

Zero Waste SA

**Business Plan: 2010-11 and
Future Directions: 2011-13**





Members of the Zero Waste SA Board approving this business plan

Member	Reason for appointment
Mr Allan Holmes (Chair)	Environmental sustainability, conservation and protection
Mr Jeff Tate	Local government and waste-related infrastructure development
Mr Lachlan Jeffries	Waste-related infrastructure development
Ms Megan Dyson	Member, Board of the Environment Protection Authority
Ms Anne Prince	Waste management industry, regional and interstate waste strategies, recycling and waste auditing
Mr Vaughan Levitzke	Ex officio member
Mr Tom Spirat	Regional affairs and local government
Ms Ann Harvey	Economic, financial and risk management
Ms Cheryl Hill	Advocacy on environmental matters on behalf of the community
Ms Michelle Morton	Environmental management, sustainability, conservation and protection

The Zero Waste SA Board is the governing body of Zero Waste SA and must consist of 6–10 members. The Board’s membership must include persons who together have, in the Governor’s opinion, practical knowledge of, and experience in:

- > environmental sustainability
- > local government
- > waste management industry or waste related infrastructure development
- > regional affairs
- > economic, financial and risk management
- > advocacy on environmental matters on behalf of the community.

The Board members, as listed above, satisfy the requirements of Section 9(6) *Zero Waste SA Act 2004*.

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Foreword

South Australia's Waste Strategy 2005-2010 has successfully guided South Australians to reduce the quantity of waste destined for landfill in this state. We now recycle 70% of our waste and new systems set in place will help us reduce waste to landfill even further.

The new five year strategy, released in draft form for comment, will set new benchmarks for us to achieve.

Most metropolitan councils and some rural councils now use the three bin system (green organics, recycling and residual waste bins), which diverts 50-55% of household waste.

Zero Waste SA has supported a pilot program with 10 councils (17,000 households) to recycle food waste by redirecting it into the green organics bin for composting. It has proved very successful. Zero Waste SA is developing a new incentive program that aims to divert 60-75% of household waste away from landfill.

Many materials in everyday products create problems when they are no longer wanted. Compact fluorescent lights, electronic equipment (e-waste), batteries and many others items need careful attention. Recycling and recovery allow the resources they contain (e.g. metals) to be used again and prevent hazardous substances (e.g. lead and mercury) being released into the environment.

We know that partnering and collaboration are critical. Zero Waste SA's strategic alliances with local government, peak industry bodies, federal and state government agencies, and community organisations have been instrumental in helping us achieve our targets and goals.

Zero Waste SA's Recycling at Work program strives to improve waste management practices in the highly fragmented commercial and industrial sector. The initial focus is on business in the metropolitan area.

The Resource Efficiency Assistance Program helps participating organisations in this sector address the difficult 'top tiers' of the waste hierarchy: avoiding and reducing waste. The program has ambitious plans for more than 1000 South Australian businesses and government worksites. With collaboration at its base, and with strong potential to save resources and money in a difficult financial climate, the program is expected to bring excellent outcomes.

South Australia has the potential to harness and build upon our experiences and successes in waste management, but we need your help to achieve this goal.

Allan Holmes
Chair
Zero Waste SA Board

1 | Introduction

Zero Waste SA is having an effect, shown in remarkable reductions in waste to landfill.

Zero Waste SA (ZWSA) was established by the *Zero Waste SA Act 2004*. ZWSA provides strategic policy advice, guidance and leadership to government and stakeholders to bring about change. ZWSA establishes programs and projects that maximise waste reduction, and promote recycling and ecological sustainability.

Other Australian states have established strategies and organisations with a similar focus. ZWSA maintains strong links with these organisations to collaborate and share experiences, information and learning. Western Australia established its own Zero Waste agency in 2008.

The Zero Waste SA Business Plan: 2010-11 is developed to support the state government waste strategy. The *draft South Australia's Waste Strategy 2010-15* has been released for public consultation in early 2010-11.

The Business Plan outlines priorities and targets to support the Waste Strategy and will be subject to adjustment once the Waste Strategy is finalised. Approved projects can have significant lead times for development and other approvals. Cash flow needs to be planned to ensure that projects can be funded beyond the financial year in which grants are approved.

ZWSA is having an effect, shown in remarkable reductions in waste to landfill. From 2002-03 to the end of the 2008-09, metropolitan waste disposed to landfill was reduced by almost 14.4%. However, a growing economy makes it difficult to continue to show overall reductions in waste to landfill. The reductions achieved by improved kerbside recycling collections for households, for example, are not as easily gained in other areas of waste management.

Data collection and analysis is becoming increasingly important to assess the effectiveness of programs and projects in decision making. This was a priority area of investment in 2009-10 with the Zero Waste SA Environment Users System (ZEUS) database completed in February 2010.

1.1 Highlights of the Business Plan

Collection of food waste at kerbside

Up to half of the residual waste from over 500,000 households is compostable. Many of the 40 local councils that have implemented, or committed to, high performing kerbside collection systems are currently recycling up to 55% of kerbside material.

This program commits \$1,437,900 in 2010-11 to capture food waste for composting and follows on from the kerbside food waste collection pilots that began in 2009 (Program reference: 5.2.3).

E-waste

South Australia is moving to phased bans on some waste types from entering landfill, reducing their harmful effects on the environment and paving the way for new recycling industries and green jobs. In November 2009 the nation's environment ministers resolved to introduce a national product stewardship scheme for televisions and computers by 2011. In 2007-08, 16.8 million televisions and computers were discarded in Australia, with 84% going to landfill. The phase-out of analog televisions in the next few years will dramatically increase this figure.

This program commits \$284,600 in 2010-11 to assist councils to run e-waste collections for their householders (Program reference: 5.2.1).

Business Sustainability Alliance

Resource efficient manufacturing can make a sustainable difference by reducing raw material, energy and water use, and thus minimising waste production.

ZWSA is committing \$1,113,300 in 2010—11 to help businesses and local and state government, understand, develop and implement cost-saving and resource efficient measure that will reduce waste. This will build capacity to deal with a range of rapidly emerging environmental, financial and social consequences (Program references: 6.3.2 and 6.3.3).

Zero Waste SA Environment Users System (ZEUS)

ZEUS went live in February 2010 and is collecting information on illegal dumping, municipal waste and recycling, household hazardous waste and farm chemicals, litter statistics and container deposit data.

During 2010—11 further data will be collected from landfill operators, composting industry and the recycling and resource recovery industry (Program reference 5.1.2).

1.2 Flexibility in uncertain financial times

In the current uncertain financial times, it is essential to be able to respond rapidly to a changing commercial environment.

Expenditure under the Business Plan will be reviewed throughout the year to ensure that it remains relevant to changing circumstances. A small contingency fund has been allowed, to service urgent requirements.

2 | Zero Waste SA aims and objectives

2.1 Vision and mission

Vision: The achievement of zero waste.

Mission: To change the direction of waste management in South Australia to one that meets both the preferred approach of the waste management hierarchy and the principles of ecologically sustainable development.

2.2 Primary objectives and guiding principles

The primary objective of ZWSA is to promote waste management practices that, as far as possible:

- > eliminate waste or its consignment to landfill
- > advance the development of resource recovery and recycling
- > are based on an integrated strategy for the state.

In the exercise of its functions, ZWSA is to be guided by:

- > the waste management hierarchy
- > principles of ecologically sustainable development as set out in Section 10 of the *Environment Protection Act 1993*
- > best practice methods and standards in waste management and the principle that government waste management policies should be developed through a process of open dialogue with local government, industry and the community in which all are encouraged to contribute to decision making.

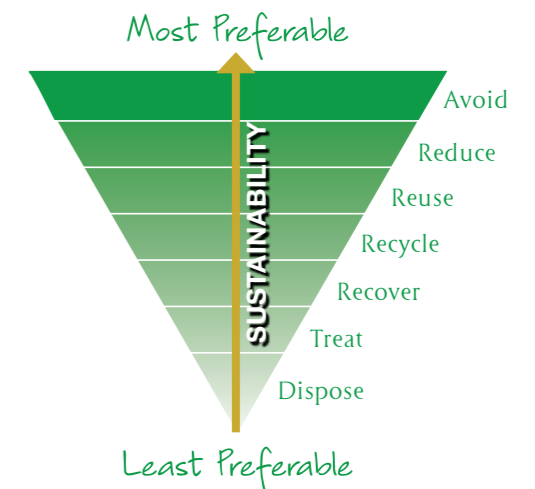


Figure 1. The waste hierarchy

2.3 Functions of Zero Waste SA¹

The functions of Zero Waste SA are—

- (a) to develop, co-ordinate and contribute to the implementation of government policy objectives in respect of—
 - (i) waste management for regions, industry sectors or material types; and
 - (ii) public and industry awareness and education in relation to waste management; and
 - (iii) programs for the prevention of litter and illegal dumping; and
 - (iv) market development for recovered resources and recycled material; and
- (b) to develop, adopt and administer the waste strategy for the State; and
- (c) to monitor and assess the adequacy of the waste strategy and its implementation; and
- (d) to provide assistance to local councils with arrangements for regional waste management; and
- (e) to contribute to the development of waste management infrastructure, technologies and systems; and
- (f) to commission, support and collaborate on research into waste management practices and issues; and
- (g) to advise the Minister from time to time about the amount to be charged by way of the levy under section 113 of the *Environment Protection Act 1993*; and
- (h) to advise the Minister about any matter referred to it by the Minister or any matter it sees fit to advise the Minister on in connection with its responsibilities under this Act; and
- (i) such other functions as may be conferred on it by this Act or any other Act, or as may be assigned to it by the Minister.

¹ Section 1.3 *Zero Waste SA Act 2004*

² Treasury SA adjusts state government fees and charges each year as part of the budget process in line with a 'basket of goods' analysis.

2.4 Funding provisions

Funding for the ZWSA programs comes from the solid waste component of the waste depot levy, collected under the Fees and Levies regulations of the *Environment Protection Act 1993*.

The Environment Protection Authority (EPA) collects the levy of which:

- > 50% is paid into the Waste to Resources Fund to be used by ZWSA for its programs
- > 5% is paid into the Environment Protection Fund
- > the remainder part-funds EPA programs.

The fee for 2009—10 was \$25.20² per tonne of waste (metropolitan area) and \$12.60² per tonne (non-metropolitan areas). The fee for 2010—11 is anticipated to be \$26.00 per tonne and \$13.00 per tonne for respectively.

ZWSA will also take advantage of other funding sources, such as the Australian Packaging Covenant, and existing alliances with organisations like KESAB environmental solutions, the EPA, industry bodies and local government.

2.5 Long term strategic objectives

This *ZWSA Business Plan: 2010–11 and Future Directions: 2011–13* reflects the objectives, actions and priorities of the draft *South Australia's Waste Strategy 2010-2015* which has two objectives:

1. maximising the value of our resources
2. avoiding and reducing waste

2.5.1 Objective 1: Maximising the value of our resources

To achieve this we will:

- > promote green innovation (e.g. promote the development and uptake of new technology)
- > recognise the lifecycle of products and account for the resources used
- > develop and adopt innovative products and services that help reduce our ecological footprint to create comparative economic advantage
- > increase and maintain capacity of recycling systems and reprocessing infrastructure
- > implement regulation that drives progress and supports long-term investment decisions
- > identify new opportunities through developing and promoting innovative solutions.

2.5.2 Objective 2: Avoiding and reducing waste

To achieve this we will:

- > avoid and reduce wasteful use of resources in production processes and products (e.g. leaner production, design for environment and extended producer responsibility)
- > learn the importance of and foster attitudes and lifestyle choices that encourage us to live within nature's limits

- > embed this new learning within our education systems
- > support consumers to make informed purchasing decisions.

2.5.3 Measurement, analysis, evaluation and reporting

We will underpin our work with our increasing knowledge and data on waste, recycling and resource recovery.

2.5.4 Stakeholders, partnering and linkages

The goals and targets of the draft South Australia's Waste Strategy 2010-15 and future strategies will be realised through consultation and successful cooperation with a range of stakeholders to identify priorities and areas of interest.

2.5.5 Goals and targets

Within each objective, ZWSA outlines specific goals and priorities for action across the 3 broad waste-generating sectors of the community: municipal solid waste (MSW), commercial and industrial (C&I) waste, and construction and demolition (C&D) waste.

Key material recovery and recycling targets in the draft Waste Strategy (Table 1) form the higher level key performance indicators.

Table 1. Draft Waste Strategy 2010-2015 key material recovery and recycling targets

Waste stream	2010 base year	By 2012	By 2015	By 2014
MSW	50% of all material presented at kerbside is diverted from landfill	60% of all material presented at kerbside is diverted from landfill	75% of all material presented at kerbside is diverted from landfill (and food waste is included)	Reduce waste to landfill by 25% (from SA's Strategic Plan)
C&I	30% of C&I materials diverted from landfill	65% of C&I materials diverted from landfill	75% of C&I materials diverted from landfill	Reduce waste to landfill by 25%
C&D	50% of C&D materials diverted from landfill	75% of C&D materials diverted from landfill	90% of C&D materials diverted from landfill	Reduce waste to landfill by 25%

3 | Where we were in 2009

South Australia is a strong performer in recycling and recovery of resources.

The Review of Recycling Activity in South Australia (2008–09) by Hyder Consulting, on behalf of ZWSA, showed that South Australia is a strong performer in recycling and recovery of resources.



Figure 2. Reported per capita recycling activity, by state³

In 2008–09, 2.55 million tonnes of materials was diverted from landfill to recycling in South Australia, down from 2.61 million tonnes recycled in 2007–08, a decrease of 2.3%. However, the 2008–09 diversion rate was the highest recorded in the last 6 years at 70.4%. The South Australian per capita recycling rate has increased to the second highest level in the last 6 years at 1573 kg/capita.

Actual recycling activity in South Australia was slightly lower during 2008–09 because overall less waste was produced in a challenging economic climate. If the trend of more waste being diverted from landfill is to continue in a growing population (1.6 million mark passed 2008–09), the recycling and reprocessing industry needs to continue to expand with it.

The 2008 municipal solid waste target (50% kerbside recycling) has been achieved and the Business Plan encourages local government to embrace food waste collection and to reduce contamination of recyclables to achieve the 2015 target (75% diverted from landfill).

South Australia performs well in construction and demolition recycling, beverage container and steel recycling, and leads the way in the recycling of some plastics (mainly PET and HDPE polymers from the beverage sector).

South Australia has a large network of privately operated drop-off centres (some 115 across the state). Local councils in this state are committed to working with state government and industry towards sustainability and resource conservation. The state also has industry leaders in the composting and C&D recycling sectors.

4 | Organisation of this Business Plan

Some actions from South Australia's previous waste strategy were designed to be completed during its 5-year timeframe. Some are ongoing and are listed for continued action in this plan.

The Business Plan 2010–11 and Future Directions 2011–13 closely follows the draft South Australia's Waste Strategy 2010–2015 and its 2 key objectives.

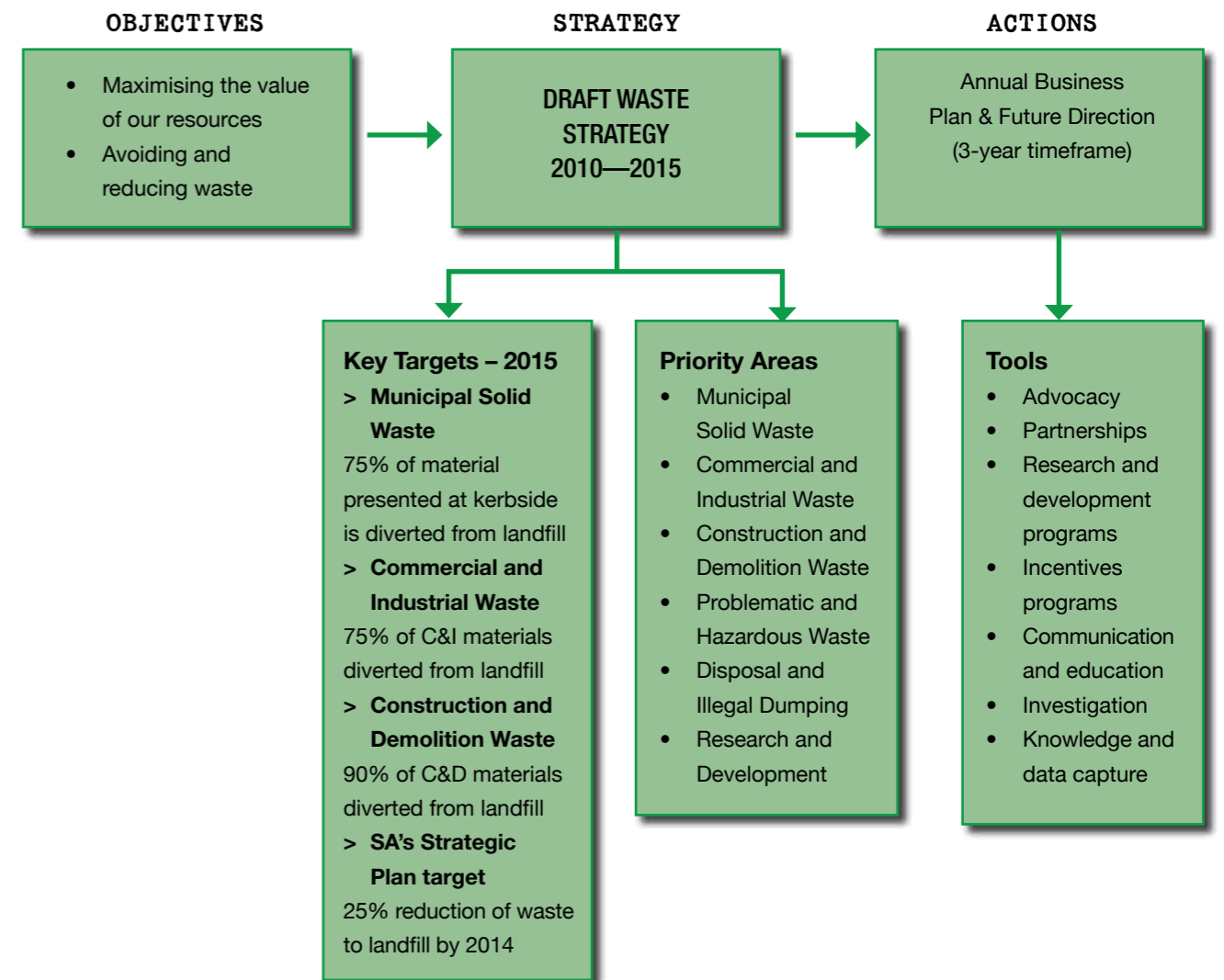


Figure 3. Relationship between draft South Australia's Waste Strategy 2010–2015 and Zero Waste SA Business Plan

Some actions from South Australia's previous waste strategy were designed to be completed during its 5-year timeframe. Some are ongoing and are listed for continued action in this plan.

Each objective is described and priorities for action for each are listed by waste (resource) stream. The actions are not mutually exclusive. The priorities for action are listed in Sections 5 and 6 by Priority Area, and Program.

Each area lists actions from the draft Waste Strategy and provides an indicative budget for each program, with outcomes and, where appropriate, key performance indicators.

³ Note: Latest available data for each state: SA 2008–09; ACT 2007–08 (source 2008 Progress update towards No Waste); Qld 2006–07 (State of waste and recycling in Queensland 2008, technical report); Vic 2007–08 (Towards Zero Waste Strategy, Progress Report for 2007–08); WA 2006–07 (Review of Total Recycling Activity in WA 2006–07 report); NSW 2006–07 (NSW Waste Avoidance and Resource Recovery Progress Report 2008); ABS population statistics. Materials included in recycling data in some states may be excluded from others.

5 | Objective: Maximising the value of our resources

To achieve this we will:

- > promote green innovation (e.g. promote the development and uptake of new cleaner technology)
- > recognise the lifecycle of products and account for the resources used
- > develop and adopt innovative products and services that help reduce our ecological footprint to create comparative economic advantage
- > increase and maintain capacity of recycling systems and reprocessing infrastructure
- > implement regulation that drives progress and supports long-term investment decisions
- > identify new opportunities through developing and promoting innovative solutions.

This section outlines our priorities to meet this objective.

5.1 Priority Area: Measurement, analysis, evaluation and reporting

To monitor how effective our programs are and to identify areas for additional attention, we need to know and understand what is happening with waste streams, recycling performance, markets and consumption. Several studies conducted for ZWSA have pointed to the lack of quality data about the sector, which the following programs aim to rectify.

Key performance indicator is:

- > 25% reduction in waste disposal to landfill by 2014 from a 2002–03 base year (over-arching target in *South Australia's Strategic Plan*).

5.1.1 Program: Waste audits and recycling activities study (continuing)

This annual survey collects data from recyclers and reprocessors in South Australia to provide stream by stream and waste type recycling tonnage. The data summarises the current market, including its market size and strength. Past surveys have shown a steady increase in recycling.

Priorities for the next 3 years

Budget: 2010–11 \$69,200
2011–12 (indicative) \$69,700
2012–13 (indicative) \$70,200

The *Review of Recycling Activity in South Australia 2008–09* (Hyder Consulting) identifies the areas of greatest need and best return on investment. The report shows that between 2003–04 and 2008–09 waste disposed to landfill has reduced from 1,277,892 tonnes to 1,071,895 tonnes. This is despite an increase over the period in:

- > total waste generated (3,319,668 tonnes to 3,624,167 tonnes)
- > South Australia's population (1,534,000 people to 1,622,700 people).

ZWSA will continue with the recycling study of activity in South Australia 2009–10, 2010–11 and 2011–12 financial years.

5.1.2 Subprogram: Knowledge management

As more waste, recycling and resource recovery data is gathered, a management and reporting system is needed to accommodate and extract information on:

- > economic and environmental costs and benefits
- > infrastructure needs
- > future waste streams for attention
- > areas needing regulatory underpinning.

Such a system facilitates monitoring, analysis and reporting on the waste reduction targets in the draft Waste Strategy and in *South Australia's Strategic Plan*.

Development of a data management system began in 2007–08, and was completed in October 2009. The knowledge based system, known as Zero Waste SA Environment Users System (ZEUS), currently stores data on illegal dumping, municipal solid waste (MSW) household hazardous waste and farm chemicals, container deposit data, litter data, landfill data, grants and incentives.

Priorities for the next 3 years

Budget: 2010–11 \$224,400
2011–12 (indicative) \$259,000
2012–13 (indicative) \$283,500

ZEUS will report on waste and recycling data at a state, metropolitan and regional level, and at an individual council/organisation level.

In future ZEUS will include data about organic waste composted and recycling from the material recycling facilities and transfer stations. ZEUS will capture data online from councils, recyclers and landfill operators in regular reports and audits.

Additional modules will be planned as modelling requirements change or as external requirements, such as any proposed carbon pollution reduction scheme, need spatial analysis modelling. Funds will be required in future years to develop additional modules as priorities are adjusted.

5.1.3 Program: Review of solid waste levy

The State Government Budget papers for 2010-11, indicate an increase in revenue collected through the solid waste levy under the Fees and Levies regulations of the Environment Protection Act 1983.

The increased in revenue from the solid waste levy is to be phased in over a three period commencing in 2011-12. The Minister for Environment and Conservation has directed Zero Waste SA under the Zero Waste SA Act to undertake a review of the structure and impacts of the solid waste levy in consultation with key stakeholders.

The levy review will begin in 2011 and its findings will be used to provide advice to the Minister.

Priorities for the next 3 years

Budget: 2010-11 \$70,000
2011-12 (indicative) \$0
2012-13 (indicative) \$0

5.2 Priority Area: Municipal solid waste (MSW)

One-third of the waste stream going to landfill is MSW. The waste stream has been significantly reduced by kerbside collection of recyclables and the 3-bin system. Councils are diverting 50-55% of household waste.

Key performance indicators are:

- > 60% diversion by 2012 of all material presented at kerbside (if food waste is included)
- > 75% diversion by 2015 (target based on 2009 estimated diversion of 55% levels in Adelaide metropolitan area only)
- > 20% of metropolitan councils to provide kerbside food waste collection system in 2010–11
- > 40% of metropolitan councils, and 10% of regional councils to provide kerbside food waste collection system in 2011–12
- > 75% of metropolitan councils, and 25% of regional councils to provide kerbside food waste collection system in 2012–13
- > 400 tonnes of household e-waste collected and diverted from landfill and recycled in 2010–11
- > 800 tonnes of household e-waste collected and diverted from landfill and recycled in 2011–12
- > 1200 tonnes of household e-waste collected and diverted from landfill and recycled in 2012–13.

5.2.1 Program: E-waste collections incentives

In November 2009 the nation's environment ministers resolved to introduce a national product stewardship scheme for televisions and computers by 2011.

In 2007–08, 16.8 million televisions and computers were discarded in Australia, with 84% going to landfill. Phase-out of analog televisions in the next few years will dramatically increase this figure.

Many parts of regional South Australia will switch over from analog to digital television signal on 15 December 2010, the first large scale switch over in Australia.

Many electronic products contain hazardous substances such as the heavy metals lead, mercury, cadmium and hexavalent chromium. Computer monitor (CRT) screens contain about 2 kilograms of lead, depending upon size and make. Most substances of concern in e-waste are of no concern for human exposure or release into the environment during ordinary use and handling; these concerns arise if e-waste is improperly handled, disposed to landfill, incinerated, shredded, ground, melted or illegally dumped.

In 2009–10, ZWSA provided \$164,000 to 30 councils to assist in collection of e-waste products.

Priorities for the next 3 years

Budget: 2010–11 \$284,600
2011–12 (indicative) \$137,400
2012–13 (indicative) \$0*

* funding beyond 2011–12 will be subject to timing of introduction of a national product stewardship scheme

ZWSA will make it easier for householders to recycle televisions, computers and other electronic waste, through grants to help councils collect and reprocess these items. ZWSA will continue grant funding to councils until the national product stewardship scheme begins. In 2010–11 ZWSA will specifically seek to help regional South Australia deal with e-waste generated by the switchover from analog to digital television.

National efforts to manage e-waste better will need individual states to provide legislative and practical support before the national product stewardship scheme begins. Where possible, ZWSA will continue to influence state and national policy development as well as state government procurement contracts and processes in this area.

ZWSA will also investigate South Australia's reprocessing capacity for the expected increase in e-waste.

5.2.2 Program: Development of strategy for e-waste

The national extended producer responsibility scheme will roll-out over several years. Due to the existing supporting infrastructure in South Australia, ZWSA has engaged with the computer and television industry for the initial roll-out to start here.

Priorities for the next 3 years

Budget: 2010–11 \$30,000
2011–12 (indicative) \$0
2012–13 (indicative) \$0

ZWSA will develop a strategy for electronic waste that will support and underpin the EPA's Waste to Resources Environment Protection Policy (EPP).

The EPP will ban certain wastes such as computers, televisions, fluorescent lighting going to landfill and ZWSA will take a leadership role on policy interventions, such as market development and infrastructure assistance.

In formulating the strategy, ZWSA will work closely with the EPA, local government, the recycling industry and other key stakeholders.

5.2.3 Program: Kerbside incentives program including food waste

By June 2008 all metropolitan councils had implemented, or committed to, high performing kerbside collection systems (40 local councils in total). In 4 years it is expected that more than 500,000 households will have a kerbside food waste collection service. Audit results indicate that 3-bin systems have a recycling rate of up approximately 50%.

In 2008–09 10 councils were funded to pilot domestic food waste collection using 2 different food collection systems. The objective was to find a system that will most effectively help reach the Waste Strategy target of 75% diversion of material collected from domestic kerbsides by 2015. The food waste pilots have informed ZWSA and stakeholders of the:

- > potential for diversion
- > kerbside yields
- > contamination rates
- > resident satisfaction levels
- > changes in presentation rates with differing collection frequency
- > cost implications and load capacities
- > odour levels.

Priorities for the next 3 years

Budget: 2010–11 \$1,437,900
2011–12 (indicative) \$1,150,300
2012–13 (indicative) \$852,800

To achieve the state's proposed 2015 target of 75% of kerbside material recycled, councils will need to implement food waste collections through existing kerbside services.

Funding of \$6.1 million over 4 years (2010–11 to 2013–14) has been allocated in the Kerbside Performance Plus incentives program, to be provided as councils implement kerbside collection of food waste as part of existing green organics collections.

5.2.4 Program: Development of strategy for food waste

ZWSA has several programs that address the generation of food waste across food supply chains:

- > REAP industry, businesses and local government program (Program reference 6.3.2) is working with manufacturers to identify opportunities for greater efficiencies in food manufacturing processes
- > REAP State government program (Program reference 6.3.3) is working to capture food waste generated in industry
- > Commercial incentives program – Recycling at Work (Program reference 5.3.1) seeks to introduce robust collection systems in commercial and industrial settings
- > the Kerbside incentive program – including food waste (Program reference: 5.2.3) is focused on the introduction of food waste collection in households.

Capacity to achieve the South Australia's Strategic Plan target of 25% reduction of waste going to landfill by 2014, it will be necessary to understand the potential food diversion arising from each ZWSA program. Resources can then be aligned to ensure that maximum food waste is diverted by identifying crucial intervention points.

Priorities for the next 3 years

Budget: 2010–11 \$30,000
2011–12 (indicative) \$0
2012–13 (indicative) \$0

ZWSA will prepare a map of food activities using a value-chain model and data recently collected during pilot programs and case studies. This map will identify points on the value chain where food waste is generated and quantify volumes of waste generated. This will open opportunities not yet explored and inform current intervention programs.

5.2.5 Program: Regional implementation

Of South Australia's waste 20% is generated in country areas, where population densities are low and delivery of waste and recycling services can be significantly more difficult than in metropolitan areas. As regional strategies are completed, ZWSA's emphasis has moved to support implementation, granting up to 50% of costs.

Priorities for the next 3 years

Budget: 2010—11 \$818,700
2011—12 (indicative) \$307,100
2012—13 (indicative) \$558,500

The Regional Implementation Program was reviewed in 2009—10. ZWSA anticipates supporting improvements to waste management in country areas by funding high priority projects. These projects may include the development of transfer stations and resource recovery facilities. This fund may also support other activities that contribute to a region's efficient delivery of services and reduction of waste to landfill.

Funds approved in one round will usually be expended in the following 2 years as projects gain approvals and achieve milestones.

5.2.6 Program: Out of council and remote areas

Since 2005, ZWSA has been working with the Aboriginal Affairs and Reconciliation Division (AARD) of the Department of the Premier and Cabinet and with the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) on waste management initiatives on the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands.

In 2006, ZWSA and FaHCSIA jointly funded a project, led by AARD, to develop a waste management strategy and implementation plan for the APY Lands.

Waste management and recycling trials were implemented in each of the communities (from 2008 to mid 2010). The plan has been developed with extensive engagement of stakeholders including the APY Lands community, relevant state government departments, and service providers based in Alice Springs and Adelaide.

The results from these trials and the final waste management and implementation plan were presented to key state and Commonwealth departments in mid 2010. ZWSA will continue to work with relevant departments to ensure that waste management needs are given priority and that the recommendations in the report are funded and implemented.

The Regional Waste Management Plan and Implementation Plan, and information from the trials, will be available to inform waste management strategies for other out-of-council areas and remote Indigenous communities.

Priorities for the next year

Budget: 2010—11 \$30,000*
2011—12 (indicative) \$0
2012—13 (indicative) \$0

AARD has committed to fund \$30,000 per annum for 2 years (2009—10 and 2010—11) for ZWSA to project manage and implement the KESAB Palya Tidy Towns Clean Up Program for the APY Lands.

5.3. Priority Area: Commercial and industrial waste

The highly fragmented commercial and industrial (C&I) sector has many very competitive, small, medium and large-scale enterprises serviced by several waste and recycling providers. This presents challenges in the diversity of types of activities and types of waste generated. The sector must be approached with a range of complementary tactics, including placing more responsibility on producers and manufacturers to:

- > manage their products beyond the point of manufacture or sale
- > implement improved waste handling, collecting and processing.

Waste reduction in the C&I sector will need sustained emphasis, to develop and implement practical strategies for collecting recyclable material. ZWSA has developed a guide for the retail sector and is keen to work with other sectors to do the same.

ZWSA will seek to encourage the adoption of sustainability practices by South Australian business and industry. This work will link with water, energy and transport sustainability activities.

ZWSA will use landfill audit results and waste generation and disposal data to identify specific industry sectors and/or companies (eg food processing/manufacturing, hardware, retail) that offer opportunities for better waste management. ZWSA will explore these opportunities and set initiatives for waste avoidance, reduction, reuse and recycling in these targeted areas.

Key performance indicators are:

- > 65% diversion of C&I waste from landfill by 2012
- > 75% diversion of C&I waste from landfill by 2015 (target based on 2009 estimated diversion of 60% C&I from landfill, Adelaide metro only).

5.3.1 Program: Commercial incentives (Recycling at Work)

The draft Waste Strategy calls for a 65% diversion of C&I waste from landfill by 2012, and 75% of C&I from landfill by 2015 (based on 2009 estimated diversion of 60% from landfill, Adelaide metro only).

Adelaide has high performance recycling collection systems for households and a strong history in source separation. An equally effective system is needed for the C&I sector.

ZWSA's Recycling at Work program is supported by \$800,000 in Australian Packaging Covenant funding and aims to encourage and support effective recycling collection systems for small to medium businesses across metropolitan Adelaide.

ZWSA works with waste collection companies to introduce source separated co-mingled dry recycling systems and/or organics collection systems. The program was launched in January 2009, and 11 waste collection companies have received funding through the program as new recycling services are introduced into businesses.

Priorities for the next 3 years

Budget: 2010—11 \$548,600
2011—12 (indicative) \$714,100
2012—13 (indicative) \$918,300

ZWSA continues to invest in this area to gain significant diversion of materials such as packaging and organics to more beneficial uses.

5.3.2 Program: Metropolitan infrastructure (industry investment incentives)

South Australia's Waste Strategy 2005–2010: Benefit Cost Assessment⁴ revealed that industry needs ZWSA assistance to:

- > reduce the cost of sorting recycled materials and
- > increase capacity for local reprocessing of recyclable materials.

ZWSA initiated 4 rounds of grant funding for metropolitan recycling infrastructure projects over the past 5 years, with 2 projects continuing into 2010–11.

In 2009–10, ZWSA completed the Recycling Industry Investment Review⁵, which consulted with the recycling industry, projected future recycling infrastructure needs and considered investment opportunities. The structure of the next funding rounds will be based on the findings of this review.

Priorities for the next 3 years

Budget: 2010–11 \$502,600
2011–12 (indicative) \$946,600
2012–13 (indicative) \$899,800

The Metropolitan Infrastructure Incentives program aims to increase the ability of local reprocessors to produce high value end-use products from recyclables. The scheme will invest in infrastructure that enables greater reuse of waste materials and reduces waste sent to landfill.

Funding rounds will be held over the next 3 years. Priority projects will be determined based on the findings from the investment review and a multi-criteria analysis.

5.4 Priority Area: Construction and demolition waste

Significant change in this sector over the past 4 years has seen large investment in new infrastructure and innovation. Nevertheless, specifications are needed for products to improve their acceptance in civil works and other applications. South Australia recycles over 1 million tonnes per year of construction and demolition (C&D) waste (1,365,043 tonnes in 2008–09)⁶, and is an Australian leader in the field.

Key performance indicators are:

- > 75% diversion of C&D waste from landfill by 2012
- > 90% diversion of C&D waste from landfill by 2015 (target based on 2009 estimated diversion of 70% C&D from landfill, Adelaide metro only).

5.4.1 Program: ZWSA – KESAB clean site building program

This program aims to engage the building and construction industry to improve waste management and resource recovery practices on construction sites by implementing and adopting codes of practice and recycling systems.

An effective code of practice must clearly outline clean site management, and support source separation and diversion of site materials to appropriate recycling facilities.

Priorities for the next 3 years

Budget: 2010–11 \$30,000
2011–12 (indicative) \$0
2012–13 (indicative) \$0

ZWSA will collaborate and seek input from key stakeholders: EPA, Department of Environment and Natural Resources, Planning SA, Local Government Association, TAFE, Housing Industry Association, Master Builders Association and industry training bodies to encourage sustainable on-site practices from the building and construction sector.

ZWSA will work with the SA Housing Trust and industry associations to fine tune the code of practice for the residential and commercial building sector, including using Housing Trust sites as a case study for data collection, analysis and demonstration projects.

A code of practice will be developed for best practice site management (waste minimisation, storage, collection, recycling and disposal) across the building and construction and industry sector.

5.5 Priority Area: Problematic and hazardous waste

Household chemicals can be dangerous without safe storage and disposal. ZWSA, with the assistance of local government, undertakes free household hazardous waste collections to help the public dispose of unwanted chemicals in an environmentally safe way.

Licensed professional waste management contractors set up temporary collection points in metropolitan and country areas of the state and householders are asked to deliver unwanted chemicals to collection points. The collection timetable is on the ZWSA website.

ZWSA will:

- > continue to fund a household and farm hazardous waste collection program across South Australia, and monitor and report the results
- > educate the community on proper household hazardous waste management practices and better inform stakeholders and the community on household and farm chemical collection facilities.

Key performance indicators are:

- > undertake collections in at least 10 councils (metro and country) per annum
- > increase public participation by 10% over previous collections in the same area
- > have effective extended producer stewardship schemes in place by 2015.

5.5.1 Program: Household hazardous waste and farm chemical collections

The Hazardous Waste Depot at Dry Creek has been funded and managed by ZWSA since July 2008; previously it was an EPA facility. The depot is open between 9am and noon on the first Tuesday of every month. The facility has been invaluable to the South Australian community over many years but it is not always convenient for residents south of the city or for those with full-time work.

Between July 2008 and March 2010, 2450 people attended 18 monthly collections and delivered approximately 132 tonnes of hazardous waste for safe disposal.

As a complementary measure to the depot, a ZWSA mobile system for the proper disposal of household hazardous waste and farm chemicals operates across metropolitan and regional areas of the state.

⁴ McLennan Magasanik Associates Pty Ltd and BDA Group. 2007. South Australia's Waste Strategy 2005–2010: Benefit Cost Assessment

⁵ Rawtec and Wright Corporate Strategy Pty Ltd. 2009 South Australian Recycling Industry Investment Review

⁶ Hyder Consulting. 2009. Review of Recycling Activity in South Australia 2008–09.

The program began in March 2004 and by March 2010 almost 1063 tonnes of unwanted hazardous materials had been collected. More than 20,322 people have delivered their hazardous waste to 179 collection points in council areas and the Outback Areas Community Development Trust.

This program gives the community of South Australia a more accessible service for the disposal of household hazardous waste. ZWSA manages the proper collection and disposal of the unwanted chemicals by an EPA authorised contractor.

Priorities for the next 3 years

Budget: 2010—11 \$788,900
2011—12 (indicative) \$791,100
2012—13 (indicative) \$793,400

Extended producer responsibility (EPR) will continue to be considered at a national level. The EPR policy approach extends the producer's responsibility for a product (physical and/or financial) past the purchase and use period to the post-consumer stage of a product's life cycle. Initiatives and policies that require the producer or the retailer, or both, take back the product or its packaging after use are the clearest example of extending producer responsibility.

Because of the large number of manufacturers and the diversity of types of products, EPR will take time to implement. Once it is introduced and accessible systems are in place, ZWSA will be able to reduce and ultimately close its hazardous waste service.

5.5.2 Program: Development of a strategy for difficult wastes

The strategy will seek to address high volume/low toxicity materials including compact fluorescent lighting, mercury lights, tyres, lead acid batteries, gas bottles, paints, waste oil and all plastics. The development of a strategy will support and underpin the EPA's Waste to Resources EPP.

Priorities for the next 3 years

Budget: 2010—11 \$90,000
2011—12 (indicative) \$50,000
2012—13 (indicative) \$0

The EPP will ban certain wastes to landfill (e.g. computers, oil, lead acid batteries). ZWSA will take a leadership role and consider policy interventions to support the EPP.

In formulating the strategies, ZWSA will work closely and consult with the EPA, local government, recycling industry (including container deposit operators), lighting industry, plastics industries, tyre industry, major retailers, and other key stakeholders.

5.5.3 Program: Infrastructure support for scheme for CFLs and energy efficient light globes

As the community moves away from traditional incandescent light bulbs, the safe disposal of the mercury contained in the new energy efficient lights needs to be addressed.

The Commonwealth Government has announced the voluntary 'Fluro-cycle' scheme that aims to recycle the majority of commercial mercury-containing lighting. This scheme is only applicable to the commercial sector and does not help the householder to dispose of their fluoro light globes in an environmentally responsible manner.

Priorities for the next 3 years

Budget: 2010—11 \$126,800
2011—12 (indicative) \$77,500
2012—13 (indicative) \$78,200

ZWSA will pilot a scheme assisting major retailers to 'take back' used fluoro globes from householders and minimise the risk to the environment. The pilot scheme will set up convenient drop-off opportunities for householders to dispose of fluoro globes. Retailers will accept used globes and then transport them to an appropriate recovery facility.

ZWSA will commit funding over the next 3 years to support major retailers across metropolitan and major regional centres to receive and recycle used fluoro globes.

5.6 Priority Area: Disposal and illegal dumping

Key performance indicator is:

- > decrease incidences and tonnages of illegally disposed waste (target based on 2009 baseline).

5.6.1 Program: ZWSA—KESAB litter reduction program

KESAB has committed to:

- > develop information resources targeting litter awareness for local government, schools and others
- > implement targeted community litter awareness campaigns
- > integrate litter education and resources into the Wipe Out Waste schools program.

Priorities for the next 3 years

Budget: 2010—11 \$30,000
2011—12 (indicative) \$30,000
2012—13 (indicative) \$30,000

This program aims to develop and implement community litter campaigns and public place/media strategies in collaboration with targeted industry sectors. The program will encourage ongoing corporate stewardship and partnership agreements that focus on strategies and action to reduce litter. Key areas for attention are highways, events, car parks and retail areas.

5.7 Priority Area: Research and development

5.7.1 Program: Sustainable markets and innovation (industry investment incentives)

The state's Waste Strategy recognises the need to promote markets for recycled materials, improve the viability of the recycling sector and develop value-added recycled products. In 2009—10, ZWSA approved \$75,000 to support South Australia's composting industry market development initiative 'Composting for Soils' program.

Priorities for the next 3 years

Budget: 2010—11 \$166,300
2011—12 (indicative) \$222,300
2012—13 (indicative) \$274,600

In 2010—11, the ZWSA Sustainable Markets and Innovation incentive program will target key waste streams and their associated recycling industries. The program will use financial incentives to increase and support markets for recycled materials. Projects will be coordinated through each material industry sector (eg composting, aggregate and plastics).

Funding rounds for the Sustainable Markets and Innovation Incentive program will be held over the next 3 years with priority projects to be determined based on the investment review and ZWSA multi-criteria analysis tool.

6 | Objective: Avoid and reduce waste

To achieve this we will:

- > avoid and reduce wasteful use of resources in production processes and products (eg leaner production, design for environment and extended producer responsibility)
- > learn the importance of and foster attitudes and lifestyle choices that encourage us to live within nature's limits
- > embed this new learning within our education systems
- > support consumers to make informed purchasing decisions

6.1 Priority Area: Measurement, analysis, evaluation and reporting

6.1.1 Program: Measuring community attitudes and behaviour

Significant work in 2004–05 identified and benchmarked community attitudes on waste management. This survey, only the second in South Australia, was the first using face-to-face interviews with householders.

This benchmark was remeasured in 2007–08 to ensure ZWSA communications programs remained relevant. In 2008–09 ZWSA incorporated some of its own questions into South Australia's Strategic Plan Household Survey administered by the Australian Bureau of Statistics.

Recycling has become progressively easier and widespread, and meaningful metrics to measure behavioural change will be identified.

Priorities for the next 3 years

Budget: 2010–11 \$30,000
2011–12 (indicative) \$35,000
2012–13 (indicative) \$40,000

In 2010–11 ZWSA will undertake market research in collaboration with Ehrenberg-Bass Institute for Marketing Science (UniSA) to measure behavioural change, knowledge and perceptions towards recycling in South Australia. In future ZWSA will continue to survey public attitudes towards waste avoidance and reducing consumption.

6.2 Priority Area: Municipal solid waste

6.2.1 Program: Kerbside recycling campaign

ZWSA has developed a communication campaign to encourage householders to recycle correctly in an effort to reduce the incidence of the wrong materials ('contamination') placed in kerbside collected recycling bins. This campaign has been developed in collaboration with the Local Government Association of South Australia, Visy Recycling and waste industry stakeholders including Compost SA.

The main elements of the campaign include advertising, direct mail, an educational DVD, online information, 1300 hotline and a training program about recycling for local government staff and elected members.

Priorities for the next 3 years

Budget: 2010–11 \$299,700
2011–12 (indicative) \$355,100
2012–13 (indicative) \$355,400

ZWSA will continue with the 'Recycle Right' campaign for the next 3 years. The campaign will supplement and improve current recycling knowledge and behaviour, and provide a tested model that can be replicated.

6.2.2 Program: Sustainable communities including Tidy Towns (KESAB)

KESAB has committed to ongoing environmental education and action embracing rural communities, local government, schools and groups through a revamped Tidy Towns program, Sustainable Communities.

KESAB will engage rural communities to adopt and implement sustainable environmental practices, encouraging a whole of community approach through environmental education and action. This will include recognition of waste and recycling efforts through annual awards, community action and councils.

KESAB's Key Performance Indicators are:

- > a minimum 4 case studies per year in consultation with stakeholders
- > participants' consultation groups conducted by December each year.

Priorities for the next 3 years

Budget: 2010–11 \$34,300
2011–12 (indicative) \$44,600
2012–13 (indicative) \$44,800
(\$105,000 from other supporters)

ZWSA will continue to provide some support to KESAB's Sustainable Communities activities.

6.2.3 Program: Wipe Out Waste schools education (KESAB)

The Wipe Out Waste (WOW) program provides training and resources to teachers. These resources enable students to gain an understanding of waste, litter, recycling and related environmental issues as part of the school curriculum.

WOW was developed on behalf of ZWSA by KESAB environmental solutions, the Department for Environment and Natural Resources Environmental Education Unit, and the Department of Education and Children's Services (DECS). WOW is an integrated comprehensive waste education program supported by curriculum resources and teacher training. It is the first program in Australia to span kindergarten through to primary and secondary schools.

WOW is a fundamental adjunct to the DECS Sustainable Schools Program. The findings of a 2008 comprehensive evaluation of the program continue to inform ZWSA's funding provision and direction for the program.

Priorities for the next 3 years

Budget: 2010–11 \$216,700
2011–12 (indicative) \$284,500
2012–13 (indicative) \$286,000

In 2010–11 the program will continue with its focus on regional and metropolitan schools. In particular, KESAB has committed to:

- > establish teacher-trained project officers who will work in collaboration with schools throughout South Australia
- > develop a support school network
- > implement waste audits and teacher training sessions
- > develop support resources under banners of Wipe Out Waste and Sustainable Schools (including new materials that focus on waste and greenhouse linkages and the benefits of recycling).

In the future the program will have more focus on product stewardship, consumption, related climate change impacts and engaging support schools. Curriculum material is due for review in 2010–11.

6.2.4 Program: Schools and community grants

Community-based organisations and some schools play an important role in collecting materials for recycling or reuse and also work at the higher end of the waste hierarchy (avoid, reduce, reuse). Individually, each operation is often small-scale.

School and Community Grants target charities, service clubs and other not-for-profit organisations, and schools (including metropolitan and regional high schools and kindergartens) that recover reusable resources. To be eligible for funding, schools must have sent a staff member to a ZWSA WOW workshop.

This program combines the Social Enterprise Grants and the Regional Implementation Program – Small Projects Component.

Priorities for the next 3 years

Budget: 2010–11 \$28,100
2011–12 (indicative) \$150,300
2012–13 (indicative) \$150,500

The program will continue to support small-scale community and school projects that encourage reuse, recycling and the diversion of waste from landfill. ZWSA will evaluate its effectiveness annually and continue to refine the program for future years.

6.3 Priority Area: Commercial and industrial waste

6.3.1 Program: Carbon offsets

The Commonwealth Department of Climate Change released the White Paper for the Carbon Pollution Reduction Scheme (CPRS) on 15 December 2008. A discussion paper on a National Carbon Offset Standard was released in December 2008 for comment.

The proposed introduction of the CPRS on 1 July 2010 has been deferred.

Priorities for the next 3 years

Budget: 2010–11 \$0
2011–12 (indicative) \$0
2012–13 (indicative) \$60,700

Until the implications for the recycling industry have been clarified and the scheme further developed, ZWSA will keep a watching brief on this issue.

6.3.2 Program: Resource Efficiency Assistance Program for industry, business and local government

Resource efficient manufacturing reduces raw material, energy and water use, and minimises waste production. Resource efficiency maintains a high profile in this plan, as we seek case studies and iconic companies to tackle their waste and related issues.

Similar programs in South Australia, interstate and overseas have shown that companies can realise large environmental and cost savings by implementing resource efficiency measures. Actions can also be accredited, providing a new marketing edge for the organisation.

ZWSA is part of the Business Sustainability Alliance (BSA) in partnership with the Department of Trade and Economic Development (using the Centres for Innovation), SA Water and the EPA. The alliance delivers the Resource Efficiency Assistance Program (REAP) and has developed an online web portal as a single point of contact to promote member agency services (www.southaustralia.biz/Innovation-in-SA/BSA-REAP.aspx).

The BSA is strategically positioned to provide key competencies in the areas of waste, water, energy, lean manufacturing, construction, compliance, climate change and sustainability.

REAP helps businesses and government to understand, develop and implement cost-saving resource efficiency measures. In doing so, the companies also build capacity to deal with a range of rapidly emerging environmental, financial and social imperatives.

Key elements are:

- > commitment from management
- > diagnostic evaluation
- > training programs
- > in-house technical support
- > financial support in the form of resource efficiency audits.

ZWSA assists with a wide range of support programs and opportunities for business and industry networking.

The key performance indicator is:

- > enrol up to 150 sites and 60 companies and business in REAP per year.

Priorities for the next 3 years

Budget: 2010–11 \$884,800
2011–12 (indicative) \$1,127,100
2012–13 (indicative) \$1,129,800

REAP is the key waste avoidance program for ZWSA and will have economic and sustainability benefits as well as developing a core of environmental knowledge in the business community. The program is expected to grow significantly over the next 2 years as more businesses join.

ZWSA, in partnership with local government, will deliver a sustainability program (S1K Stage 2) to small business across the metropolitan region. S1K Stage 2 aims to involve 50 businesses per council over the next 2 years.

6.3.3 Program: REAP for state government

State government is a significant generator of C&I waste across myriad operations including offices, hospitals, national parks, emergency services, correctional facilities, TAFE campuses and schools. Government needs to set an example to the community by working to achieve the objectives of the state's Waste Strategy.

Government procurement processes and decisions can avoid and reduce waste at the beginning of a product's life, and ensure that what is purchased can be reused and recycled. Through its procurement power, government can influence change in business and the wider community.

Sustainable procurement is about tackling waste higher up the waste hierarchy, doing more than buying greener products by:

- > designing waste out of government procurement processes
- > establishing leaner business practices
- > avoiding unnecessary consumption
- > managing demand.

Priorities for the next 3 years

Budget: 2010–11 \$208,500
2011–12 (indicative) \$129,300
2012–13 (indicative) \$131,300

ZWSA's role evolves from the Greening of Government Operations Framework. ZWSA will continue its advocacy and enabling role in greening state government. This will include providing advice and input on a range of issues such as procurement, 'green' accommodation fit-outs, and waste management.

In 2010–11 state government agencies will have the opportunity to work with the REAP alliance of agencies and experts to improve their management of materials, energy and water.

ZWSA will develop a strategy to promote sustainable procurement through joint projects with other state government departments, and partnerships with business and local government. ZWSA's aim is to lay the foundation for sustainable procurement to become usual business practice across state departments and agencies.

Initial investigations will focus on fully understanding existing sustainable procurement efforts interstate, most notably the Queensland Government's Sustainable Procurement initiative and the Victorian EcoBuy program, which has involvement of over 70% of Victorian local governments.

ZWSA is undertaking a feasibility study with state government worksites along the northern side of North Terrace. This study will examine ways to develop a 'sustainability precinct' to showcase best practice waste management and recycling.

A food waste recycling trial is underway in one section of the Regency TAFE campus. Its progress will be monitored with a view to rolling out initiatives in other food and hospitality training areas of the campus.

The key performance indicator is:

- > enrol up to approximately 25 sites and 10 government departments/agencies in REAP per year.

6.3.4 Program: Consumption and waste avoidance incentives

This program proposes a new open-call incentive scheme, available to any sector and waste stream. Its purpose is to enable initiatives that:

- > demonstrate effective ways to avoid waste
- > reach a broad number of people
- > help to guide social change towards models of sustainable consumption.

Only initiatives that meet specific criteria will be eligible to apply for the incentive program. ZWSA support will help guide a transition to sustainable resource use in the economy. For example, it may assist supply to meet a genuine demand, or it may facilitate more sustainable consumer choices.

Applicants will be required to meet the following criteria for suitable projects to receive funding:

- > are unique/innovative in South Australia
- > need seed or kick-start funding
- > need funding for an element essential to the initiative's success (i.e. the initiative would not proceed without the element)
- > operate at the 'avoidance', 'reduction' or 'reuse' levels of the hierarchy
- > can demonstrate measurable outcomes and return on investment
- > are based on a model that has been proven successful elsewhere
- > deliver multiple benefits in addition to reduced consumption and improved resource (social, economic or environmental)
- > are consistent with Government policy directions including targets for reduction of waste to landfill and South Australia's Waste Strategy
- > can be implemented and reported within 18 months of initiation.

Priorities for the next 3 years

Budget: 2010—11 \$209,900
2011—12 (indicative) \$165,000
2012—13 (indicative) \$222,500

ZWSA will run the new consumption and waste avoidance incentive program in 2010—11 and assess future rounds of funding in 2011—12 and 2012—13 following review of the initial round of applicants and initiatives proposed.

6.4 Priority Area: Construction and demolition waste

6.4.1 Program: Promote better design of the built environment

Building and retrofitting of commercial and residential development and construction work can strengthen an ability to move towards a more sustainable use of building materials and practices. This can be achieved by working within the legislative planning framework to develop principles and guidelines that:

- > minimise or avoid waste in the construction process
- > promote building design that supports future adaptability and maximises reuse and redevelopment of existing infrastructure
- > incorporate material reuse, materials with recycled content and materials that are recyclable
- > include on-site waste separation and recovery systems during construction and demolition
- > provide sufficient space to manage waste and recycling infrastructure in the design phase of developments
- > where feasible achieve the outcomes under 'Management' and 'Materials' in the Green Star Rating tool¹ (www.gbc.org.au).

Priorities for the next 3 years

Budget: 2010—11 \$0
2011—12 (indicative) \$50,000
2012—13 (indicative) \$0

ZWSA will work with the appropriate stakeholders, such as Department of the Premier and Cabinet Green Building initiative, University of South Australia, Housing Industry Association, Master Builders Association of SA, Property Council, developers, Planning SA, Department for Transport, Energy and Infrastructure, Land Management Corporation, and others, to promote better sustainable design of the built environment. This will include adoption of new and more sustainable building materials and practices.

6.5 Priority Area: Disposal and illegal dumping

Litter is a significant issue, particularly in metropolitan areas and on metropolitan beaches. ZWSA funds most KESAB programs for litter reduction.

ZWSA is also looking at ways to address illegal dumping including impacts on charitable collection organisations. Illegal dumping is a significant cost to outer urban councils, and it has been suggested that the increase to the solid waste levy will increase the problem.

ZWSA has attempted to reduce the incidence of illegal dumping through:

- > direct assistance to local government
- > working with and supporting KESAB to conduct its litter campaigns and recycling initiatives
- > working with the tobacco, take-away food and hospitality industries to develop and implement waste avoidance and litter reduction strategies, particularly for public places and events
- > implementing a high-profile media and education campaign to encourage behavioural awareness of litter and illegal dumping issues
- > increasing education, information, investigation, surveillance and enforcement.

6.5.1 Program: ZWSA—KESAB litter counts, trends and evaluation

KESAB has been monitoring litter incidence at 151 sites across the state on a quarterly basis since 1998, providing the best continuous data set for measuring litter incidence in Australia.

This program aims to maintain effective litter data on trends, item types and locations, and develop community education and awareness campaigns. Data will be stored and analysed in ZEUS.

National litter monitoring was reintroduced in 2006, using the methodology developed by KESAB.

Priorities for the next 3 years

Budget: 2010—11 \$64,000
2011—12 (indicative) \$64,000
2012—13 (indicative) \$64,000

This program will continue to be supported for at least the next 3 years.

KESAB has committed to:

- > conduct quarterly counts at 151 sites throughout South Australia
- > maintain a comprehensive database and trend line of litter stream in South Australia
- > integrate with Keep Australia Beautiful National Litter Index and Branded Litter study
- > develop litter reduction strategies and resources based on litter count data.

6.5.2 Program: ZWSA - KESAB litter awareness

Extensive social research into community behaviour, litter and recycling highlights the need for new community and public place litter resources and strategies. The research findings identify targets and opportunities to focus on key issues and community sector groups. This enables resources and strategy options in collaboration with partners and stakeholders to be developed.

This program aims to develop and regularly update a suite of contemporary litter awareness and information materials (brochures, posters, signs, some in languages other than English), and make them available to councils, schools, community groups and stakeholders to increase awareness of litter disposal.

KESAB has committed to:

- > develop information resources targeting litter awareness for local government, schools and others
- > implement targeted community litter awareness campaigns
- > integrate litter education and resources into Wipe Out Waste schools program
- > develop a car park litter prevention and awareness campaign aimed at large shopping centres and retail shopping precincts.

Priorities for the next 3 years

Budget: 2010—11 \$100,000

2011—12 (indicative) \$100,000

2012—13 (indicative) \$100,000

(\$78,000 from Australian Packaging Covenant)

The program will design and pilot information projects before implementation.

7 | Stakeholders, partnering and linkages

The program will enhance South Australia's reputation as a leader in environmental initiatives

7.1 Tertiary Education Sector (UniSA) Partnership

In 2007—08, ZWSA sought expressions of interest from all South Australian universities, with the primary objective of creating of a 'centre of excellence' to:

- > build long-term capacity to undertake activities at the higher end of the waste hierarchy
- > create a focal point for waste-related research.

The University of South Australia was selected to develop the Zero Waste Centre for Sustainable Design and Behaviour. In 2008—09 the Centre was established and has appointed a Chair, Steffen Lehmann.

Priorities for the next 3 years

Budget: 2010—11 \$210,500

2011—12 (indicative) \$210,800

2012—13 (indicative) \$211,100

The university, with ZWSA, will continue to develop the Zero Waste Centre with its Zero Waste SA Chair for Sustainable Design and Behaviour. The program will:

- > build local knowledge and capacity
- > develop expertise through a pool of students
- > develop a knowledge and skills base for consultants
- > attract Australian Research Council Linkage and other appropriate grant funding
- > enhance South Australia's reputation as a leader in environmental initiatives
- > develop national and international research expertise in the field.

7.2 Local Government Association

A successful partnership with the Local Government Association, which began before the establishment of ZWSA, will continue for the period of the Business Plan and will be reviewed annually. The partnership is supported by this budget item.

Priorities for the next 3 years

Budget: 2010—11 \$41,300

2011—12 (indicative) \$42,600

2012—13 (indicative) \$43,800

This budget item will:

- > support local council implementation of food collection with kerbside organics
- > support the continued process of waste management reform by country councils
- > facilitate local government discussion of key issues of relevance to ZWSA.

7.3 Waste Management Association of Australia

The Waste Management Association of Australia (WMAA) SA division, coordinates and articulates its members' concerns and suggestions. Initiatives in C&I waste streams will require greater consultation with, and significant involvement from, the waste collection and sorting industry. The WMAA holds briefing sessions on a range of ZWSA issues each year.

Priorities over the next 3 years

Budget: 2010—11 \$25,900

2011—12 (indicative) \$26,200

2012—13 (indicative) \$56,800

This budget will help WMAA link the industry with ZWSA and contribute to the biennial waste conference in Adelaide.

7.4 National and state policies

At a national level, ZWSA contributes, particularly through the Environment Protection and Heritage Council Waste Working Group, to national discussions on a range of issues.

The group considers matters such as plastic bags, tyres, end of life vehicles, e-waste, waste oil, product stewardship and the Australian Packaging Covenant. This may result in a new policy direction focusing on extended producer responsibility and product stewardship, which is expected to require significantly more ZWSA policy advice and participation in the future.

Priorities for the next 3 years

Budget: 2010–11 \$267,300
2011–12 (indicative) \$278,300
2012–13 (indicative) \$114,600

This budget item contributes to national projects (South Australia contributes 8% of total project costs), travel and salaries.

8 | Corporate support functions

Communications aim to raise awareness of ZWSA's purpose, achievements and programs, and enhance its stakeholder relationships by encouraging two-way communications.

8.1 Corporate communications, education, marketing and website

ZWSA's communications, education and marketing activities target industry, government and community. Communications aim to raise awareness of ZWSA's purpose, achievements and programs, and enhance its stakeholder relationships by encouraging two-way communications, especially with local councils and industry.

In 2009–10, in response to 2008 market research findings, ZWSA focused on improving the quality of information on recycling and waste management and improving access to that information through an advertising campaign which it plans to repeat annually.

Activities included production of the regular e-newsletter *Rewords*, coordination of media events, briefings and site visits to promote policy, and other initiatives. ZWSA prepares educational and promotional material for industry and the community, and supports whole of government sustainability public relations initiatives.

Priorities for the next 3 years

Budget: 2010–11 \$284,000
2011–12 (indicative) \$289,100
2012–13 (indicative) \$305,200

The focus on public information and engagement on recycling will be complemented by linking consumption with waste and climate change. The introduction of food waste collections will also increase the need to raise public awareness of contamination issues, green organics, waste oil facilities and the greenhouse gas benefits of recycling.

8.2 Zero Waste SA Board support

ZWSA provides policy and administrative support to the Board of Zero Waste SA and committees approved by the Board (i.e. Governance Committee). The Board meets around 10 times a year and members (excluding public servants) receive appropriate sitting fees for attending meetings.

The next 3 years

Budget: 2010–11 \$134,900
2011–12 (indicative) \$136,900
2012–13 (indicative) \$145,300

The budget item reflects running costs of Board meetings, training of members and ZWSA staff salaries and on-costs allocated to support the Board function.

8.3 Corporate services (accommodation, office running costs and salaries)

All organisations require administrative support and advice, and this budget funds the administration of ZWSA activities. Administration includes rental office lease payments, payroll, insurance and purchasing, as well as administrative support to the Board and management of the Waste to Resources Fund.

The next 3 years

Budget: 2010–11 \$717,100
2011–12 (indicative) \$707,100
2012–13 (indicative) \$740,900

This budget item provides ongoing administration support to the organisation.

Key performance indicators are:

- > unqualified audit reports from the Auditor-General
- > 90% of accounts paid on time.

9 | Income and expenditure*

INCOME (Waste to Resources Fund)	2010—11 \$	2011—12 \$	2012—13 \$
50% of waste levy payments from EPA	11,567,000	11,625,000	11,636,000
Cash held 1 July, opening balance (estimated)	18,000,000	20,156,000	22,830,000
Total Income	29,567,000	31,781,000	34,466,000

Expenditure

Priority Areas and Programs

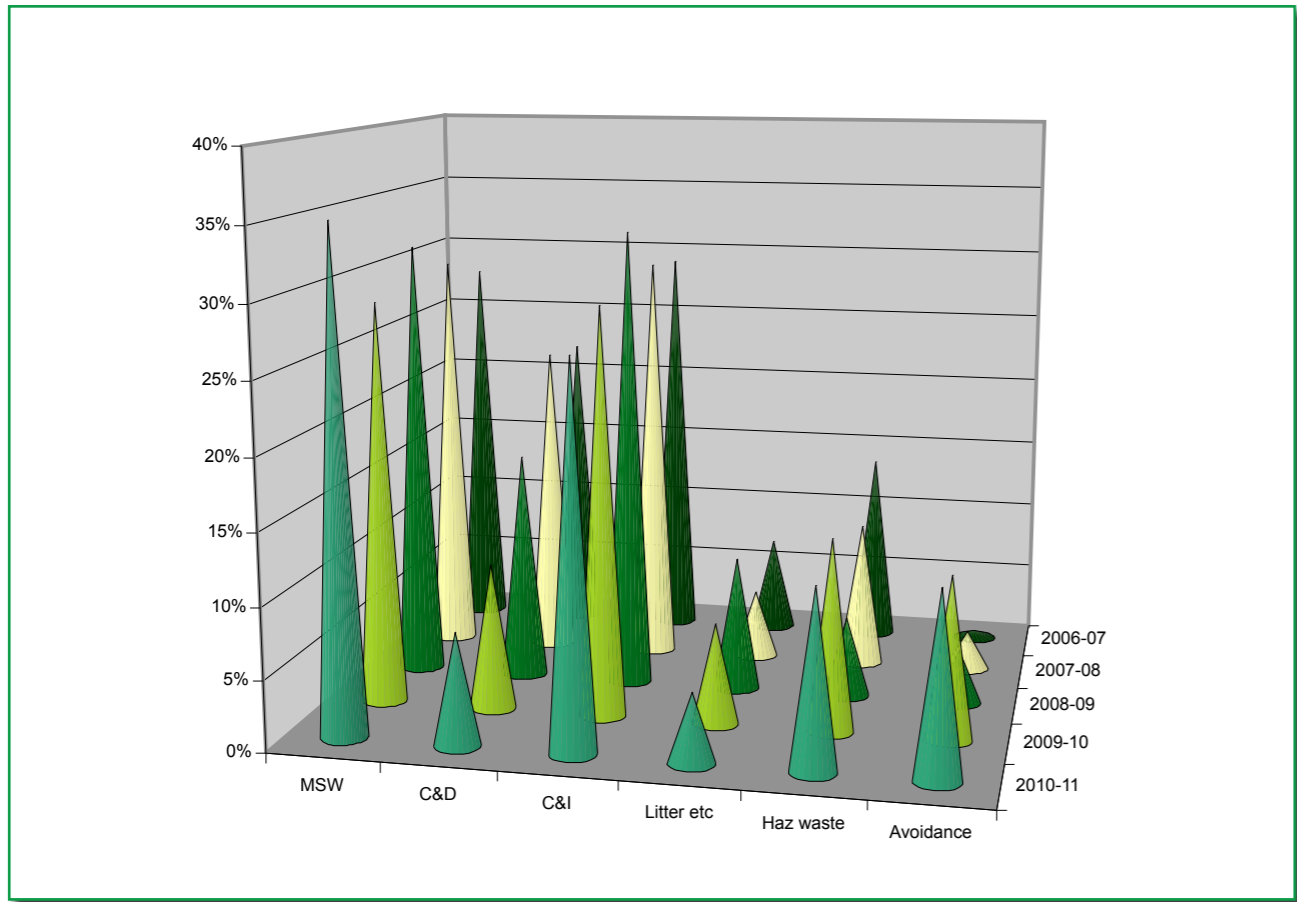
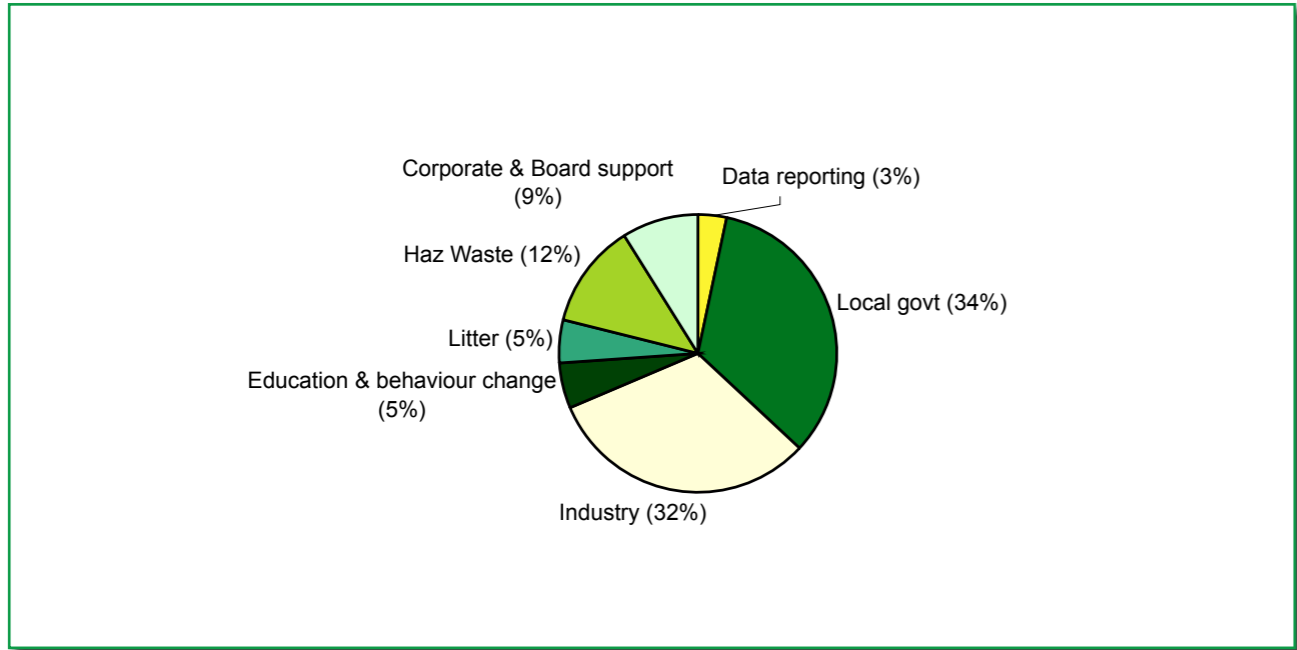
Maximising the value of our resources

5.1.1 Waste audits and recycling activities study	69,200	69,700	70,200
5.1.2 Knowledge management (ZEUS)	224,400	259,000	283,500
5.1.3 Review of the solid waste levy	70,000	0	0
5.2.1 E-waste collections incentives	284,600	137,400	0
5.2.2 Development of strategy for e-waste	30,000	0	0
5.2.3 Kerbside incentives program, including food waste	1,437,900	1,150,300	852,800
5.2.4 Development of strategy for food waste	30,000	0	0
5.2.5 Regional implementation assistance program	818,700	307,100	558,500
5.2.6 Out of council and remote areas	30,000	0	0
5.3.1 Commercial incentives program — Recycling at Work	548,600	714,100	918,300
5.3.2 Metropolitan infrastructure — industry investment incentives	502,600	946,600	899,800
5.4.1 Program: ZWSA – KESAB clean site building program	30,000	0	0
5.5.1 Household hazardous waste and farm chemical collections	788,900	791,100	793,400
5.5.2 Development of strategy for difficult wastes — high volume/low toxicity materials including CFLs and mercury lights	90,000	50,000	0
5.5.3 Infrastructure support scheme for CFLs and energy efficient light globes	126,800	77,500	78,200
5.6.1 ZWSA—KESAB litter reduction	30,000	30,000	30,000
5.7.1 Sustainable markets and innovation — Industry investment incentives	166,300	222,300	274,600

Avoiding and reducing waste			
6.1.1 Measuring community attitudes and behaviour	30,000	35,000	40,000
6.2.1 Kerbside recycling campaign	299,700	355,100	355,400
6.2.2 Sustainable communities — including Tidy Towns (KESAB)	34,300	44,600	44,800
6.2.3 Wipe Out Waste (WOW) — schools education program (KESAB)	216,700	284,500	286,000
6.2.4 Schools and community grants program	28,100	150,300	150,500
6.3.1 Carbon offsets	0	0	60,700
6.3.2 REAP — industry, businesses and local government	884,800	1,127,100	1,129,800
6.3.3 REAP — State government	208,500	129,300	131,300
6.3.4 Consumption and waste avoidance initiatives	209,900	165,000	222,500
6.4.1 Promote better design of built environment	0	50,000	0
6.5.1 ZWSA—KESAB litter counts, trend and evaluation	64,000	64,000	64,000
6.5.2 ZWSA—KESAB litter awareness	100,000	100,000	100,000
7.1 Partnership with tertiary sector (UniSA)	210,500	210,800	211,100
7.2 Local Government Association	41,300	42,600	43,800
7.3 Waste Management Association of Australia	25,900	26,200	56,800
7.4 National and state policies (EPHC)	267,300	278,300	114,600
8.1 Corporate communications, education, marketing and website	284,000	289,100	305,200
8.2 Zero Waste SA Board support	134,900	136,900	145,300
8.3 Corporate services — accommodation, office running costs and salaries	717,100	707,100	740,900
Total expenditure	9,035,000	8,951,000	8,962,000

*The Zero Waste SA budget is subject to announcements in the 2010 Budget.

10 | Budget distribution charts



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