How we delivered:
All the projects that were assessed

Project name	Assessment criteria	Description
ResourceSmart Schools	Tier 1	See pages 2 & 3 for detail.
Business Support Program	Tier 1	See pages 2 & 3 for detail.
Energy Efficient Office Buildings	Tier 1	See pages 2 & 3 for detail.
Building Victoria's Organics Recovery	Tier 1	See pages 2 & 3 for detail.
Driving Investment for New Recycling	Tier 1	See pages 2 & 3 for detail.
Household Chemical Collection	Tier 2	Provides a safe and free service for Victorians to dispose of household chemicals, one of the most cost effective services of its type in Australia.
Love Food Hate Waste	Tier 2	Reached over one million Victorians via online advertising, advertorials and social media, motivating Victorians to use leftovers for lunch.
Social Value from Waste	Tier 2	Diverted 548 tonnes of waste from landfill, employed 37 staff and trained another 11, enabling social enterprises in the program to achieve both environmental and social goals.
Smarter Choice	Tier 2	Encouraged consumers to purchase energy efficient appliances and products. It is estimated to have reached over 390,000 households, saving an estimated total of $11 million in household energy bills between 2012-2015.
Energy Efficient Rebates for Low Income Households	Tier 2	Aimed to reduce cost of living expenses for low income households.
Statewide Waste and Resource Recovery Infrastructure Plan	Tier 2	Provided long-term vision and roadmap for the state's waste and resource recovery system.
Community Sustainability Infrastructure Fund	Tier 3	The CSIF project increased renewable energy capacity of 494.26kW and reduced energy consumption of 31,397GJ per year.
FirstRate5	Tier 3	Underpins the minimum energy efficiency standards for new housing in Victoria, and increasingly, around the country.
Kerbside Food Organics and Garden Organics Recovery	Tier 3	The project provided advice and funding support to targeted councils and business as an incentive for them to install the infrastructure needs to increase recovery of organic waste.
Paintback	Tier 3	By 2021, Paintback aims to collect, divert and recycle 45 million kilograms of unwanted paint and packaging that would otherwise have been disposed to landfill.
Victorian Litter Plan	Tier 3	The project aimed to build capacity and capability of state and local government, land managers, and other stakeholders to address littler and illegal dumping issues.
Waste Data Service	Tier 3	The provision of waste and resource recovery data to improve decision making.

For more detail about the assessment of these projects, you can review the full report, *Measuring our impact*, on our website www.sustainability.vic.gov.au

Our alignment with Victorian Government priorities

Our focus under the *Towards SV2020* strategy is on helping the community take action on climate change and to use our resources sustainably. Our programs deliver against State Government priorities and action plans including Victoria's Energy Efficiency and Productivity Statement, Renewable Energy Roadmap, the New Energy Technologies Sector Strategy, and the Statewide Waste and Resource Recovery Infrastructure Plan.

Climate Change | **Energy efficiency** | **Renewable energy** | **New energy technology** | **Resource recovery**

Our contribution to the United Nations Sustainability Goals

The United Nations adopted the Sustainability Development Goals in 2015, establishing a plan of action for people, planet and prosperity. The 17 Sustainable Development Goals and 169 targets seek to build on the Millennium Development Goals and complete what these did not achieve. They seek to realize the human rights of all and to achieve gender equality and the empowerment of all women and girls. They are integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental.

SV's work primarily contributes to supporting the achievement of:

Goal 7 › Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 8 › Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goal 11 › Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 12 › Ensure sustainable consumption and production patterns

Goal 13 › Take urgent action to combat climate change and its impacts

What we have learned

Taking the learnings from the projects assessed as part of this review, and across other Australian and international experience, key considerations for SV in how it designs programs and projects in future include:

- Co-design, capturing all project stakeholders and partners, should be an integral factor in developing objectives, scope and planning for implementation of projects.
- Expected project benefits and the measures that will be used to track and assess them should be defined at the project outset, and be embedded in the project logic. They should align with project objectives and be agreed across all parties involved.
- Learning feedback loops and continuous improvement should be used to refine project delivery and project specifications. They should be embedded in associated contracts and agreements and linked to review milestone.
- Adequate time should be allowed to undertake stakeholder management, performance evaluation and project re-scoping as needed.

Who is ACIL Allen?

Sustainability Victoria commissioned ACIL Allen to independently assess its programs and initiatives to objectively quantify the value SV provides to the Victorian community. ACIL Allen is the largest independent Australian owned economics and policy consultancy in Australia. They advise companies, institutions and governments on economics and policy management.

For more detail about the assessment of these projects, you can review the full report, *Our Impact: Putting the customer first*, on our website www.sustainability.vic.gov.au

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Measuring our impact

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Sustainability Victoria
VICTORIA State Government

2018 Measuring our impact

A summary report

Sustainability Victoria

Introduction

At the end of 2017, SV commissioned ACIL Allen to complete an independent impact assessment of our programs and initiatives to objectively quantify the value SV provides to the Victorian community. The assessment and its findings will be used to improve SV's approach to project design effectiveness and the monitoring and evaluation of its ongoing work.

What was assessed?

The report assessed economic, social and environmental benefits of SV's programs. 17 out of 62 projects undertaken since 2011 were assessed.

Initiatives were divided into three project tiers:

Tier 1 › **Direct support and investment**
High profile, high cost, central to SV goals, high quality data
5 projects

Tier 2 › **Engagement and campaigns**
Social or behavioural change, strong focus on stakeholder and community engagement, impact not easily monetised
6 projects

Tier 3 › **Working with others**
Overall impact and value less direct, including projects shared with other jurisdictions, largely managed by industry, where SV is leading, coordinating or planning
6 projects

Key Findings

- For Tier 1 projects alone **SV delivered a cost benefit of 1:2.49**, generating $248.4 million in total present value benefits to Victoria from an investment of $28.6 million. In one example assessed (Driving New Investment in Recycling), every $1 spent returned nearly $20 in economic benefit to the community. While not quantified, when all program benefits are taken into consideration, the total benefits from all of SV's programs are likely to significantly exceed the organisation's expenditure since 2011.
- SV has **demonstrated a strong strategic focus** that maximises its impact by developing a program of work that uses a range of sustainability initiatives which work together to integrate outcomes and build viable long-term industries as a foundation for a sustainable economy. There have been lessons along the way. The benefits directly attributable to SV from Tier 1 projects alone have collectively more than paid for themselves since 2011. It establishes SV as a commercially adept business.
- SV is **powerful advocate and facilitator of positive and sustained social change**. SV has changed social behaviours and cultural attitudes toward waste and energy across a range of programs. SV's strong focus on collaboration and consultation is improving industry and community engagement in environmental issues across Victoria.
- SV is **a pioneer in social impact investment**, with many experiences, successes and lessons to share with others. SV is at the forefront of the next wave of social impact investment, with expertise in facilitating this form of change, having generated employment and provided training in current programs.
- SV is **an innovator and leader on environmental matters** in Victoria as well as other jurisdictions, particularly around co-regulatory approaches. By bringing stakeholders together, co-designing projects to achieve agreed outcomes, SV could expand its leadership role and impact in the Victorian community.
- The projects assessed collectively **addressed tangible needs and gaps**, as well a market failures. They have delivered a rich variety of outputs, including educational resources, awards and materials efficiency best practice guides and resources and improved the capacity of stakeholders to deliver on aligned environmental and social goals.

How we delivered: Five major case studies

ResourceSmart Schools

This initiative that helps schools benefit from embedding sustainability in everything they do. Schools take action to minimise waste, save energy and water, promote biodiversity and reduce greenhouse gas emissions. Our schools program helps schools reduce costs while giving students the opportunity to learn about sustainability in a tangible and realistic environment.

Key achievements

1.4 million students and teachers have **been reached by our schools program** since 2011.

80% of schools that participated indicated that our schools program directly led to a **reduction in the amount of resources used**.

- The 425 participating schools typically achieved a **5 to 10 per cent reduction** in waste generation, and many schools made changes in school infrastructure and/or practice changes.
- **69 per cent** of schools indicated that they had made 'moderate' or 'significant' progress in embedding sustainability into the curriculum
- There were three types of benefits across electricity, water, landfill, paper and recycling:
  - **lower financial cost** for schools because of lower resource use and/or waste .
  - **lower carbon pollution** which resulted from lower electricity consumption.
- teachers and students have **enhanced knowledge of sustainability**, resulting in energy and water savings in the home environment.
- The spill-over benefits to our schools program arising from teachers and students applying enhanced sustainability practices at home is estimated at $14.7 million in present value terms. The net benefit or net present value is estimated at $15.1 million in 2014-15 dollars under a 4 per cent real discount rate.

The benefit-cost ratio of this project is estimated at 2.24.

Business Support Program

This project supports small and medium-sized enterprises to improve their input materials usage, reduce waste and improve energy efficiency through grants. The sectors addressed include manufacturing, dairy farming, food processing, textiles and fashion, retail and supermarkets, plastics and chemicals and beverage, wineries and breweries.

Key achievements

x 1,428 small and medium sized **businesses participated.**

$5.9 million **in annual savings** for businesses that participated.

- **51 per cent of businesses** in the program were located **in regional Victoria**.
- **88 per cent** of businesses that undertook resource efficiency assessments fully implemented at least one recommendation.
- Collectively, businesses implemented around one-third of recommendations by value – approximately $56,000 in investment per business.
- Energy saving was **62,693 GJ** per annum, while materials efficiency projects resulted in more than **5,000 tonnes of waste avoided** (including food waste, timber, plastics, rubber, solvent and sand).
- The project has a net present value of **$28.5 million** and an internal rate of return (IRR) of 40 per cent.

The benefit-cost ratio (BCR) is 2.60.

Driving Investment for New Recycling

This program supports infrastructure projects for the collection, sorting and/or treatment of commercial and industrial waste and municipal solid waste that significantly increases the recovery of valuable material and diverts it from landfill. The project targeted new or the upgrade of existing infrastructure projects and sought to improve facilities servicing regional Victoria. While DINR is not intrinsically innovative in and of itself, it supported projects looking at innovative ways to increase the diversion of material from landfill (through largely untested processing approaches) and importantly, to stimulate emerging markets for these recycled products.

Key achievements

243,521 tonnes **increase in processing capacity**, with actual produced capacity increases of 126,399 tonnes

(Up until November 2016.
Not all projects completed)

218,920 tonnes **increase in diversion**, with an actual diversion of 51,062 tonnes up until November 2016

- **New recycling across all waste sectors** with the best results in high-volume material streams such as glass and organics).
- The **present value** of benefits generated by the assessed projects is **$102.18 million** in 2017 dollars under a 7 per cent real discount rate.
- The net present value of the assessed projects is **$96.99 million**.

The benefit-cost ratio of the projects is 19.69*.

Energy Efficient Office Buildings

This project assists owners of mid-tier commercial office buildings to reduce energy costs and environmental impacts by providing assistance to undertake energy efficiency upgrades. The project helped 20 building owners to undertake three stages of work: a detailed opportunities analysis, building tuning implementation and monitoring and verification. The selected buildings are reasonably representative of Victoria's mid-tier office stock.

The buildings comprise: 8 buildings in the Melbourne CBD and ranging between 2,000 and 22,000m², 8 buildings in wider metropolitan Melbourne and ranging between 2,228 and 20,376m² and 4 buildings in regional centres and ranging between 570 and 4,072m².

Key achievements

Across the project's 20 participating Victorian buildings, average benefits over a 12-month period are:

29% **reduction in energy use** following building tuning.

4,000 tonnes **reduction in CO2-e emissions** over a 12-month period.

- 1 star NABERS Energy rating improvement.
- A payback on efficiency investment in less than three years.
- Over $1.1 million in savings in energy bills per annum.
- Over $10 million in co-investment from building owners.
- Delivery of over 90 jobs.

The benefit-cost ratio (BCR) is estimated at 1.04.

Building Victoria's Organics Recovery

This project aims to increase the recovery of organics away from landfill by improving the recovery, processing and beneficial use of garden and food organics, collected by regional councils. The flow-on benefits of decreasing organics to landfill include decreasing leachate to groundwater and other localised environmental harm, as well as reducing greenhouse emissions. BVOR was designed to facilitate the development of organic resource separation systems and/or processing facilities in regional and rural Victoria.

Key achievements

New kerbside organics collection services introduced in:

> 650 tonnes **collected** in the first cycle

9,362 tonnes **diverted** from landfill 2016-17

Bendigo: A combined food and garden collection service. More than 650 tonnes of food and garden organics were collected in the first full collection cycle under the scheme (a total of 10,856 tonnes was collected with minimal contamination over the first 12 months of operation).

Ballarat: A garden collection service, with 1,410 tonnes of organic waste diverted from landfill in the first two months of operation.

Smaller organics diversion, recovery and composting actions enacted by **East Gippsland Shire Council, Southern Grampians Shire Council and Corangamite Regional Landfill**.

- New organics processing facility approved for Geelong with a capacity of **30,000 tonnes** of organics per annum.
- Organics collection trials demonstrated clear benefits with Mildura Council now considering implementation of an ongoing organics collection service.
- The estimated present value of benefits for the two projects (City of Bendigo and City of Ballarat) is estimated at **$39.94 million**.

The benefit-cost ratio (BCR) is estimated at 1.17.

Project name	SV funding	Present Value (PV) of all costs	PV of project benefits	Net Present Value (NPV)	Benefit-Cost Ratio (BCR)
	($ million)	($ million)	($ million)	($ million)	
ResourceSmart Schools (RSS)	$12.19	$12.2	$27.3	$15.1	2.24
Business Support Program	$8.77	$18	$46.5	$28.5	2.60
Energy Efficient Office Buildings (EEOB)	$1.68	$24.5	$25.5	$1.0	1.04
Building Victoria's Organics Recovery (BVOR)	$2.5	$40	$46.9	$7.0	1.17
Driving Investment in New Recycling (DINR)	$3.49	$5.2*	$102.2*	$97*	19.69*
All five projects	**$28.6**	**$99.9**	**$248.4**	**$148.6**	**2.49**

*Based on 5 assessed DINR projects (out of 15). Notes: Wholesale energy prices and/or wholesale energy efficiency upgrade costs are used in the cost-benefit analyses.
A social cost of carbon of $35/tonne is used in the valuation of environmental benefits from avoided greenhouse gas emissions.
A real discount rate of 7 per cent is used in most of the cost-benefit analyses. Detailed assumptions are provided in each case study in the appendices.
Source: ACIL Allen