## STATEWIDE WASTE AND RESOURCE RECOVERY INFRASTRUCTURE PLAN

### progress report

PROGRESS REPORT - JULY 2015 TO JUNE 2017



On behalf of the waste portfolio, Sustainability Victoria would like to acknowledge all the local governments, reprocessors and material recovery facility operators that completed the survey that informed this report.

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Statewide Waste and Resource Recovery Infrastructure Plan Progress Report – July 2015 to June 2017

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#### Introduction

The Statewide Waste and Resource Recovery Infrastructure Plan Progress Report – July 2015 to June 2017 provides an update on implementation of the Statewide Waste and Resource Recovery Infrastructure Plan (SWRRIP). It reflects the collective work undertaken by Victoria's waste portfolio, made up of the Department of Environment, Land, Water and Planning (DELWP), Environment Protection Authority Victoria (EPA), Sustainability Victoria (SV) and the seven Regional Waste and Resource Recovery Groups (the Groups).

The report includes the following sections:

- Section 1: Summary of key achievements arising from SWRRIP actions, Regional Implementation Plans and supporting initiatives.
- Section 2: Performance indicator data for the 2015–16 financial year.

#### What is the SWRRIP?

Initially launched in June 2015, the SWRRIP is led by SV on behalf of the Victorian Government. The SWRRIP provides a long term vision and roadmap to guide future planning for waste and resource recovery infrastructure in Victoria and is being implemented in partnership with the waste portfolio.

The SWRRIP seeks to establish a fully integrated waste and resource recovery system to meet the SWRRIP's goals (see Figure 1). Supporting implementation of the SWRRIP are the seven Regional Waste and Resource Recovery Implementation Plans (Regional Implementation Plans), which identify infrastructure and service needs, and how these can be met over at least the next 10 years for each waste and resource recovery region in Victoria.

#### FIGURE 1: THE SWRRIP GOALS – WHAT WE WANT TO ACHIEVE IN 30 YEARS.

#### GOAL

Landfills will only be for receiving and treating waste streams from which all materials that can be viably recovered have been extracted.

#### GOAL 3

Waste and resource recovery facilities including landfills are established and managed over their lifetime to provide best economic, community, environment and public health outcomes for local communities and the state and ensure their impacts are not disproportionately felt across communities.

#### GOAL 2

Materials are made available to the resource recovery market through aggregation and consolidation of volumes to create viability in recovering valuable resources from waste.

#### GOAL 4

Targeted information provides the evidence base to inform integrated statewide waste and resource recovery infrastructure planning and investment at the state, regional and local levels by industry, local government, waste and resource recovery groups, government agencies and the broader community.

The key government strategies and initiatives supporting the delivery of the SWRRIP for the next five to ten years are illustrated in Figure 2. For more information see Appendix 1 or visit SV's website.

#### The challenges of attributing change and measuring the impact of our work

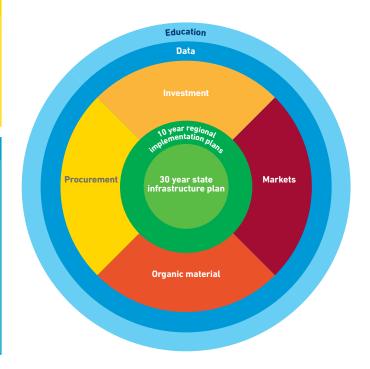
The SWRRIP, Regional Implementation Plans and supporting initiatives aim to provide guidance, remove barriers to investment and to support evidence based planning and investment decisions made by local and state governments and industry. The waste portfolio's work providing long term surety and guidance for waste and resource recovery decisions is helping build confidence and certainty for the sector, and assisting in being able to respond to market challenges as they arise.

However, although our work may contribute to decisions, there are many factors influencing investors, operators and planners such as:

- Industry and local governments' own planning and investment cycles and needs.
- External factors that impact on progress from year to year, both positively and negatively. This could range from commodity price and demand changes which may reduce annual recycling rates, long term weather fluctuations impacting organics generation, to technology advances increasing recycling rates.

This report aims to measure both the impact of the work of government and the activities of the waste and resource recovery sector.

FIGURE 2: THE SWRRIP, REGIONAL IMPLEMENTATION PLANS AND SUPPORTING INITIATIVES.



# Section 1: Summary of key achievements arising from SWRRIP actions, Regional Implementation Plans and supporting initiatives – July 2015 to June 2017.

What we're doing	Key highlights from across the Portfolio¹ (lead organisations italicised)
Integrating statewide, regional and local planning.	All seven of Victoria's Regional Implementation Plans released (Metropolitan in October 2016, remaining six in June 2017). The plans work collectively with the SWRRIP to establish an integrated waste and resource recovery system for Victoria (Groups).
	> Guideline for Infrastructure Scheduling released ensuring a consistent process for scheduling landfill air space across the State (SV).
	> SWRRIP and Regional Implementation Plans referenced in the Victoria Planning Provisions, enabling consideration by land use planning decision-makers (DELWP).
	> SWRRIP reflected in Infrastructure Victoria's 30-year Infrastructure Strategy (DELWP and SV).
	> SWRRIP and Metropolitan Implementation Plan reflected in Plan Melbourne Strategy (DELWP, Metropolitan Group and SV).
	> Established relations with Invest Victoria, Invest Assist, Trade Victoria and Regional Development Victoria (SV).
Aligning Victorian Government funding with the SWRRIP goals and priorities.	<ul> <li>Committed over \$53 million from the Sustainability Fund towards waste and resource recovery initiatives in the last two years. This includes over \$30 million in infrastructure support.</li> </ul>
Improving data and supporting	> Established the Waste Data Service to improve quality, timeliness and access to data (SV).
evidence based decision	> Published the Waste Data Portal to share datasets and Projection Model for infrastructure planning (SV)
making by state and local government and industry.	Researched and published a biomass assessment of Victoria as part of the Australian Biomass for Bioenergy Assessment funded by the Australian Renewable Energy Agency seeking to catalyse investment (SV).
Increasing community and	> Released the Victorian Waste Education Strategy (August 2016) (SV).
business knowledge and understanding of recycling and waste as an essential service.	Worked with metropolitan council waste educators and culturally diverse engagement specialists to produce an education kit and training package to help councils communicate with their residents from culturally diverse backgrounds about waste, recycling and litter (Metropolitan Group).
	> Hosted Victoria's first Waste Education Conference (Grampians Central West Group and SV).
Building social licence to operate and engagement in	<ul> <li>Released Waste Education grants for (Love Food Hate Waste Local Engagement Support, Litter and Illegal Dumping and Improving Resource Recovery) (SV).</li> </ul>
planning for the waste and	> Worked with local governments to co-design and trial ten community recycling pilot projects (SV).
resource recovery system.	Partnered with CSIRO to research factors that contribute to building trust in the sector, which has increased understanding of attitudes to waste and resource recovery and identified interventions to improve attitudes (SV).
	<ul> <li>Released the Community and Stakeholder Engagement Guide to assist the waste and resource recovery sector to deliver meaningful and successful community and stakeholder engagement (Metropolitan Group).</li> </ul>
Supporting increased allocation and preservation of	SV and Groups contributed to land use planning decision making by local government, Planning Panels Victoria, Victorian Civil and Administrative Tribunal and the Victorian Planning Authority.
land and buffers for waste and resource recovery activities.	Developed guidance and worked with councils to improve the use of land use planning tools to protect buffers surrounding waste and resource recovery infrastructure which will support the protection of amenity, public health and the environment. (Metropolitan Group).

<sup>1</sup> Regional Implementation Plan achievements from Regional Groups will be included in future reports.

#### What we're doing

# Supporting planning and investment in, and better management of, waste and resource recovery infrastructure and services.

#### Key highlights from across the Portfolio¹ (lead organisations italicised)

- > Launched the Investment Facilitation Service which promotes local investment opportunities, reduces investment barriers and supports development of investor business cases (SV).
- Released round 1 of the Resource Recovery Infrastructure Fund (\$5,100,000) and the Waste to Energy Infrastructure Fund (\$2,300,000) (SV).
- > Developed a **Hard Waste Services Leading Practice Guide** to support the delivery of council hard waste services, including mattresses (*Metropolitan Group*).
- > Released the *Guide to Better Practice at Resource Recovery Centres* and *Optimising Kerbside Collection*Systems for local government to improve performance and operational efficiencies (SV).
- Commissioned a feasibility study investigating the best options for developing a waste and resource recovery system that can help achieve the vision of a 'low waste' community for Fisherman's Bend (Metropolitan Group).
- > Produced templates, guidelines and delivered training (with the Planning Institute of Australia) as part of the *Improving Resource Recovery in Multi Unit Developments* to support councils in improving waste management planning (*Metropolitan Group*).
- > Supported the finalisation of projects from previous funding rounds such as the Metropolitan Local Government Waste and Resource Recovery Fund (Metropolitan Group) and Driving Investment for New Recycling (SV). Projects included:
  - infrastructure upgrades at resource recovery centres
  - landfill closures and development of resource recovery centres
  - collection of kerbside food/garden organics
  - social enterprises and charities delivering social value to community while recovering resources.

## Increasing recovery and improving management of priority materials such as organics and e-waste.

- > Released the Victorian Organics Resource Recovery Strategy (September 2015) (SV).
- > Led the joint procurement for organics processing on behalf of eight south eastern metropolitan councils (*Metropolitan Group*).
- Delivered activities for the Back to Earth Initiative in participating councils and launched a new social media campaign showcasing some of the enterprises using compost produced from garden organics collected from Melbourne households (Metropolitan Group).
- > Consulted with industry and local governments and conducted research on e-waste, including an in-depth market flow and technology processing analysis, to inform e-waste ban from landfill in Victoria (DELWP, EPA and SV).

### Supporting the growth of stronger and more resilient markets.

- > Released the Victorian Market Development Strategy for Recovered Resources (May 2016) (SV).
- > Funded seven R&D projects to build markets for the use of recovered glass fines, tyres and flexible plastics (SV).
- > Worked with industry sectors to facilitate product stewardship arrangements for tyres including (SV):
  - Developed the National Market Development Strategy for Used Tyres, in partnership with the Queensland Government; an initiative of the Australian Environment Ministers.
  - Supported Tyre Stewardship Australia's forum on opportunities to develop markets for tyre derived product.
  - Co-funded two R&D projects focused on the development of specifications for the use of tyre-derived products in road construction.
- > Worked with industry and other jurisdictions to support the establishment of Paintback®, a unified national product stewardship scheme developed and implemented by the industry, which aims to keep waste paint out of landfill by offering easy options for disposing of unwanted paint and packaging correctly (SV).

#### Section 2: Performance indicator data for the 2015–16 Financial Year

A suite of performance indicators have been established to measure how the SWRRIP actions, Regional Implementation Plans and other initiatives are supporting progress towards the goals of the SWRRIP and impacting the waste and resource recovery sector. Data and information collected will be used for ongoing evaluation of the effectiveness of the SWRRIP, guide continuous improvement and inform Victorian Government program planning.

#### Methodology

SV collected data for the 2015–16 financial year (the first year of the SWRRIP) to establish a baseline against which we will track progress. Future evaluations will allow comparisons and reporting on change and trends. If existing data was available for the 2014–15 financial year, we have incorporated it into this report.

The main data source was an online survey (SWRRIP M&E Survey) with some key stakeholder groups to understand what had been happening on the ground with planning for, and managing, waste and resource recovery infrastructure and services. A total of 101 responses were received, representing a 66% response rate (see Table 1).

TABLE 1: SWRRIP M&E SURVEY RESPONSE RATE – RESPONDENT GROUPS

Respondent groups	Contacted	Completed response	Response rate
Local Government	79	60	76%
Reprocessors	65	36	55%
Material Recovery Facilities	8	5	63%
Total	152	101	66%

The survey has provided a comprehensive data set, however there are limitations with this approach, including:

- Only one person in an organisation was targeted. Multiple people and departments may have been involved in waste and resource recovery planning and programs.
- > Responses are all self-reported.
- No metropolitan material recovery facilities (MRF) operators responded.
- Private transfer station and landfill operators were not surveyed but may be included in future surveys.

Additional data was collected through desktop research and SV's Victorian Local Government Annual Waste Services Survey (VLGAS) and Victorian Recycling Industries Annual Survey (VRIAS).

The following sections highlight key results arising from the performance indicator review.

#### Infrastructure planning and investment

#### What are we measuring?

#### What will change over time?

Indicator: Number of local governments and industry making planning and investment decisions informed by waste and resource recovery infrastructure data and information.

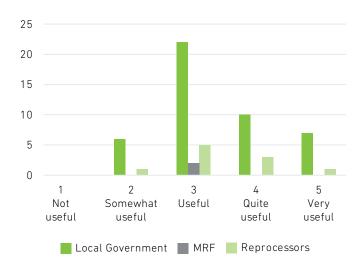
 Local government and industry are using plans, strategies, data and guidance produced by government to inform planning and investment.

 Government materials are considered useful information sources

The SWRRIP M&E Survey asked if respondents were using various Victorian Government plans, data and resources to inform waste and resource recovery planning and investment decision making in 2015–16. Key results from the responses received included:

- There was a total of 260 reported uses of different plans, strategies, resources, data and analysis.
- > 57 respondents reported use of the SWRRIP, with 88% rating it as 'useful' (see Figure 3 for respondent group breakdown).
- 78% of local governments surveyed reported they used the SWRRIP followed by 40% of MRFs surveyed and 28% of reprocessors surveyed.
- 36 respondents reported use of the Victorian Organics Resource Recovery Strategy (VORRS), with 83% rating it as useful.
- Of the 9 reprocessors who used VORRS, 56% were organics reprocessors.
- > 14 respondents reported use of the Investment Facilitation Service, with 93% rating it as 'useful'.

FIGURE 3: RATING OF 'USEFULNESS' OF SWRRIP - RESPONSES BY GROUP



#### What are we measuring?

Indicator: Investment in new or upgraded infrastructure and a net increase in jobs.

Indicator: Industry and local government are undertaking planning to invest in new or upgraded infrastructure that is consistent with the strategic directions of the SWRRIP.

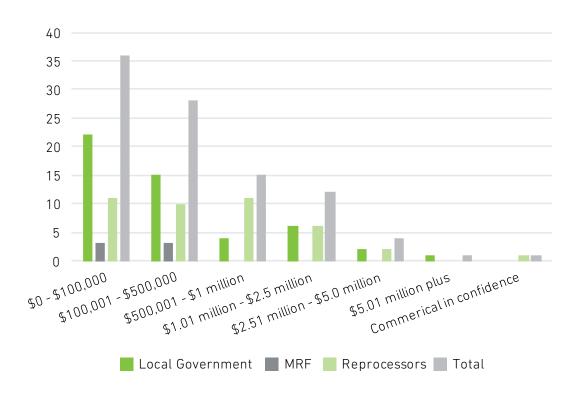
#### What will change over time?

- Increased investment in infrastructure that supports the SWRRIP goals and the priorities identified in Regional Implementation Plans.
- Generation of more jobs in the waste and resource recovery sector.
- More project planning and development activity.

The SWRRIP M&E Survey asked respondents if they undertook planning to invest, or did invest, in new or upgraded waste and resource recovery infrastructure in the 2015–16 financial year. Respondents could provide information for up to three priority projects.

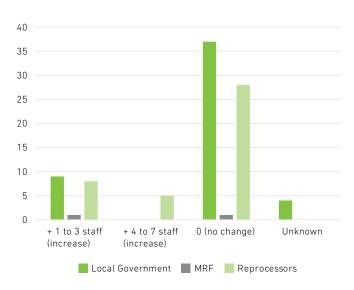
- Of the 99 responses received, 59% reported they undertook planning or invested in infrastructure. Broken down by respondent groups this included 69% of reprocessors, 53% of local governments and 40% of MRFs.
- Overall, respondents reported undertaking planning or investing in a total of 99 different projects.
  - Local government undertook 52 projects. Resource recovery centres / transfer stations made up 50% of projects followed by landfills at 35%.
  - Reprocessors undertook 45 projects. 31% related to organics and 11% related to plastics.
- Investment ranges for 64 of respondent's projects (67%) were under \$500,000 and 27 projects (28%) were between \$500,001 and \$2.5 million (see Figure 4 for respondent group breakdown).





- > 56% of respondents projects were reported as being completed and 19% were in development (e.g. construction).
- 12% of projects were in planning stages which were defined as 'early' (e.g. scope development, reviewing data) and 'detailed' (e.g. feasibility studies, detailed design).
- > 66 respondent projects (71%) had no impact on staffing levels, 18 projects increased staffing levels by 1 to 3 people (estimated or actual) and five projects increased staffing levels by 4 to 7 people (estimated or actual) (see Figure 5 for respondent group breakdown).

FIGURE 5: PROJECT STAFFING IMPACT - RESPONSES BY GROUP



- Respondents indicated how projects may impact recovery (multiple responses could be provided)
  - 53 projects were reported as increasing operating efficiency (speed).
  - 50 projects were reported as increasing operating capacity (size).
  - 41 projects were reported as reducing contamination (quality).
  - 34 projects were reported as increasing material range (scope).
  - 15 projects were reported as having no impact on recovery.

#### What are we measuring?

#### What will change over time?

Indicator: Government departments and agencies have strategies, plans, programs and functions<sup>2</sup> that are consistent with the strategic directions of the SWRRIP.

 Relevant planning by government supports the SWRRIP goals and Regional Implementation Plan priorities.

Data has been collected recording the referencing or use of the SWRRIP by government departments and agencies. A three point scale was applied to rate the outcome to determine consistency with the SWRRIP strategic directions. It is a broad rating and a qualitative determination was made by SV.

- Two plans / strategies included content outcomes relating to the SWRRIP and waste and resource recovery.
  - One plan received a Rating 1 'Consistent with the strategic directions of the SWRRIP'.
  - One plan received a Rating 2 'Consistent in part with the strategic directions of SWRRIP'.
- Four EPA works approval decisions took into account the SWRRIP as part of their overall approvals process.
  - The outcomes of three of the works approvals have been given a Rating 1 'Consistent with the strategic directions of the SWRRIP'.

#### **Community engagement**

#### What are we measuring?

#### What will change over time?

Indicator: Industry and local government are implementing strategies to communicate and engage directly with communities located near facilities.

- Increased community understanding and involvement in waste and resource recovery infrastructure planning.
- Well established relationships with communities located near facilities.

The SWRRIP M&E Survey asked about communication activities (e.g. websites, social media) and engagement activities (e.g. community forums or reference groups) undertaken with communities located near facilities that may have been impacted by infrastructure developments or operational issues in 2015–16. Respondents could provide information for up to three facilities. Key results from the responses received included:

- > 42 reported that they had communicated and / or engaged directly with communities.
- Local governments identified the infrastructure type for which they undertook communication and / or engagement activities. Licenced landfills (39%), followed by stand-alone resource recovery centres / transfer stations showed the greatest representation (36%).
- Of all of the activities undertaken, 36% were reported as being 'part of an ongoing program', 19% were a 'response to a complaint or issue' and 16% were 'contractual or licence requirements'.
- > 58 respondents described the relationship they had with communities located near facilities. 53% reported that they had a 'well established relationship', 43% reported they were 'developing a relationship' and 4% reported they had 'no relationship'.

#### Land use planning

#### What are we measuring?

# Indicator: Relevant local governments and planning authorities are considering hubs or sites of specific interest (as identified in the SWRRIP and/or Regional Implementation Plans) and reflecting them in Precinct Structure Plans (PSP) and Local Planning Schemes.

#### What will change over time?

- Suitable waste and resource recovery sites will be progressively protected through land use planning schemes.
- Planning will ensure unsuitable land uses are not established with, or near waste and resource recovery facilities.

The SWRRIP M&E Survey asked local governments with SWRRIP Hubs of State Significance if they undertook strategic land use planning activities that 'considered' or 'recognised' the protection of that hub in 2015–16 (NB: multiple responses provided).

- 22 state hubs were identified as being sited within the boundaries of 17 different local government areas. 13 of the 17 local governments identified responded to the SWRRIP M&E Survey.
- > Land use planning activity was reported for eight of the hubs.
  - Planning schemes were amended to recognise the role of waste and resource recovery activities for four of the hubs.
  - Five hubs were 'recognised' explicitly in a strategic land use planning documents.
  - Planning controls were applied to three hubs to ensure buffers are maintained.

Three planning scheme amendments had outcomes relating to the SWRRIP. One was given a Rating  $1^3$  'Consistent with SWRRIP strategic directions' by SV and two were given a Rating 2 'Consistent in part with SWRRIP strategic directions'.

#### Infrastructure and service management

#### What are we measuring?

# Indicator: Local government are supporting improved material stream management consistent with SWRRIP and Regional Implementation Plans that provide the best outcomes for local government and community.

#### What will change over time?

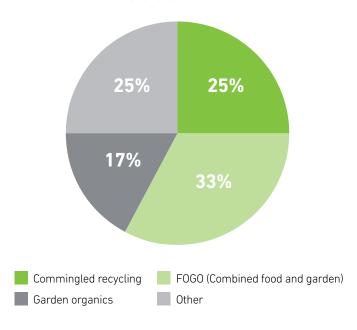
- Increased recovery of material streams through improved service access and operations.
- Greater aggregation and consolidation of materials to achieve quantities for reprocessing through collaborative procurements.

The SWRRIP M&E Survey asked local government questions relating to management of infrastructure and services in 2015–16. Key results from the responses received included:

#### Kerbside services

20 (34%) reported that they made a total of 24 service changes to increase the recovery of materials by introducing a new or expanding an existing kerbside collection service. Eight (33%) of these service changes related to food and garden organics and four (17%) related to garden organics (see Figure 6).

FIGURE 6: NEW OR EXPANDED KERBSIDE SERVICES – LOCAL GOVERNMENT RESPONSES



<sup>3</sup> A three point scale was applied to rate the outcome to determine consistency with the SWRRIP strategic directions. It is a broad rating and a qualitative determination made by SV

#### Resource recovery centres / transfer stations (RRC/TS)

- > 4 (7%) local governments opened new RRC / TS. Two indicated that the driver for this change was increased population / community demand and two indicated that the driver was landfill closure.
- > 3 (5%) closed RRC / TS. One indicated that the driver for this change was 'reduced population / community demand' and one indicated that the driver related to 'service and material consolidation at larger facilities to increase viability'.
- > 15 reported that they 'reconfigured site to encourage drop off of recyclable material prior to disposal' to increase recovery. The most common material impacted was e-waste (37% of identified materials).
- > 14 reported that they 'expanded range of materials accepted' at RRC / TS to increase recovery. The most common materials impacted were household batteries and e-waste.
- 9 reported they 'established systems to collect materials from other locations and then aggregate them at a central site' to increase recovery. The most common were 'e-waste'.
- > 9 'changed pricing to encourage recycling over disposal'.
- > 3 'increased operating hours / days'.

#### Service procurement

- 26 (43%) local governments reported that they completed procurements. Most were for RRC / TS service operation (40%) followed by commingled kerbside services (20%).
- The inclusion of 'increasing resource recovery as an evaluation criteria' was reported for 40% of procurements undertaken, most notably with procurements for RRC / TS.
- 8 (31%) indicated that the procurements they had been involved with were collaborative with other local governments.

#### Households with access to kerbside services

Data from 2014–15 and 2015–16 Victorian Local Government Annual Waste Services (VLGAS) survey provides a Victorian wide snapshot of household waste and recycling service access as reported by local government and allows for trend comparison over a two year period.

Table 2 and Table 3 illustrate service access for households for commingled recycling and garden organics as compared against garbage services. The following limitations are noted about the data:

- > Total households serviced may also include some commercial and industrial properties.
- > Data cannot be broken down to food and / or organics components.

TABLE 2: HOUSEHOLDS AND COMMINGLED RECYCLING SERVICES – TOTAL STATE

Description	2015–16	2014–15	Differences
Number of households with access to recycling services	2,445,698 households	2,413,714 households	+ 1.3%
Number of households with access to garbage services	2,513,210 households	2,497,675 households	+0.6%
Households with access to recycling services as a percentage of households with access to garbage services	97%	97%	no increase

TABLE 3: HOUSEHOLDS AND GARDEN ORGANICS SERVICES – TOTAL STATE

Description	2015–16	2014-15	Difference
Number of households with garden organics services	1,326,731 households	1,252,200 households	+ 9.9%
Number of households with garbage services	2,513,210 households	2,497,675 households	+ 0.6%
Households with access to garden organics services as a percentage of households with access to garbage services	53 %	50%	+ 3 percentage point increase

#### **Facility Improvements**

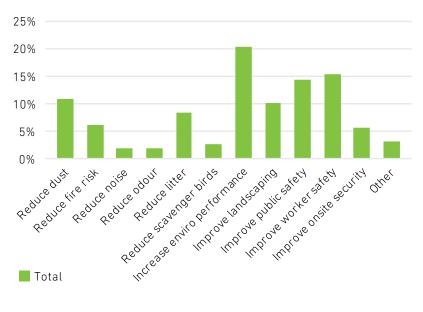
What are we measuring?	What will change over time?
Indicator: Environmental, public health and/or amenity performance of waste and resource recovery facilities has improved.	<ul> <li>Improved performance and reduced impacts of infrastructure on the environment, public health and amenity.</li> </ul>

The SWRRIP M&E Survey asked all respondents questions relating to projects undertaken to improve the environmental, public health and safety or amenity performance of facilities. Respondents could provide information for up to three priority projects.

- Of the 99 responses received, 51% reported they undertook projects. Broken down by respondent groups this result included 58% of reprocessors, 48% of local governments and 20% of MRF respondents.
- Data from reprocessor respondents can be viewed by the main material managed by their facility. Of the 21 who undertook improvement projects, 38% were organics reprocessors and 28% plastics reprocessors.
- Resource recovery centres / transfer stations and landfills each made up 43% of local government improvement projects.
- Respondents also identified the objectives of each project (multiple responses could be provided). Projects were undertaken for a range of reasons including 20% to 'increase environmental performance', 15% to improve 'worker safety', 14% to improve both 'public safety' and 11% to 'reduce dust (see Figure 7)'.

<sup>4</sup> Access data describes that a service is provided. It includes opt in services that some councils may have. It does not record household take up of the service.

FIGURE 7: PROJECT IMPROVEMENT OBJECTIVES - ALL RESPONSES



#### Data

#### What are we measuring?

#### What will change over time?

Indicator: Data provided by stakeholders is increasing in accuracy and is submitted as per agreed/published timeframes.  Faster turn-around times for data collection from stakeholders to data publication by SV to ensure evidence informing decision making is as up-to-date as possible.

SV administers VLGAS and VRIAS. Data has been collected to provide insight into the timeliness of data provided by local government (LG) and reprocessors (see Table 4).

TABLE 4: VRIAS AND VLGAS PERFORMANCE SNAPSHOT - TIMELINESS

Sub Measure	Survey	2015–16	2014-15	Differences
Response rate	VLGAS	100% (79 LGs)	100% (79 LGs)	No change
Submitted by the set due date	VLGAS (Mandatory data <sup>5</sup> )	9% (7 LGs)	13% (10 LGs)	4 % point decrease
All received after set due date	VLGAS (Mandatory data <sup>6</sup> )	73 days	154 days	81 days faster
Submitted by the set due date	VLGAS (Optional data)	19% (15 LGs)	20% (16 LGs)	1 % point decrease
All received after set due date	VLGAS (Optional data)	109 days	167 days	58 days faster
Response rate	VRIAS	90% (65 of 72 known reprocessors surveyed)	91% (64 of 70 known reprocessors surveyed)	1 % point decrease
Submitted by the set due date	VRIAS	35% (23 of known reprocessors surveyed)	33% (21 of known reprocessors surveyed)	2 % point increase.
All received after set due date	VRIAS	148 days	195 days	47 days faster

<sup>5</sup> Submission of kerbside recycling data is mandatory

<sup>6</sup> Submission of kerbside recycling data is mandatory

#### Market demand

#### What are we measuring?

#### What will change over time?

Indicator: Industry report increasing market demand for end products from priority materials.

 Market demand for organics and other priority materials is increasing.

The SWRRIP M&E Survey asked reprocessors<sup>7</sup> and MRFs about market demand trends experienced for end products<sup>8</sup>. Respondents could provide information for up to three priority end products and were asked which markets 'saw the greatest change'. Note the reported trends only refer to individual organisation's experiences, not the sector as a whole. Key results from the responses received included:

Reprocessor responses showed that of the total priority materials / end products reported on:

- > 67% experienced an increase in market demand. This change was felt most in local /regional markets (50%), followed by interstate / international markets (25%).
- 15% experienced a decrease in market demand. This change was felt most in local/regional markets (57%), followed by interstate / international markets (29%)
- When looking at high level material streams and market demand reported by reprocessors?:
  - Organics followed by aggregate, masonry and soils showed the greatest increase for some respondents.
  - Organics showed the greatest decrease for some respondents.

MRF responses showed that of the total priority materials / end products reported on:

- > 33% experienced an increase in market demand. Responses showed that this change was felt mainly in Victorian markets.
- > 33% experienced a decrease in market demand. Responses showed that this change was almost exclusively felt in the Victorian market.

#### Materials recovered or landfilled

#### What are we measuring?

#### What will change over time?

Indicator: Overall diversion rate from landfill has improved (All materials, including organics).

- A higher percentage of all materials are being diverted from landfill.
- A higher percentage of available organic material recovered.

Table 5 and Table 6 provide high level information about total waste managed and the recovery of materials for recycling (including energy recovery). This data is from the Victorian Recycling Industries Annual Reports.

Plastics reprocessors were not included in this question in the SWRRIP Survey as they provided similar data through the National Plastics Recycling Survey

<sup>8</sup> Reported changes in market demand did not distinguish between interstate and international markets. SV acknowledges that at the time of publication, changing policy in China restricting the recyclables it imports will impact demand for some materials.

<sup>9</sup> Reported end products / materials grouped by the main material managed by the reprocessor using the high level VRIAS material categories.

#### TABLE 5: VICTORIA'S HIGH LEVEL WASTE AND RESOURCE RECOVERY DATA – ALL MATERIALS

Description	2015–16	2014-15	Differences
Total materials recovered (tonnes)	8.49 million tonnes	8.41 million tonnes	+ 80,000 tonnes
Total waste managed (tonnes)	12.67 million tonnes	12.53 million tonnes	+ 140,000 tonnes
	4.17 million tonnes of waste sent to landfill	4.12 million tonnes of waste sent to landfill	
	8.49 million tonnes diverted from landfill for recycling	8.41 million tonnes diverted from landfill for recycling	
Diversion rate <sup>10</sup> (all materials)	67%	67%	No change

#### TABLE 6: VICTORIA'S HIGH LEVEL WASTE AND RESOURCE RECOVERY DATA - ORGANICS<sup>11</sup>

Description	2015–16	2014-15	Differences
Total organics recovered (tonnes)	1.04 million tonnes	1.04 million tonnes	No change
Total organics managed	2.49 million tonnes	2.49 million tonnes	+ 10,000 tonnes (difference
(tonnes)	1.45 million tonnes of organic waste were sent to landfill	1.45 million tonnes of organic waste were sent to landfill	due to high level rounding of figures)
	1.04 million tonnes of organics were recovered	1.04 million tonnes of organics were recovered	
Recovery rate (organics) <sup>12</sup>	42%	42%	No change

Diversion rate = Total materials recovered divided by total waste managed (including non-recoverable waste streams)
 Tonnes of organic waste landfilled are estimated from landfill composition audits (2009)

<sup>12</sup> Recovery rate = Total organics recovered divided by total organics managed

## Appendix 1: Summary of initiatives and complementary plans supporting the SWRRIP

Area	Initiative/complementary plans	Details
10-year Regional Implementation Plan	Regional Waste and Resource Recovery Implementation Plans	Identifies how regional and local waste infrastructure needs and opportunities will be met over the next 10 years, and delivers statewide goals and strategic directions in the seven waste and resource recovery regions.
Markets	Victorian Market Development Strategy for Recovered Resources	Seeks to stimulate and expand strong markets for recycled materials, critical to the success of Victoria's waste and resource recovery system.
Organic material	Victorian Organics Resource Recovery Strategy	Provides the mechanism to improve the recovery of organic materials.
Investment	Investment facilitation service	Provides information and advice on Victoria's waste and resource recovery sector to prospective investors in infrastructure.
Procurement	Procurement support	Facilitates collaborative procurement of waste and resource recovery services and infrastructure for local governments.
Data	Victorian Waste Data System	Improves the quality, timeliness and accessibility of waste and resource recovery data. Provides accurate, useful and timely data to underpin good decision-making to enable Victoria to plan for, and better manage, waste and materials streams.
Education	Victorian Waste Education Strategy	Leads targeted waste education that facilitate reduced waste generation, improves resource recovery and increases the community's participation and understanding of waste management and resource recovery infrastructure and services.

