for protecting or managing aspects of the environment (and are enforced through state legislation). Waste-related NEPMs currently in place address used packaging materials and the movement of hazardous waste between states/territories.
- **National product stewardship arrangements** (between government and industry) are in place for televisions and computers, end-of-life tyres, waste oil, mobile phones and other products. Future arrangements for other materials are likely to be established, e.g. household batteries.

### *What do we mean by circular economy?*

*The circular economy concept is gaining increasing currency in waste policy, which envisages keeping products, components, and materials at their highest utility and value at all times. This contrasts with the 'take, make and dispose' economic model, which relies on plentiful, cheap and easily accessible materials and energy. The role of local governments in the circular economy is not only as a producer, collector and transporter of waste, but importantly, as a purchaser of domestically recycled products.*

## Victorian legislation and policy

The **Environment Protection Act 1970 (EP Act)** is the key legislative mechanism for environmental protection in Victoria, and includes:

- The Victorian waste and resource recovery planning framework
- The establishment of landfill levies and industrial waste policies
- Subordinate regulations for waste and recycling facilities, including the Waste Management Policy (Combustible Recyclable and Waste Materials)
- The waste management hierarchy
- Provision for regional waste and resource recovery groups – ISC is a member of NEWRRG (the North East Waste and Resource Recovery Group)
- Scope for the development of state and regional waste plans - councils are required to perform waste management functions that are consistent with Regional Waste and Resource Recovery Implementation Plans (such as the NEWRRG Implementation Plan).

### *Waste and climate change*

*Waste decomposing in landfill generates methane which is a greenhouse gas with 21 times the warming effect of carbon dioxide. Transport and processing of recyclables also creates emissions. Operating higher up on the waste hierarchy not only reduces waste but also reduces greenhouse gas emissions.*

There are additional waste issues currently under consideration which may affect future waste management in the region:

- The Victorian Government has committed to banning e-waste from landfills from July 2019.
- The Victorian Government has committed to introducing a single-use plastic shopping bag ban by the end of 2019.
- With recent regulations announced by all other states, Victoria currently remains the only state in Australia without legislation planned to introduce a deposit on beverage containers. There may be future pressure on the Victorian Government to join a national scheme to enact this.

## Recycling Industry Strategic Plan (RISP)

Since 2017, the recycling industry has been subject to significant disruption and challenges, as a result of restrictions imposed by other countries that previously processed much of Australia's recycling. The Victorian Government responded in July 2018 with the RISP, aiming to build a resilient recycling sector that is part of a circular economy and characterised by:

- Adaptability to market disruptions and opportunities;
- Cost-effective, safe and reliable household services;
- High recovery rates; and
- Long-term supply of recycled materials is aligned with demand from downstream markets and uses.

The RISP commits to developing a circular economy policy by 2020, which will build on Victoria's existing waste and resource recovery strategies, with a focus on waste minimisation and sustainable production and consumption.

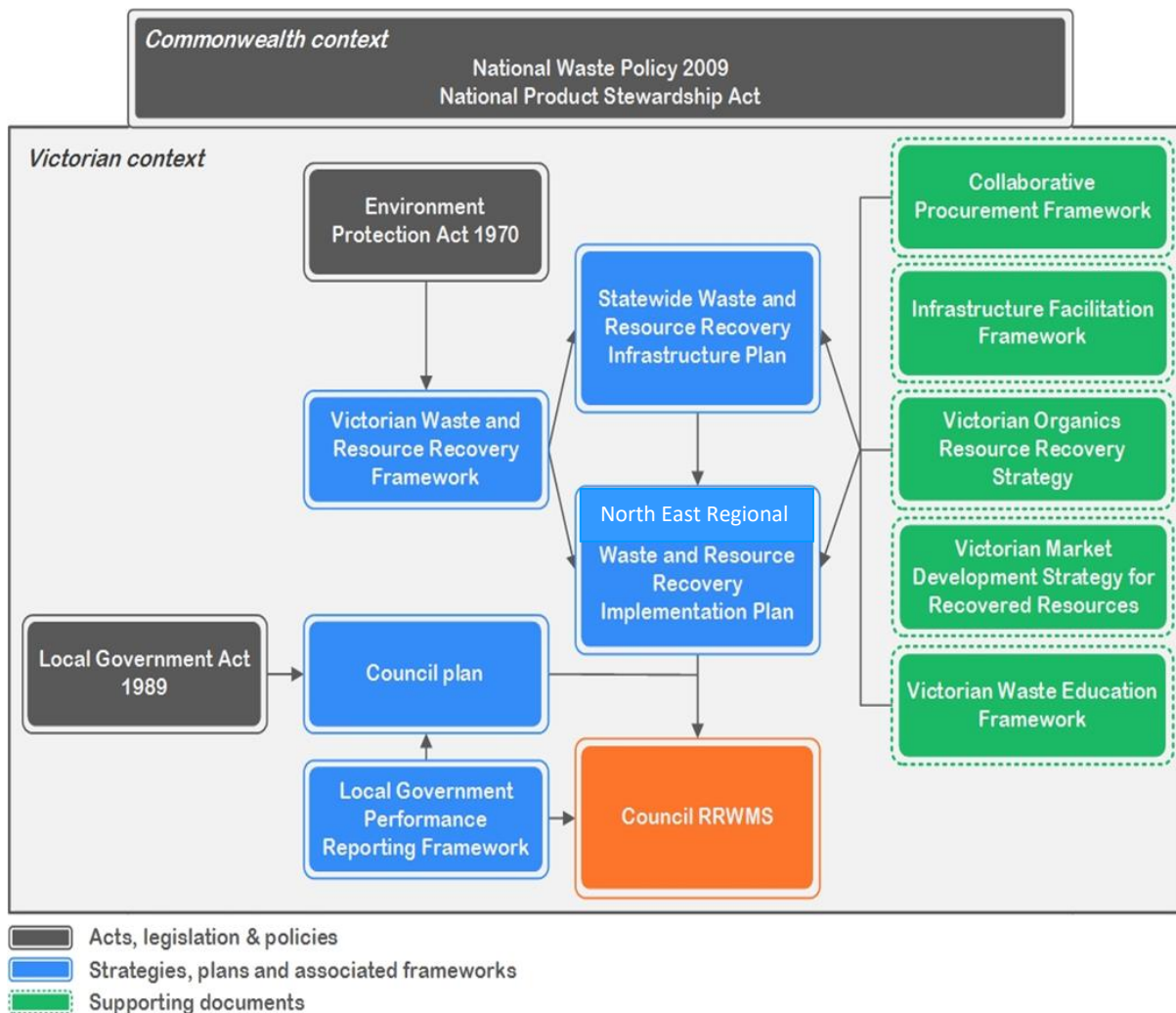
## Regional Waste and Resource Recovery Implementation Plans

The North East Waste and Resource Recovery Implementation Plan (NEWRRIP) was developed by the North East Waste and Resource Recovery Group (NEWRRG) in 2017. The plan identifies the infrastructure capacity needs and priorities of the region and shares the strategic directions and visions of the State Infrastructure Plan. Regional strategic objectives are to:

- Achieve behaviour change that reduces waste generation and increases resource recovery
- Encourage innovative and cost-effective ways to increase resource recovery

- Identify and establish industry relationships to build market opportunities to maximise resource recovery
- Facilitate the aggregation of services through joint procurement to maximise resource recovery and cost effectiveness
- Plan for future waste and resource recovery infrastructure and service needs for the region. To comply with the EP Act, Councils need to adopt these (or similar) strategic waste objectives to ensure Council waste management functions are consistent with the regional plan.

**Figure 1: Legislative and Policy Context**



## Council Plans and Policies

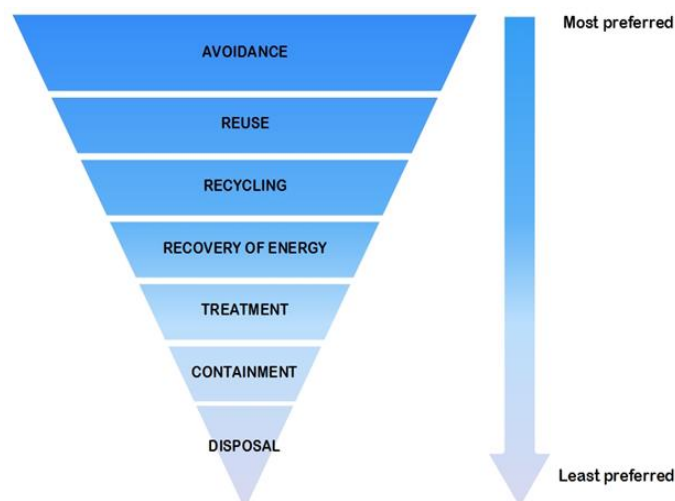
Table 2 summarises ISC Plans, Strategies and Policies that interact with or direct this RRWMS.

**Table 2: Applicable ISC Plans, Strategies and Policies**

Plan, Strategy or Policy	Strategic objectives and actions relating to waste
<b>The Indigo Shire Council Plan 2017-21</b>	<ul style="list-style-type: none"> <li>To support initiatives and projects that reduce consumption of resources.</li> <li>Develop a waste management strategy.</li> <li>Implement Plastic-wise Indigo policy and programs.</li> </ul>
<b>Indigo Shire Environment Strategy 2019</b>	<ul style="list-style-type: none"> <li>Develop a detailed waste management plan to meet the objectives of increasing diversion percentages from landfill, as well as decreasing total waste to landfill.</li> <li>Reduce emissions from ISC operations to net zero by 2035.</li> </ul>
<b>Plasticwise Policy 2018</b>	<ul style="list-style-type: none"> <li>To reduce, and eventually eliminate single use plastics from within council operations and at council events.</li> <li>A commitment to advocacy and educating and promoting voluntary adoption of the Policy in the community.</li> </ul>
<b>Climate Change Policy 2019</b>	<ul style="list-style-type: none"> <li>Viewing all strategic and operational decisions in the context of climate change, by verifying emissions reductions opportunities have been considered for all applicable decisions.</li> <li>Actively promoting and participating in the circular economy, to reduce the contribution to climate change from Indigo Shire's waste generation.</li> <li>Support the community to reduce emissions and adapt to a changing climate.</li> </ul>

## Waste management hierarchy

The waste management hierarchy is the key principle of waste management policies in Australia and is included in the EP Act. The hierarchy establishes the order of preference for waste management, where avoidance is the most preferred option and disposal the least preferred option as shown in Figure 2. The hierarchy shows that while recycling is a good outcome, it is not the most preferred, and greater focus should be placed on avoidance and reuse. Not only is this a better outcome for the environment, but it also has financial benefits. Appropriate market signals are already in place, with the costs of landfilling being the highest per tonne, recycling and composting are cheaper than landfilling per tonne, but still incur a significant cost.



**Figure 2: Waste hierarchy**

Waste avoidance and minimisation are the most important elements of the waste management hierarchy and also present some of the toughest challenges. Unfortunately, in spite of growing awareness in the community about the need to reduce waste, waste generation rates have continued to rise (beyond linearly with population growth).

Additionally, recycling of items collected is largely within the control of local governments, and there is an established history of attempting to educate and influence the community's behaviour and practices regarding recycling. Avoidance and reuse, by contrast, is largely out of local government's control, and the community is less accustomed to education and influence regarding these behaviours.

## Where are we now?

### Council waste services – summary

Indigo Shire Council is committed to providing effective and cost-efficient waste and recycling services to the community, with a focus on the waste management hierarchy. The current waste services provided by Indigo Shire Council are:

#### **Kerbside collection**

Through a regional contracting arrangement, kerbside collection of waste, recycling and organics (in some areas) is undertaken.

#### **Public place (street and park) waste and recycling bins**

ISC offers waste and recycling bins in town centres and parks.

#### **Waste transfer stations**

Indigo Shire has two transfer stations. Beechworth is open Friday to Monday inclusive from 1-5pm. Rutherglen is open Friday to Sunday inclusive from 1-5pm. The transfer stations accept a broad range of domestic items, with the majority of categories accepted free of charge.

#### **Hard waste vouchers and weekends**

ISC provides an annual voucher with the rates notice for free disposal of up to 1m<sup>3</sup> of hard waste at the transfer stations. Council has also run hard waste disposal weekends at additional locations throughout the Shire.

#### **Green waste weekends**

ISC offers two weekends per year where residents can dispose of green waste for free at the transfer stations, as well as additional locations.

#### **Illegal dumping collections/enforcement**

When illegal dumping is reported, ISC staff investigate the event to identify the involved person where possible, and collect and dispose of the items appropriately.

#### **Litter including dog waste bags**

ISC towns' team manage litter in the town centre areas. Public place bins are provided to reduce litter. Dog waste bags and bins have recently been installed in some parks and key dog walking areas. Street sweeping occurs in towns as required, mainly to collect autumn leaves that may affect drainage.

#### **Event waste management**

ISC supports community events with the provision of bins and a collection service. This process is linked to the IEDTAC (Indigo Economic Development and Tourism Advisory Committee) grants program. Templates for event waste management plans and other guidance is also provided.



## Waste generation and material recovery

This section summarises the current status and trends in waste generation and materials recovery.

- **Garbage** is collected and taken directly to the landfill at the Albury Waste Management Centre (AWMC), with volumes calculated by a weighbridge.
- **Recyclables** are taken to Cleanaway's Materials Recovery Facility (MRF) in Albury, sorted, processed and bailed, before on-selling to dynamic (largely overseas) markets. Contaminants in the recycling bin are manually removed by operators at the MRF, as well as throughout the conveyer process.
- **Organics** are initially taken to AWMC for screening, then transported to an industrial composting facility.

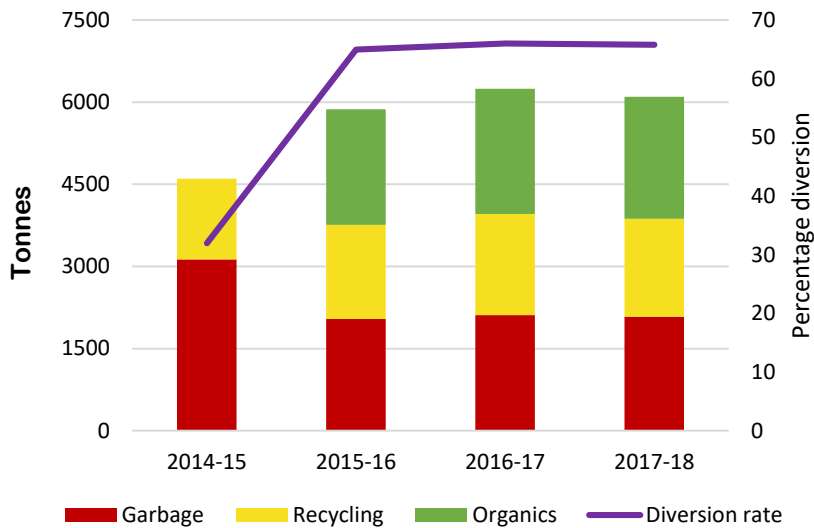
### *Organics composting*

*Some respondents in the community survey were concerned that the FOGO waste is not processed locally. Cleanaway have tried unsuccessfully for several years to establish an organics processing facility within the region, and continue to pursue more local opportunities. The greenhouse gas emissions benefits of transporting the FOGO so it can be composted, compared with travelling less distance to be landfilled, are very favourable. The trucks would have to travel all the way around Australia to generate the same emissions as landfilling would create compared with composting (in Shepparton or Wagga Wagga). A new organics composting facility is being developed by Rural City of Wangaratta, which may provide a future option for closer composting of FOGO.*



**Photo: FOGO waste collection**  
**Source: Halve Waste**

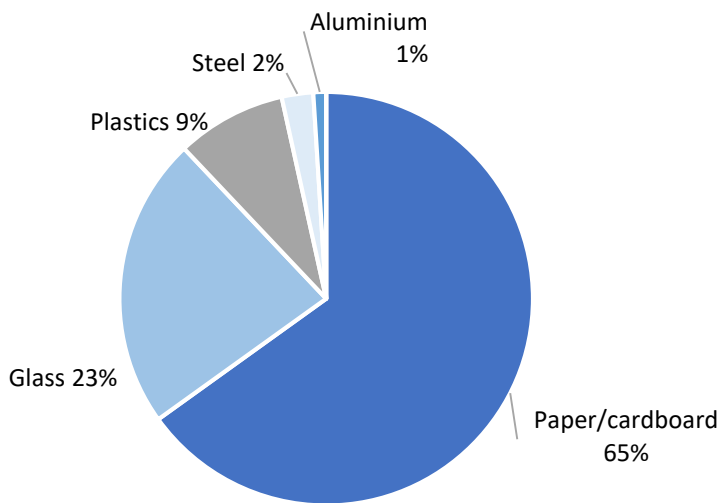
**Figure 3: Kerbside waste, recycling and organics generation 2015-18**



**Key Points:**

- Organics collection service introduced 2015, which triggered a significant increase in % diversion from landfill.
- Diversion rate from landfill has been consistent over the last three years at approximately 66%.
- Recycling and landfill volumes remain consistent.
- Low rates of contamination (~10% for recycling) and <1% for organics)

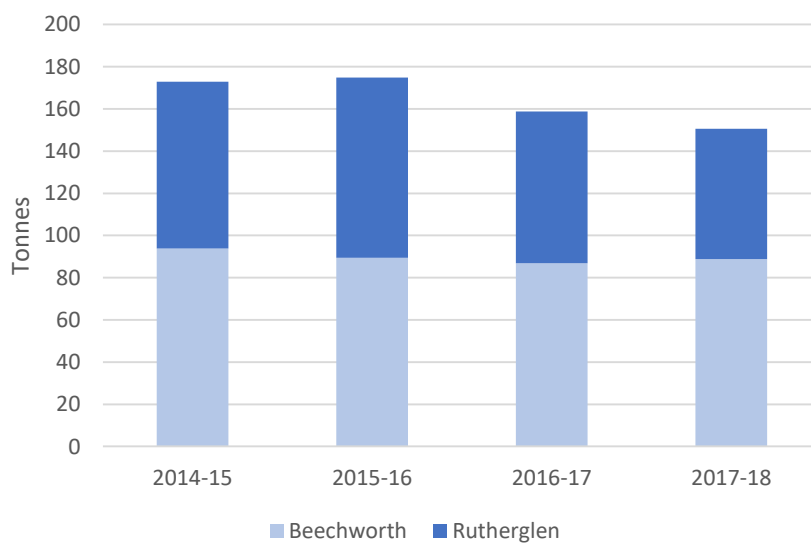
**Figure 4: Materials generated in kerbside recycling**



**Key Points:**

- Composition consistent over time.
- Contamination is approximately 10% (not shown)
- Primary contaminants: soft plastics, hazardous waste.
- Economic challenges with recycling glass currently (but it is not landfilled).

**Figure 5: Waste to landfill volumes collected at WTS**



**Key points:**

- Landfill volumes trending slightly downwards at Rutherglen.
- The community survey indicated that some customers are concerned that items collected at the WTS aren't recycled. In fact, most items are recycled, only the household (hard) waste collected in the skip bin is not.

## Recycling and waste disposal facilities

ISC operates waste transfer stations at Beechworth and Rutherglen, which are open 1-5pm Friday to Monday inclusive (Rutherglen not open on Mondays). The transfer stations operate on public holidays, except for Christmas day, Good Friday and Anzac Day. The facilities are closed on CFA declared code red days, but operate irrespective of any other weather conditions. Both transfer stations operate over the top of the former landfill, which has been progressively covered with clean fill. Commercial and industrial waste are not accepted, including plaster board, paint, concrete, tiles, insulation, cleaning solvents, dead animals, herbicides, pesticides, infectious waste, liquid waste, chemicals and asbestos. Only hard waste that is put in the skip bin at the transfer stations is disposed of to landfill, all other items are recycled.

Sustainability Victoria (SV) offer regional collection sites for some hazardous materials (e.g. household batteries, fluorescent tubes), and annual collections for higher risk items and chemicals. The locations of these events vary.

ISC does not operate a landfill, but has several former landfills. The environmental risks posed by a landfill site continue to be evident for a long time after waste has ceased to be accepted. There are five closed unlicensed landfills that ISC is legislatively responsible for under the EP Act 1970. All of the former landfills are situated on DELWP land, for which ISC pays an annual licence fee. Licence fees have increased significantly over the past two years, in some cases doubling. ISC undertakes regular visual inspection of the former landfills, as well as undertaking groundwater and landfill gas monitoring every second year. Council has provided for the cost of rehabilitating closed landfills in its balance sheet.

## Financials

The current and historical financial information for ISC waste services is shown in Table 3. In 2018-19, the Victorian Ombudsman considered ISC's administration of the waste budget in accordance with the Local Government Act. The Ombudsman concluded ISC has been transparent in charging waste management charges, and that funds associated with the environmental management contribution are supporting the reasonable costs of facilitating relating services. Overall, ISC waste budget is in deficit.

**Table 3: Waste management financial data**

Account Group	2014/15	2015/16	2016/17	2017/18	2018/19
<b>Income</b>					
Service charges	1,872,881	2,131,602	2,224,147	2,249,551	2,416,284
Environmental management contribution	509,094	539,997	560,931	574,954	587,890
Other revenue	50,823	49,228	73,613	47,460	55,612
<b>Total Income</b>	<b>2,432,798</b>	<b>2,720,828</b>	<b>2,858,691</b>	<b>2,871,965</b>	<b>3,059,786</b>
<b>Expense</b>					
Contract services	1,131,881	1,389,102	1,414,248	1,446,809	1,698,012
Employee Costs	166,529	175,098	177,772	178,607	184,090
Other operating expenses	402,545	452,749	514,388	516,784	593,756
Corporate overheads (16% of expenditure)+	269,668	319,765	333,948	339,622	392,520
Event-related waste removal	1,380	2,564	1,416	1,500	1,500
Street Sweeping (Contract service & est. staff)	51,562	52,593	53,645	54,718	55,812
Landfill rehabilitation	0	2,336,480	185,610	195,708	199,452
<b>Total Expense</b>	<b>2,023,565</b>	<b>4,728,351</b>	<b>2,681,028</b>	<b>2,733,748</b>	<b>3,125,142</b>
<b>Surplus / (Deficit)*</b>	<b>409,232</b>	<b>(2,007,523)</b>	<b>177,663</b>	<b>138,217</b>	<b>(65,356)</b>

\* For both actual and budget a positive net result means a favourable contribution to Council, which is referred to as a Surplus and a negative net result means a unfavourable contribution to Council, which is referred to as a Deficit.

+ Corporate overheads are not allocated for actuals and budget but the allocation is to show an indication of Corporate costs used to assist with the delivery of the service

## Fee structure

The survey results showed there is frustration from customers about the fees charged at the WTS. ISC usually incurs a cost to recycle items, which is comprised of collection, transport and processing fees. This cost is in some cases passed onto the customer (i.e. mattresses and green waste), however some recyclables that incur a cost to ISC remain free of charge to the customer (i.e. polystyrene, waste oil and batteries). Scrap metal is the only item collected at the WTS that provides more income than expense when recycled.

The concept of a "user pays" fee structure means the user of the service pays the full cost of the service/goods. At the other end of the spectrum, rates would cover all aspects of WTS operations and

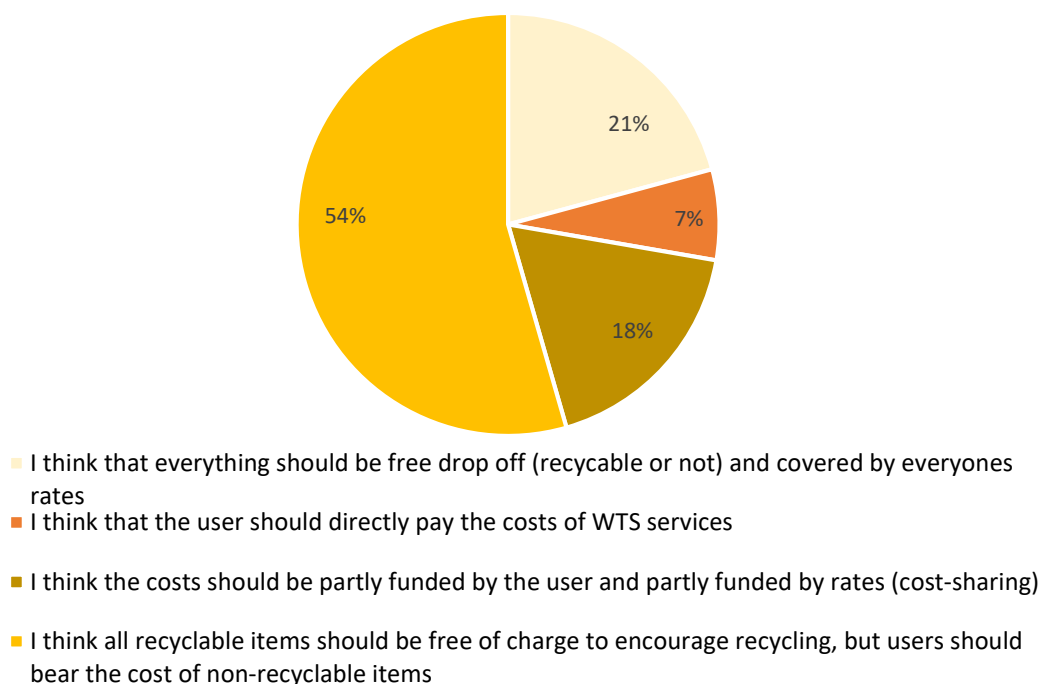
recycling, irrespective of whether the rate payer uses the WTS service or not. The current operating model of the WTSs is more towards the user pays model, but does not entirely align with this because many items don't attract a fee.

Another approach to fee structure is to incentivise positive waste reduction behaviours, and create a dis-incentive for landfill generation, i.e. highest fees for hard household waste that is landfilled, and reduced or no fees for recyclable items.

The waste survey aimed to gain community opinions on these pricing models. A small minority supported the user pays fee structure, with most respondents agreeing with an incentive-model (Figure 6). The cost impact of implementing such a model would be significant – with approximately \$50,000<sup>1</sup> of lost revenue per year as a result of fees being waived for mattresses and other soft furnishings, green and timber waste and tyres. Apart from the increased cost, this model does not incentivise actions higher up on the waste hierarchy, namely avoidance and reduction. Without a cost to take these items to the WTS for recycling, members of the community may be more likely to increase their consumption and disposal of these items (e.g. mattresses and furniture).

Therefore, ISC's position is to have a hybrid fee structure in which fees are waived for recyclable items that don't incur a large cost to process, while fees are passed onto customers to items that are expensive to recycle. This goes part-way to helping incentivise waste avoidance and minimisation, and also enables WTS to continue to be viable. The alternative of waiving all fees for recyclable items is currently too costly. Actions identified in this strategy include further education to the community on how to reduce their charges at the WTS.

**Figure 6: Community views on potential WTS fee structures**



<sup>1</sup> Based on 2017-18 WTS records of volumes of soft furnishings, mattresses, tyres and green waste, and the current fees for these items – both transfer stations combined.

## Performance and achievements

Indigo Shire has historically performed well in waste, with achievements including having the third highest landfill diversion rate in the State (at 66%). ISC is fortunate to have strong partnerships via NEWRRG, and an engaged community. This positions ISC well to meet the future challenges.

Recent achievements:

- Introduction of the FOGO (food organics and garden organics) service in 2015, as one of the first councils in the state to do so.
- 66% of our waste is diverted from landfill – as a result of the FOGO bins and the community's recycling efforts.
- Very low contamination rates in kerbside organics and recycling bins.
- Grants obtained to improve facilities at the waste transfer stations, including construction of e-waste sheds.
- Adopted a Plasticwise Policy in 2018, in response to community aspirations, as one of the first Councils in the state to do so.

## Community and partnerships

ISC's partnerships and community are some of our greatest strengths in achieving objectives of this Strategy.

### *Partnerships*

ISC is a member council of the North East Waste and Resource Recovery Group (NEWRRG). This membership has multiple benefits:

- Direct linkage to State Government waste agencies;
- Collaborative, group-led procurement for transfer station collection contracts;
- Annual budget for audits, studies and improvement projects; and
- Opportunity to meet and collaborate with counterparts from other councils on similar issues.

ISC also partners with Councils in NSW, which provides the following benefits:

- Use of the Albury Waste Management Centre (AWMC) – landfill and some recycling;
- Collaborative procurement of the kerbside collection contract;
- Joint funding of, and service from, Halve Waste and the education program; and
- Opportunity to meet and collaborate with counterparts from other councils on similar issues.

### *Community engagement*

ISC is fortunate to have a community that is highly engaged in responsible waste management. 99% of survey respondents stated they were either very confident or usually confident about knowing how to segregate their waste.

Several volunteer community groups in the Shire actively work on campaigns aligned with the waste hierarchy, including:

- Plasticwise Yackandandah
- Plasticwise Beechworth
- Plasticwise Chiltern
- Plasticwise Stanley

- Beechworth Boomerang Bags
- Indigo Shire Tidy Towns Committee
- Repair cafes – Beechworth and Rutherglen
- Toy libraries – Beechworth and Yackandandah

ISC ran a community survey on our waste services as part of the development of this RRWMS. The survey was open from March 15- April 15 2019, and available in electronic and hard copy formats. 151 responses were received within the timeframe, from a range of Indigo Shire localities. Relevant results summarised and discussed throughout this report. The full survey results are included in the RRWMS background report and service review.

## Planning for the future

When planning for the future we can expect:

- Increased population in Indigo Shire;
- An increase in the proportion of the population that is ageing;
- A general trend of greater waste generation per capita;
- Greater community expectations for waste services;
- A new kerbside waste contract to take effect from 2024;
- Increasing interest/knowledge from some members of the community about waste;
- A changing recycling industry;
- Reformed environmental regulation via the new *Environmental Protection Act*;
- The e-waste ban to landfill that has already been announced to take effect, as well as a likely ban on plastic bags, and a possible container deposit scheme; and
- Ongoing cost increases for recycling processing, organics processing, landfill tipping fees and contractor services.

### Industry trends

In recent years, environment protection measures for landfills have increased in line with knowledge of the impacts. Improved engineering and management practices come at a cost and it is more efficient to provide such expensive infrastructure as a regional asset. There is a trend towards rationalising landfills, with closure of small landfills and replacement with transfer stations (or resource recovery centres).

There is an industry trend towards establishing advanced waste treatment technologies as an alternative to landfill disposal. This includes technologies such as gasification, pyrolysis, anaerobic digestion and other waste to energy technologies. The technologies suited to municipal solid waste require large volumes of waste (at least 100,000 tonnes per year depending on the technology) to justify the large capital outlay involved (over \$30 million for most systems). Therefore, ISC's role in pursuing alternative waste technologies is as a partner (and/or customer) in regional developments, rather than ISC attempting to pursue this individually.

## Our Challenges

ISC is not alone in facing significant challenges relating to waste services, driven by international market dynamics, rising costs, increasing waste generation, State Policy reform and the challenges of providing services in a small Shire. The key challenges to address in this strategy are:




- Limitations on exporting recyclables for processing;
- Increasing waste generation per capita;
- Model waste contract clauses – increased risk and costs for councils;
- Distance from recycling collectors and processors – high cost of transport;
- Limited regional landfill space;
- Legacy of former landfills;
- Limitations of transfer station infrastructure and staffing;
- Increasing e-waste generation, and expectation for council to recycle all e-waste with no cost recovery;
- Limited staff to manage waste contracts and conduct educational programs; and
- Increasing community expectations about waste services, i.e. soft plastics collections.

## Council waste services – analysis

This section summarises the current status and performance for each of the waste service that Council offers. Future directions and opportunities are included which are derived from a combination of government and industry strategic directions, community desires, benchmarking with other similar councils and ISC staff ideas. For all waste services currently offered, there are opportunities for improvement. Additionally, there are a variety of waste services that ISC has not traditionally provided, and to do so would meet community and industry expectations. Some services continue to be delivered despite high cost and misalignment with the waste hierarchy. It is very timely to review all services in line with the waste hierarchy to ensure investment is targeted at the right actions that not only have environmental benefits but also save costs longer term via reduction of tipping, transport and processing fees.

### Kerbside collection

**Table 4: Current kerbside service summary**

Service	Bin size	Charge (2019/20)		Number of bins	Collection frequency
		Urban	Rural		
 Garbage	140L urban/240L rural or optional urban upgrade	\$111.80 \$188.15 (240L)	\$188.15	7318	Fortnightly
 Recycling	240L Option to upgrade to 360L	\$85.85 \$103.90	\$85.85	7318	Fortnightly
 Food and garden organics	240L	\$157.95	-	5219	Weekly (no rural service)



Key challenges/external context:	Community feedback:
<ul style="list-style-type: none"> <li>Restrictions of export of recyclable material have thrown the Australian recycling industry into crisis.</li> <li>Electronic waste ban to landfill from July 2019.</li> <li>State Government policy direction to modify waste contracts to share risks and costs between recycling providers and contractors</li> <li>Ongoing lack of acceptance from a small minority of customers regarding the FOGO service.</li> </ul>	<p>58% of survey respondents stated the kerbside service was either very suitable or mainly suitable.</p> <p>The most common comments received about the service were:</p> <ul style="list-style-type: none"> <li>Opposition from some customers in the FOGO collection area that don't want this service.</li> <li>Dissatisfaction with a fortnightly waste (red) bin collection, particularly for families that use nappies.</li> <li>Need for either a larger bin or more frequent collections.</li> <li>Desire for soft plastics to be collected.</li> </ul>
<p><b>Future directions/opportunities for the kerbside service:</b></p>	
<ul style="list-style-type: none"> <li>Increase community awareness of the option to upgrade bins.</li> <li>Increase the provision of educational materials to households regarding what items should go in each bin, and how to manage odours between collections.</li> <li>Prepare a documented policy on the waste service (including FOGO) to communicate the no-exemptions position and the reasons for this.</li> <li>Continue to assess new areas to be added to the FOGO collection area.</li> <li>Support collaborative contractual arrangements that bring best value and support a sector flexible and resilient to market changes.</li> <li>Investigate future contractual arrangements that include reporting requirements that include tracking of waste disposal, recyclable and organics reprocessing.</li> </ul>	

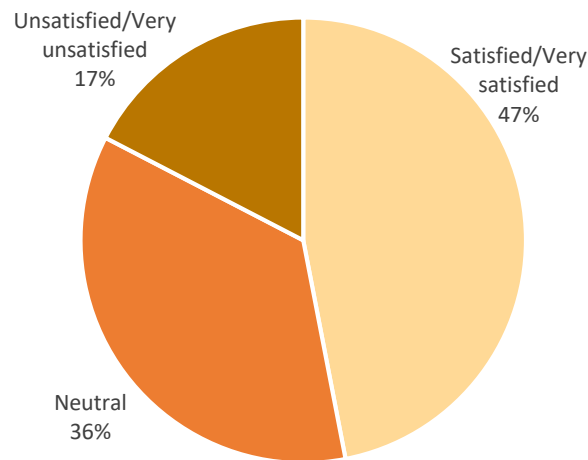


**Community views of FOGO**  
*93% of respondents in the community waste survey said they support the use of the green organics bin to divert waste from landfill.*

*Photo source: Halve Waste*

## Public place (street and park) waste and recycling bins

**Figure 7: Community Satisfaction with street and park bins**



**Current status:**

- 131 bins.
- Serviced by Cleanaway.
- Additional collections/bins provided at peak holiday times.
- Monthly cleaning of bin surrounds.
- Not all bins are paired – i.e. waste and recycling bin together.
- Organics bins not currently included as part of this service.

**Key challenges/external context:**

Tourism industry – catering to increased visitation as well as different understanding of what items can be placed in which bin.

Uniformity of bin surrounds and signage across the towns.

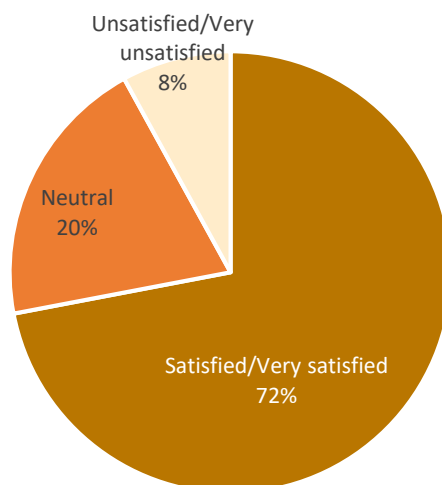
Balancing costs with greater community expectations about increased bins and emptying (each bin empty costs approximately \$5.20).

**Future directions/opportunities for street and park bins:**

- Review the location of all street and park bins, identifying key gaps in all towns that additional bins are required.
- Modify location of some bins to ensure pairing – including a recycling bin next to every waste bin.
- Include consistent stickers/signage/surrounds on bins to improve segregation and user experience.
- Discuss available waste services with sports park committees of management.
- Lift the standard of clearing of street and park bins and bin surrounds.
- Trial a stick-on sensor in street and park bins to rationalise the number of collections.

## Waste transfer stations

**Figure 8: Community feedback: Satisfaction with waste transfer stations**



### Current status:

- Two operating transfer stations, Beechworth and Rutherglen
- Both sites operate over the top of former landfills.
- Most items are recycled, with costs for ISC to transport the items to the recycler.
- Profit from scrap metal sales only.
- Mixed fee structure: some degree of user pays but some items free.
- Infrastructure is not best practice/contemporary.

### Items accepted at WTS

#### At a charge:

- General household (hard) waste (landfilled)
- Mattresses\*
- Soft furnishings – lounge chairs, couches\*
- Timber waste\*
- Garden waste\*
- Car tyres\*
- Heavy vehicle tyres\*

*\*recycled or otherwise processed at significant cost.*

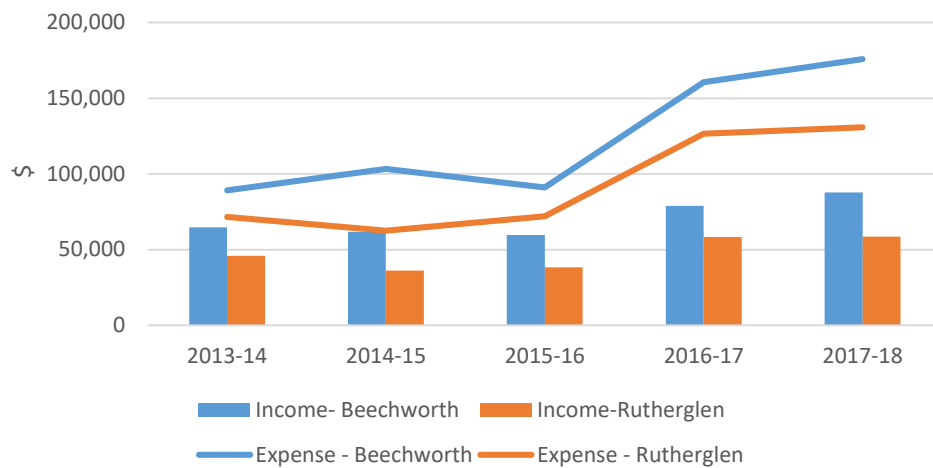
#### For free: (^recycled at lower cost to ISC)

- E-waste (unwanted electronic items)^
- Household recyclables^
- Cardboard^
- Scrap metal^
- White goods^
- Car bodies^
- Polystyrene^
- Car batteries^
- Domestic gas bottles^
- Waste oil and containers^
- Clean fill (subject to prior arrangement and provision of testing results).

### Key challenges/external context:

- Perceived high fees from some customers
- Limited operating hours
- Limited locations across the Shire
- Low cost recovery
- Distance from recyclers, and economies of scale.
- E-Waste ban will increase volumes (and cost to ISC) of e-waste.
- Lone worker limits customer supervision/support for correct segregation.

**Figure 9: WTS Financials**



**Future directions/opportunities for WTSs:**

- Monitor for grant opportunities to improve infrastructure and user experience at WTSs.
- Work with op-shop operators and social enterprises to recover reusable items from the transfer stations for sale at regional reuse shops.
- Explore modifying some of the opening hours to include a morning.
- Improve communication of fee structure; what happens to materials collected; and how customers can save on fees.
- Commission new e-waste sheds (to be constructed via state government grant in 2019).
- Consider rebranding waste transfer stations as Resource Recovery Centres – to improve the focus on recovery rather than disposal.
- Develop master plans/strategies for each of the WTFs to ensure continual improvement. (Beechworth & Rutherglen)



**Photo: Beechworth transfer station entrance**

## Illegal dumping

### Current status:

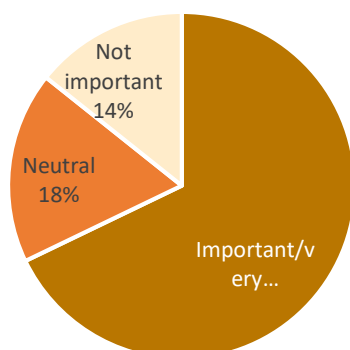
- 49 reported cases of illegal dumping between July 2016 and January 2019, which are investigated initially by ISC environmental health officers, and then the items are collected by operations staff and taken to the WTS.
- Beechworth and Chiltern were the highest reported locations for illegal dumping, although locations throughout the Shire are affected.
- Surveillance cameras are deployed for repeat cases/locations.
- Furniture, mattresses, household waste and tyres are the most frequently dumped items (which attract a fee for disposal at WTSs), however some items that are free to take to the WTS have also been illegally dumped.

### Future directions/opportunities for illegal dumping:

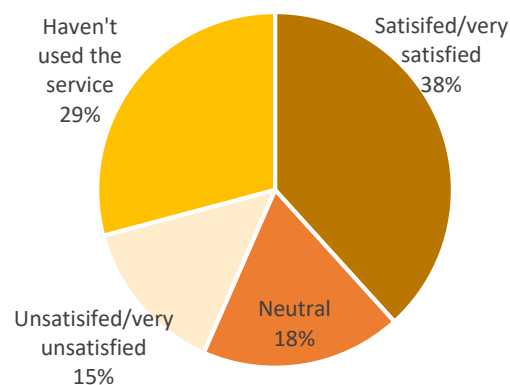
- Increase communication and awareness about which items can be taken to the WTS at no charge.
- Continue to monitor illegal dumping cases to inform which sites require additional surveillance.

## Hard waste disposal

**Figure 10: Community feedback: Importance of hard waste weekends to the community**



**Figure 11: Community satisfaction with hard waste weekends**



### Comments in the waste survey related to hard waste included:

- Preference for a kerbside collection of hard waste (previously offered by ISC and reviewed by Council as no longer feasible in the mid-2000s).
- Need for greater than 1m<sup>3</sup> allowed by the voucher.
- Renters not able to access the hard waste voucher.

**Current status:**

Council operates a hard waste service that involves:

1. Customers may take hard waste to the WTSs during opening hours any time throughout the year, with a charge applied (except for e-waste, white goods or scrap metal – which are free).
  2. Provision of a free hard waste disposal voucher annually in the rates notice. This voucher goes to all rate payers and allows up to 1m<sup>3</sup> of hard waste disposal at no charge. This voucher can be used at the Beechworth and Rutherglen WTS at any time during opening hours throughout the year, as well as at the Wodonga and Tallangatta WTSs.
  3. Hard waste weekends - Additional hard waste drop-off points have been offered in towns that don't have a WTS (Yackandandah, Chiltern and Tangambalanga). These sites have been opened over two weekends per year, staffed by council operations personnel. The rates voucher and volume limits are intended to apply at these weekends.
- Hard waste weekends are used by approximately 7% of rateable properties in the Shire (assuming all people dropping off waste reside in the Shire). This low uptake contrasts with the high importance rating (Figure 10) that the community put on hard waste weekends during the survey.

**Key challenges/external context:**

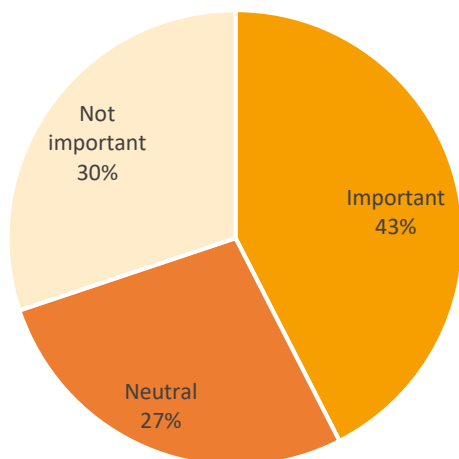
- Misalignment with the waste hierarchy: the hard waste weekends don't promote waste management measures higher up on the waste hierarchy, and encourage increased disposal to landfill, which has a financial and environmental cost, and is contrary to the waste hierarchy model.
- High costs borne by all rate payers for the service (irrespective of use), at approximately \$100/visit.
- Continued lack of presentation of hard waste voucher – meaning that there is no verification that the service is being used by Shire residents, with additional lost revenue.
- Council has sold the Tangambalanga site, there is no suitable location for this service to continue in Kiewa-Tangambalanga beyond 2018/19.
- Health and safety risks to staff and customers, e.g. asbestos exposure, manual handling, hazardous or sharp waste.
- Unauthorised entry/theft from the locations following the drop off days.
- Utilisation of the service is by a relatively small percentage of the Shire population (7% of rateable properties), and the service is available at four other locations at any time throughout the year. Although most people like to have services available in their own towns, the reality of living in a rural Shire is that travel outside of one's town is often required in order to access some services.
- Most other councils have discontinued a hard waste service (see background report for benchmarking results).

**Future directions/opportunities for hard waste:**

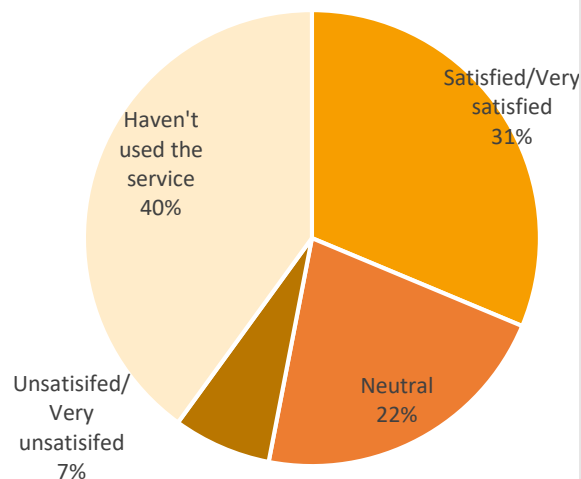
- Discontinue the hard waste weekends program due to high costs, safety risks and misalignment with the overarching objectives of the waste hierarchy and this waste strategy. (Note: Addition of second waste disposal voucher)
- Continue with free waste vouchers in the rates notice.
- Work with real-estate agents to explore options for renters (that don't receive a rates notice) to receive the waste disposal voucher.
- Work with Wodonga City Council and/or Rural City of Wangaratta to ascertain costs and feasibility of hard plastics getting recycled through their existing arrangements.

## Green waste disposal

**Figure 12: Importance of the green waste service to the community**



**Figure 13: Community satisfaction with green waste service**



### Community feedback:

- Many survey respondents had not used the green waste service(s). Some community members are not aware of the service.
- Preference expressed by some respondents for a more flexible voucher system rather than designated green waste weekends.

### Current status:

1. Council offers green waste disposal via the following options:
  2. Items that can fit can be placed in the FOGO bin (for properties that receive this service).
  3. Larger items/volumes of green and timber waste can be taken to the Beechworth or Rutherglen WTSs during any operating days throughout the year, at a fee depending on the volume.
- Free green waste disposal weekends (two consecutive weekends) are offered annually in spring. There is no voucher or volume limits currently related to this service, and the disposal can occur for free on the designated weekends at the Rutherglen and Beechworth WTSs, as well as additional sites in Yackandandah and Chiltern.
  - The data shows that most customers utilise Beechworth and Rutherglen on green waste weekends, rather than the additional locations, indicating that most people are content to use the permanent WTSs for this service.
  - The green waste collected at the WTS (and additional locations) is shredded by an external contractor once a sufficient volume is reached. This contract is a collaborative regional contract facilitated by NEWRRG. There is a cost per m3 for the shredding, which is why there is a cost for customers to dispose of green waste (outside of the free green waste weekends). The shredded material is made available as free mulch to anyone in the Shire, but there is low uptake due to contamination and self-loading requirements.
  - ISC WTSs are the only WTSs in the region that do not segregate garden waste from raw and treated timbers. These items have been stockpiled and shredded together, creating a low value, contaminated mulch-like product.

**Key challenges/external context:**

- Provision of a free green waste service assists customers manage fire risk on their properties and maintains the visual amenity of the Shire.
- Regional direction to separate raw timber, treated timber and garden waste – this will incur additional costs as treated timber is landfilled.
- Weed load in garden waste limits beneficial reuse of mulch.
- Some manufacturers in the region accept raw timber as a feedstock, which presents opportunities for reuse.
- Costs and service delivery risks associated with dedicated green waste weekends.
- Inconvenience to some customers of having designated green waste weekends, rather than the flexibility to use a voucher at other times.

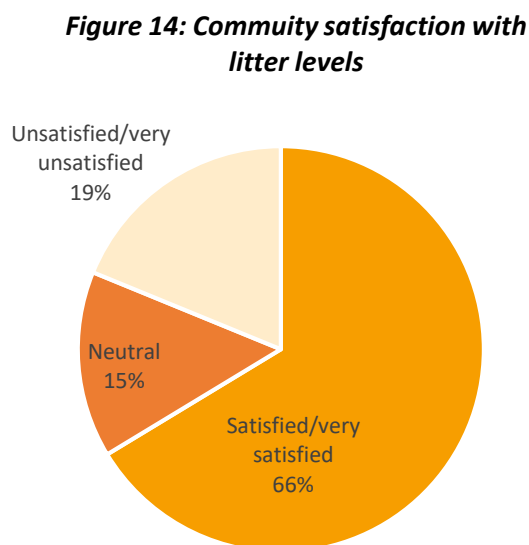
**Future directions/opportunities for green waste:**

- Retain free green waste weekends, in addition provide a second waste disposal voucher with rates notice. This levels out the visitation at the WTS and provides the customer with more flexibility to use the voucher when the time suits.
- Work with real-estate agents to explore options for renters (that don't receive a rates notice) to receive the waste disposal voucher.
- Commence segregation of various green and timber wastes– i.e. add a skip bin for treated timbers, and segregate raw timber from garden waste. Add signage and train operators on new system. Assess feasibility of options for reusing raw timber, e.g. transport to Alpine MDF or D&R Henderson; or collection by men's sheds or similar groups for reuse.
- Assess feasibility of a mulch collection day(s), whereby mulch is loaded by council staff and plant into customer trailers and/or delivered to Landcare, Landmates or tree planting projects.



## Litter including dog waste

**Figure 14: Community satisfaction with litter levels**



Free text comments in the survey elaborated on reasons for dissatisfaction and included: people failing to pick up dog waste; litter outside of towns; construction waste; and overflowing waste bins.

Community comments on the dog waste bag dispensers included: need more dispensers and bins; needs education and enforcement; bags need to be refilled; and concern that the bags aren't compostable.

### Current status:

- Indigo Shire does not have any specific litter campaigns or programs.
- Street sweeping occurs in some town centres as required, and focuses on autumn leaves.
- Cigarette butts are anecdotally the main item of litter observed. Butt bins are available in town centres, but in some cases they are malfunctioning.
- In 2018, ISC initiated a trial of dog waste collection bags, and bins, in some of the public parks that are frequented by dog walkers, as well as at Baarmutha Park (the Beechworth Golf Club).

### Future directions/opportunities for litter:

- Conduct audit of butt bins in towns – replace broken ones with new; add butt bins in areas where they are absent and cigarette litter is observed.
- Formalise an operational arrangement to regularly empty and check function of butt bins.
- Review additional areas for the provision of dog waste bags and bins. Develop a plan for phased roll out of additional bins, and a schedule for collections and replacement of bags.

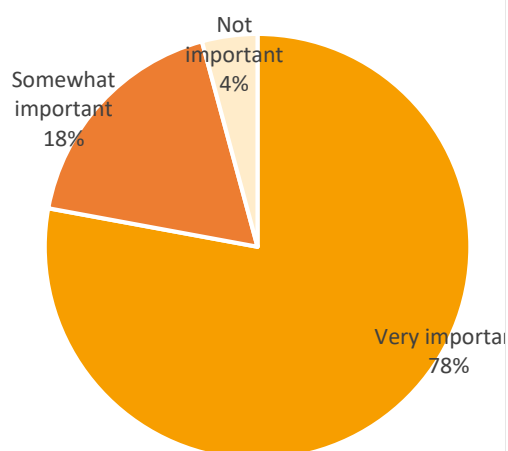


### **Dog waste bags and bins**

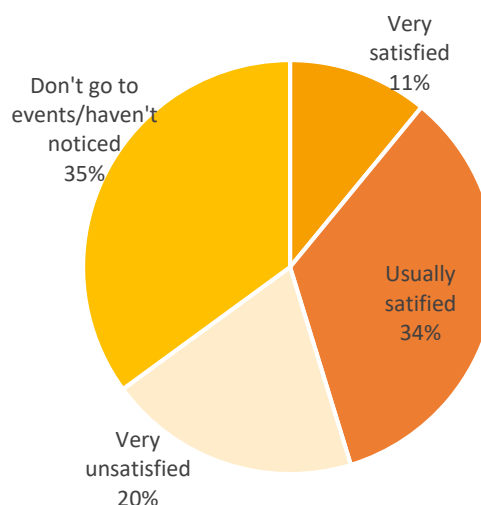
*Some respondents of the community survey were concerned the dog waste bags aren't compostable – they are. The ideal future state will be to have the 3 bins at every waste station, however that is currently cost prohibitive. Some bins attract low volumes of waste and odour can be an issue if the pick-ups aren't frequent. For these reasons, red bins are currently*

## Event waste management

**Figure 15: Importance of event waste management to the community**



**Figure 16: Community satisfaction with events waste management**



### Current status:

- Indigo Shire's tourism team provides support to event holders to manage their waste.
- If the event is successful in obtaining an IEDTAC (Indigo Economic Development and Tourism Advisory Committee) event grant, waste services may be provided or subsidised by ISC.
- If the event is privately run or not subject to a grant, the event holder is responsible for paying for the waste service, but the organisation of which is facilitated by council staff.
- An events waste management plan template and guide is provided to help event holders reduce their waste.

### Future directions/opportunities for event waste management:

- Share learnings from Yackandandah Folk Festival with other events to assist all events improve their waste management practices.
- Formalise the IEDTAC grants process to require any events receiving waste management support from ISC to implement an approved waste management plan.
- Increase the use/provision of organics bins at events (3-bin system).
- Provide bin signage/stickers with event bins to aid source segregation.
- Support Plasticwise Yackandandah's Dish Pig (mobile industrial washing-up trailer), by promoting hire of the Dish Pig by external events, and use of the Dish Pig at council-run events.

### *Plasticwise Policy*

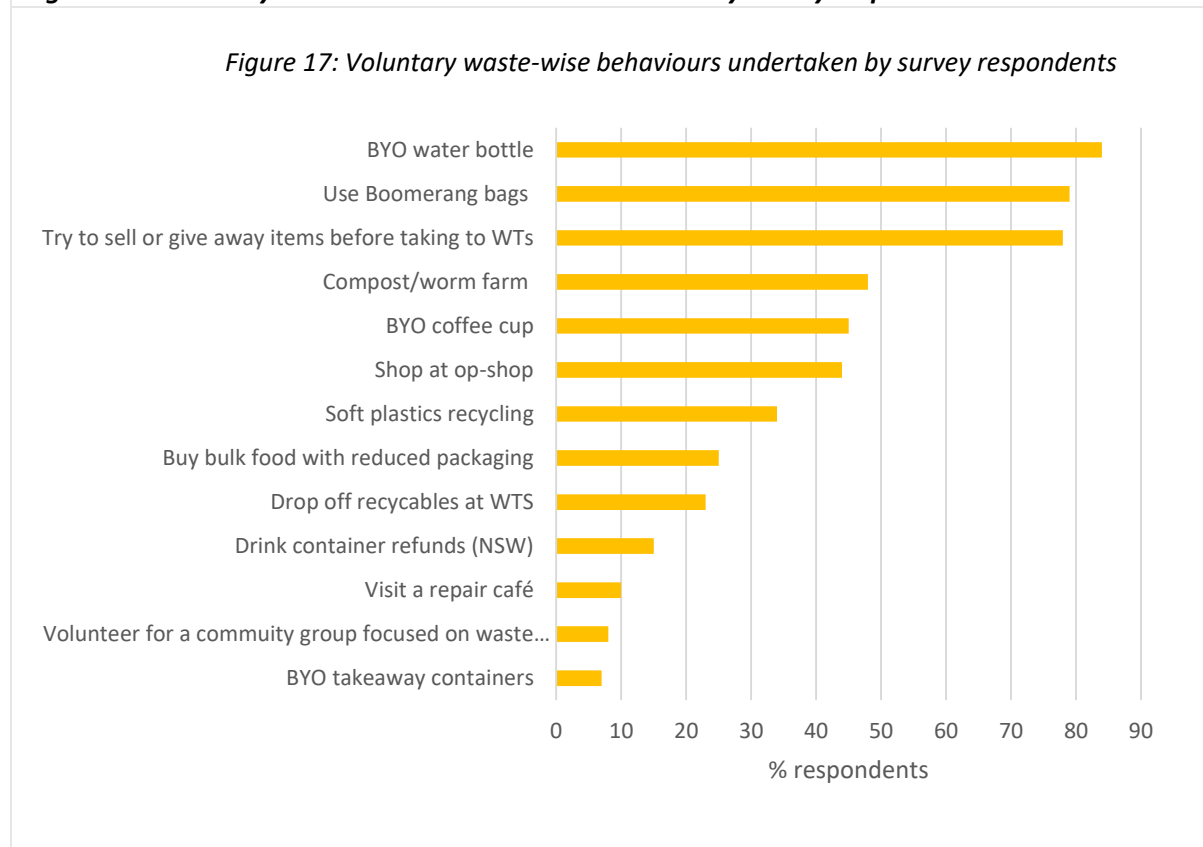
*The community waste survey asked if people were aware of ISC Plasticwise Policy 2018 and noticed a difference. Two-thirds of respondents had either never heard of it, or heard of it but had not noticed a difference since it was adopted. Further work is required to implement this Policy.*

## Education and engagement

### Current status:

- ISC contributes financially to regional waste education programs as part of its collaborative kerbside contract as well as via NEWRRG membership.
- The kerbside contract has an arm called Halve Waste, which employs dedicated waste education officers that address schools, businesses and community group, as well as implementing multi-media education campaigns.
- Halve Waste provide free waste assessments for businesses in Indigo Shire. This process results in a tailored action plan to help businesses better manage their waste, save on costs and increase recycling rates. Three businesses in Indigo Shire have made use of this service since 2014, all in Beechworth. Therefore, it is likely that many businesses do not know about the service.
- Via NEWRRG, Indigo Shire participates in Resource Smart Schools, and the Student Environmental Education Days (SEED) program.
- Historically, ISC waste staff have not had a focus on, or budget for, education, however increased education to divert waste from landfill reduces costs to ISC.
- Volunteer community groups focused on waste in Indigo Shire play a significant role in waste education. Plasticwise groups operate in several towns and have run many successful campaigns, engaging businesses and the community directly, i.e. Proud to be Plasticwise campaign.
- Tourism has many benefits to Indigo Shire, but also presents waste challenges. While our established residents are enthusiastic recyclers, many visitors to the region may not be accustomed to a three bin system, and other community practices such as boomerang bags.
- 

**Figure 17: Voluntary waste-wise behaviours undertaken by survey respondents**



### Community feedback

- The community survey aimed to gauge current levels of knowledge and attitudes in the community about waste. The results showed that Indigo Shire communities are generally very engaged with waste management, have a high level of knowledge about segregation, and undertake many additional voluntary waste minimisation behaviours (see chart on right)
- 57% of survey respondents said they were “*very confident – I know a lot about what should go in each bin*” and 42% answering “*most of the time I know what bin to put something in*”.
- Most respondents seek information if needed from the Halve Waste website (accessible via ISC website), then hard copy guides, then ISC, followed by friends/family/colleagues.
- 7% of respondents don’t seek further information if they are unsure.
- Free text comments to this question highlighted that many people think a sticker on the bins would be helpful, and/or a poster on the fridge

A-Z guides of what can go in each bin are available for download and printing on the Halve Waste website, and hard copies are available in customer service centres.

### Future directions/opportunities for waste education:

- Commence an ISC waste education program – addressing several areas of this strategy.
- Continue to meet regularly with Plasticwise and other applicable community groups to support their community education efforts.
- Promote the free services offered by Halve Waste – particularly to the business community.
- Run events/campaigns associated with Plastic-free July.
- Work with accommodation providers to include A-Z guides for waste and/or bin stickers in short-term rental properties.



*Photo: Community waste education event, reusable nappies, Beechworth library.*

## Potential additional services

A variety of services that ISC doesn't offer have been considered in the development of this strategy. The background report includes further information on these services, the challenges, costs and triple-bottom line sustainability assessment. The key additional services are summarised in Table 6 below.

**Table 6: Analysis of potential additional services**

Service not currently offered	Challenges	Recommendation	Cost impact of service offering
<b>Acceptance of aggregates, soil and masonry at transfer stations</b>	<ul style="list-style-type: none"> <li>Keeping the material clean for recycling</li> <li>Potential asbestos contamination</li> <li>Low volumes</li> <li>Costs to transport for processing</li> </ul>	Explore options and costs for concrete acceptance and recycling via the ISC WTSs, either via transport to Wangaratta or Wodonga transfer stations for processing or via a mobile processor.	<ul style="list-style-type: none"> <li>This service would incur a cost to ISC, which could be either fully or partially recovered by the fees set.</li> <li>Costs and revenues to be evaluated.</li> </ul>
<b>Reuse shop at the WTS</b>	<ul style="list-style-type: none"> <li>Insufficient waste and customer volume to make this viable at Beechworth or Rutherglen WTS, also desire not to divert items from local op-shops.</li> </ul>	Run an EOI process for potential re-use partner organisations to divert sale-able items from the WTS, via regular collections and selling via existing outlets.	Positive cost impact – via reduced landfill fees.
<b>Commercial collections</b>	<ul style="list-style-type: none"> <li>Various waste streams and volumes that may not be able to be accommodated.</li> <li>Additional workload for ISC waste officer.</li> </ul>	<ul style="list-style-type: none"> <li>Communicate the Cleanaway kerbside service options to businesses.</li> <li>Support the FOGO collection EOI.</li> </ul>	<ul style="list-style-type: none"> <li>Cost recovery from service fees. Expected to be cost-neutral or slightly favourable.</li> <li>Costs and revenues to be evaluated.</li> </ul>
<b>Hard plastics recycling</b>	<ul style="list-style-type: none"> <li>Distance/cost to a recycling provider</li> <li>Relatively low volumes</li> </ul>	Explore options to collaborate with Wodonga City Council and or Rural City of Wangaratta for hard plastics recycling.	Costs and revenues to be evaluated. Costs of transport will be offset by reduced landfill tipping costs.
<b>Soft plastics collection and recycling</b>	<ul style="list-style-type: none"> <li>No recycling processor willing to take the material currently.</li> <li>No further RedCycle collection points feasible for RedCycle to service in Indigo Shire.</li> </ul>	Pursue regional collection and recycling opportunities via NEWRRG	Costs and revenues to be evaluated – identified as a NEWRRG project for 2019/20.

Service not currently offered	Challenges	Recommendation	Cost impact of service offering
<b>Acceptance of paint at WTSs</b>	Distance/cost to a recycling provider Relatively low volumes	Pursue regional collection and recycling opportunities via NEWRRG	Costs and revenues to be evaluated. identified as a NEWRRG project for 2019/20.
<b>Acceptance of fluorescent lighting tubes at WTSs</b>	Distance/cost to a recycling provider Relatively low volumes	Pursue regional collection and recycling opportunities via NEWRRG	Costs and revenues to be evaluated. identified as a NEWRRG project for 2019/20.

## How to achieve the objectives

Table 7 below outlines broad strategies to achieve the objectives identified at the outset of this strategy.

**Table 7 Strategies to achieve our objectives**

Objectives (desired outcomes)	How we will achieve these outcomes	Implementation year	Resource Impact	
			Recurrent service cost	Capital or one off cost
<b>Primary Objective: Reduce total volume of waste disposed of to landfill (per capita)</b>				
<b>Encourage innovation and continual improvement in waste services and increase resource recovery.</b>	Investigate future contractual arrangements that include reporting requirements that include tracking of waste disposal, recyclable and organics reprocessing.	2019/20 Ongoing	No additional cost	
	Commence an ISC waste education program – addressing several areas of this strategy.	2019/20	~\$20,000	
	Promote the free services offered by Halve Waste – particularly to the business community.	2018/19 2019/20	No additional cost	
	Retain free green waste weekends, in addition provide a second waste disposal voucher with rates notice. This levels out the visitation at the WTS and provides the customer with more flexibility to use the voucher when the time suits.	2019/20 Ongoing	No additional cost	
<b>Prioritise the waste management hierarchy when making decisions about waste management.</b>	Discontinue the hard waste weekends program due to high costs, safety risks and misalignment with the overarching objectives of the waste hierarchy and this waste strategy. (Note: Addition of second waste disposal voucher)	2019/20 Ongoing	~\$40,000 saving	
	Run an EOI process for potential re-use partner organisations to divert sale-able items from the WTS, via regular collections and selling via existing outlets.	2019/20	No additional cost	
<b>Engage the community to achieve behaviour change that reduces waste generation and increases resource recovery.</b>	Increase community awareness of the option to upgrade bins.	2019/20 Ongoing	No additional cost	
	Increase the provision of educational materials to households regarding what items should go in each bin, and how to manage odours between collections.	2019/20 Ongoing	~\$3,000	

Objectives (desired outcomes)	How we will achieve these outcomes	Implementation year	Resource Impact	
			Recurrent service cost	Capital or one off cost
	Improve communication of fee structure; what happens to materials collected; and how customers can save on fees.	2019/20 Ongoing	No additional cost	
	Consider rebranding waste transfer stations as Resource Recovery Centres – to improve the focus on recovery rather than disposal.	2019/20	No additional cost	
	Increase communication and awareness about which items can be taken to the WTS at no charge.	2019/20 Ongoing	No additional cost	
	Formalise the IEDTAC grants process to require any events receiving waste management support from ISC to implement an approved waste management plan.	2019/20	No additional cost	
	Share learnings from Yackandandah Folk Festival with other events to assist all events improve their waste management practices.	2019/20	No additional cost	
	Support Plasticwise Yackandandah's Dish Pig (mobile industrial washing-up trailer), by promoting hire of the Dish Pig by external events, and use of the Dish Pig at council-run events.	2019/20 Ongoing	No additional cost	
	Run events/campaigns associated with Plastic-free July.	2019/20 Ongoing	No additional cost	
	Work with accommodation providers to include A-Z guides for waste and/or bin stickers in short-term rental properties.	2019/20 Ongoing	No additional cost	
	Discuss available waste services with sports park committees of management.	2019/20 Ongoing	No additional cost	
<b>Continually improve on diversion and contamination rates.</b>	Commence segregation of various green and timber wastes– i.e. add a skip bin for treated timbers, and segregate raw timber from garden waste. Add signage and train operators on new system. Assess feasibility of options for reusing raw timber, e.g. transport to Alpine MDF or D&R Henderson; or collection by men's sheds or similar groups for reuse.	2019/20		~\$10,000



Objectives (desired outcomes)	How we will achieve these outcomes	Implementation year	Resource Impact	
			Recurrent service cost	Capital or one off cost
	Increase the use/provision of organics bins at events (3-bin system).	2019/20 Ongoing	No additional cost	
	Provide bin signage/stickers with event bins to aid source segregation.	2019/20	~\$500	
<b>Provide an efficient and cost-effective service that meets the community's needs (most of the community's needs, most of the time).</b>	Prepare a documented policy on the waste service (including FOGO) to communicate the no-exemptions position and the reasons for this.	2020/21	No additional cost	
	Continue to assess new areas to be added to the FOGO collection area.	2019/20 Ongoing	No additional cost	
	Continue with free waste vouchers in the rates notice. (Note: Addition of second waste disposal voucher)	2019/20 Ongoing	~\$20,000	
	Work with real-estate agents to explore options for renters (that don't receive a rates notice) to receive the waste disposal voucher.	2019/20 Ongoing	No additional cost	
	Assess feasibility of a mulch collection day(s), whereby mulch is loaded by council staff and plant into customer trailers and/or delivered to Landcare, Landmates or tree planting projects.	2020/21	No additional cost	
	Lift the standard of clearing of street and park bins and bin surrounds.	2019/20	No additional cost	
	Trial a stick-on sensor in street and park bins to rationalise the number of collections.	2020/21	No additional cost	
	Re-run a community waste survey, to inform review/development of new waste strategy, and gauge improvement in some areas	2022/23	No additional cost	
<b>Leverage partnerships and grant funding to maximise our efforts.</b>	Support collaborative contractual arrangements that bring best value and support a sector flexible and resilient to market changes.	2019/20 Ongoing	No additional cost Potential savings in service costs.	
	Work with Wodonga City Council and/or Rural City of Wangaratta to ascertain costs and feasibility of hard plastics getting recycled through their existing arrangements.	2019/20 Ongoing	No additional cost Potential savings in service costs.	

Objectives (desired outcomes)	How we will achieve these outcomes	Implementation year	Resource Impact	
			Recurrent service cost	Capital or one off cost
	Pursue regional collection and recycling opportunities via NEWRRG	2019/20 Ongoing	No additional cost Potential savings in service costs.	
<b>Plan for future waste and resource recovery infrastructure and service needs of our community.</b>	Monitor for grant opportunities to improve infrastructure and user experience at WTSs.	2019/20 Ongoing	No additional cost	
	Explore modifying some of the opening hours to include a morning.	2019/20	No additional cost	
	Develop master plans/strategies for each of the WTSs to ensure continual improvement. (Beechworth & Rutherglen)	2020/21 Ongoing		~\$20,000 per site
	Conduct audit of butt bins in towns – replace broken ones with new; add butt bins in areas where they are absent and cigarette litter is observed.	2018/19	No additional cost	
	Review additional areas for the provision of dog waste bags and bins. Develop a plan for phased roll out of additional bins, and a schedule for collections and replacement of bags.	2020/21		~\$5,000
	Review the location of all street and park bins, identifying key gaps in all towns that additional bins are required.	2018/19	No additional cost	
	Modify location of some bins to ensure pairing – including a recycling bin next to every waste bin.	2019/20 Ongoing		~\$15,000
	Install a stand-alone power system at Beechworth WTS to improve the health and safety of the operator, as well as the service delivery to customers .	2019/20	No additional cost	
	Collaborate on the NEWRRG waste data platform project, and implement the related tablet system at the WTSs .	2019/20 Ongoing	No additional cost	
<b>Responsibly manage waste facilities to minimise the risk of pollution.</b>	Commission new e-waste sheds (to be constructed via state government grant in 2019).	2019/20		Grant received for implementation
	Continue to monitor illegal dumping cases to inform which sites require additional surveillance.	2019/20 Ongoing	No additional cost	
	Liaise with EPA about application of the closed landfill guideline and rehabilitation expectations .	2019/20	No additional cost	

Objectives (desired outcomes)	How we will achieve these outcomes	Implementation year	Resource Impact	
			Recurrent service cost	Capital or one off cost
	Review and improve the fire response capability at the Rutherglen WTS .	2019/20	No additional cost	
	Develop and aftercare management plan for each of the former landfills .	2020/21		~\$15,000
	Explore options and costs for concrete acceptance and recycling via the ISC WTSs, either via transport to Wangaratta or Wodonga transfer stations for processing or via a mobile processor.	2019/20	No additional cost	

## Implementation Plan

Table 7 above includes broad actions to achieve each strategic objective. A more detailed implementation action plan fleshing out each of these strategies (and additional actions) has been developed, and will be used as the day-to-day tool for environment and sustainability staff to implement all actions identified during the process of developing this RRWMS. Opportunities for each service area (as per the background report) have been subject to quantitative ranking based on triple bottom line (TBL) criteria. The results can be viewed in the background report section 9.2, and has informed the priority and timeframe for completion.

Not all waste activities and actions included in the implementation plan in the background report have been discussed in this Strategy document, given this is a summary document which aims to focus on more significant action. Some of the actions included in the implementation plan are minor and most can be achieved with existing resources and without a significant change to service delivery and/or have cost recovery via fees or reduced landfill tipping fees. Proposed actions that entail a significant change to existing services have been discussed in relevant sections of this report.

## Monitoring, evaluation and review

Progress towards achieving this strategy will be regularly monitored, and the strategy reviewed to maintain currency. Table 8 summarises the monitoring, evaluation and review program for this Strategy. The Coordinator Environment and Sustainability is responsible for undertaking these actions.

**Table 8: Strategy monitoring, evaluation and review schedule**

Action	Timeframe				
	2019/20	2020/21	2021/22	2022/23	2023/24
Collate data and report on key waste indicators as part of the quarterly environment and sustainability report.	✓	✓	✓	✓	✓
Conduct annual progress review of achievement towards implementation plan.	✓	✓	✓	✓	✓
Re-run a community waste survey, to inform review/development of new waste strategy, and gauge improvement in some areas					✓
Conduct/repeat service review to inform development of new strategy					✓
Complete a detailed review of the strategy, and update for the next five years.					✓

## Abbreviations and glossary

<b>AWMC</b>	Albury Waste Management Centre
<b>DELWP</b>	Department of Environment, Land, Water and Planning
<b>EP Act</b>	Environment Protection Act 1970
<b>FOGO</b>	Food organics and garden organics
<b>ISC</b>	Indigo Shire Council
<b>MRF</b>	Materials recovery facility
<b>NEWRRG</b>	North East Waste and Resource Recovery Group
<b>RRC</b>	Resource Recovery Centre
<b>RRWMS</b>	Resource Recovery and Waste Management Strategy
<b>SV</b>	Sustainability Victoria
<b>TBL</b>	Triple bottom line assessment evaluates sustainability on the basis of environmental, social and economic factors
<b>Treatment</b>	To process or handle material to remove contamination or reduce harm to the environment or public health
<b>WTS</b>	Waste Transfer Station