



Geoff Butler, a resident at Eldercare's Allambi aged care facility in Glengowrie, makes use of the new recycling system

## Case Study

# UPCLOSE

Zero Waste SA Industry Program



## Aged care sector embraces recycling

Looking after the needs of older people is a complex business.

Dealing with waste has tended to be low on the priority list even though the average residential aged care facility is an intense user of resources.

As a result just about everything has been going to landfill.

The waste challenge is about to become even greater with ageing baby boomers – who represent an estimated 25% of the population – heading for aged care homes in ever increasing numbers.

But a corresponding rise in waste to landfill is being avoided thanks to a unique partnership between the South Australian Government, the aged care sector and waste management industry.

Zero Waste SA has been working closely with both sectors through its Industry Program which funded waste management reviews for a small group of aged care providers.

The findings were significant. The reviews demonstrated that with the support of waste management companies, the recycling rate could be lifted by about 40%.

Early pilots have now triggered a major turnaround in the aged care sector with increasing numbers of facilities adopting more intensive recycling practices while achieving significant cost savings.

“It’s gobsmacking how much waste comes out of aged care but there wasn’t an awareness at site level about recycling. It was an entirely new concept.”

**Tony Pascoe**

Manager Procurement and Contracts,  
Eldercare



**Government of South Australia**

Zero Waste SA

**AVOID • REDUCE • REUSE • RECYCLE**



Recycling bins at the UnitedCare Regency Green Multicultural Aged Care Facility

# Sustainability objectives

Stimulating a culture of recycling in the aged care sector to reduce waste to landfill.

## Outcomes

- reviews demonstrate benefits of recycling in the aged care sector
- mounting interest in waste diversion among aged care providers
- waste management industry adapts to support new initiatives
- introduction of waste reporting enables benchmarking
- cost savings of 23% to 28%
- recycling rate increased by about 40%
- operational efficiencies
- green marketing benefits

## Eldercare recycling

Recycling implemented at 12 aged care facilities and offices. Annual results include:

- waste to landfill reduced from 78% to 52%
- 32 tonnes of organics recycled
- 165 tonnes of co-mingles recycled
- \$25,000 estimated cost savings

## Southern Cross Care recycling

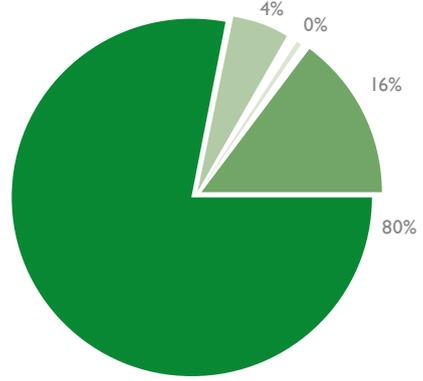
Recycling being rolled out at 14 aged care facilities plus offices.

- previous recycling rate 21%
- aiming for 70% recycling rate in all facilities
- 78% achieved at head office
- \$80,000 estimated annual cost savings

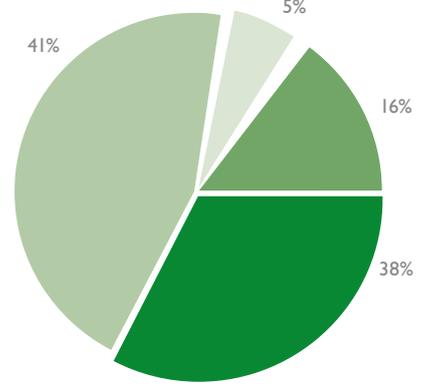
## Zero Waste SA support

- funding for waste management reviews
- driving collaboration between aged care and waste management sectors
- assistance with waste recycling tenders
- ongoing advice on new waste initiatives
- leadership in finding recycling option for sanitary pads

Average aged care recycling before waste review



Average aged care recycling after waste review



■ Waste to landfill     ■ Co-mingled recycling  
■ Cardboard recycling     ■ Food organic recycling

Based on M<sup>3</sup> per resident per month



*Chef Matthew Zerella makes use of the new composting system at Southern Cross Care's Phillip Kennedy Centre*

“Both the waste contractors and myself always use the mantra: ‘You all recycle at home – why would you not want to recycle at work’. There are always nods and comments agreeing to this which in turn defeats resistance to change management. The local council recycling initiatives have resulted in the best recycling rates countrywide so building on that record is a great way to initiate change.”

#### **John Freeth**

Director  
Directed Resources

## Focus on aged care waste

The challenge of reducing waste to landfill in the rapidly growing aged care sector has been an ongoing focus of Zero Waste SA's Industry Program.

It is estimated that the sector has one of the lowest industry rates for recycling at about 20%. That's well below the State Government's strategic target of 75% for commercial and industrial waste.

A key reason for the gap is adult incontinence pads which account for about 35% of all residential aged care waste. No services currently exist in Australia for recycling absorbent hygiene products, although efforts are being made to have this changed (see page 6).

But even with hygiene pads removed from the equation, resource recovery in residential aged care was still poor.

In an attempt to drive change, in 2012 the Industry Program invited aged care homes to take part in a full waste management survey 75% funded by Zero Waste SA.

“We wanted the waste surveys to closely examine the different waste streams and practices of residential care homes and to then present improvement opportunities in a practical way which care home staff could act upon,” says Andrew Hutcheon, Zero Waste SA Principal Adviser for Industry Sustainability.

The initiative received the full support of Aged & Community Services, the peak body for not-for-profit aged care providers in South Australia, and several of its members applied. They included two of South Australia's largest providers, Southern Cross Care and Eldercare, and two smaller operators, James Brown Memorial Trust and Simply Pink.

*\*Co-mingled recycling – also known as dry recyclables – includes glass, plastics, cardboard, paper and steel.*

## Waste reviews highlight the challenge

John Freeth, the Director of waste management consultancy Directed Resources, was commissioned by Zero Waste SA to conduct the audits.

A recycling specialist, John was previously Manager of Environment Services at Anglicare where he increased landfill diversion from 20% to more than 70%.

As part of the Zero Waste SA aged care initiative, he carried out detailed reviews of 30 residential homes owned by the four not-for-profit operators. He discovered that none had formal recycling programs in place.

“Apart from cardboard collections and some limited co-mingled\* recycling, they all had one-bin systems with everything else going to general waste,” says John.

“Most of the sites had full commercial kitchens which are no different to restaurants, yet none of the food waste was being recycled.”

John says he always starts his sessions with the statement: ‘If we can divert the wet waste, food organics mainly, from general waste to composting, then what is left is totally recyclable. Everything else, other than incontinence aids, is dry-recyclables which can be segregated and recycled in one way or another in Adelaide.’

The reviews found that because wet waste was not being separated, waste going to landfill ranged from a high 74% at James Brown to 85% at Southern Cross Care. In all cases the review demonstrated that this could easily be reduced to about 40% – and fairly quickly.



Medirest Hospitality Service Managers Stacey Matthews (left) and Linda Matthews in Eldercare Allambi's main kitchen

“Apart from doing the right thing for the environment and being able to show residents and their families they operated a green site, the operators realised they could save some serious money,” says John.

“The cost of landfill is nearly double that of dry recyclables per cubic metre and additional savings can be made by having waste management contracts tailored to individual requirements.”

## Waste companies help drive change

While encouraging aged care operators to embrace resource recovery was the principal aim, it was only part of the solution.

Support of Adelaide's waste management companies was also key.

Organisations with multiple residential homes tend to have ad hoc waste management arrangements with different operators. The size of bins are often too large or too small with collections made when they aren't needed. This all added to the cost.

John Freeth supported the aged care providers in tendering for new waste management contracts with single companies that could meet very specific requirements.

SITA Australia and Veolia are among the companies that have adapted their operations to accommodate the aged care sector.

“With the EPA Solid Waste Levy being increased each year, the environmental and cost benefits of increasing recycling are too big to ignore,” says SITA State Manager Angelo Stratis.

“We've noticed a substantial increase in the number of aged care facilities requesting recycling services and we've worked with them on a number of initiatives to allow source separation with minimal effort.”

These include the introduction of smaller, 45-litre, 60-litre and 70-litre bins which are clearly signed with colour coded lids and located at strategic locations. SITA has also supported organics collections from kitchen areas using 240-litre or 660-litre rear lift bins.

Similar changes have been made by Veolia whose dedicated account managers provide training for aged care staff and supply posters and signage to assist the recycling process.

Veolia Key Account Manager Olivia Rundle says the biggest challenge is to ensure a clear and consistent message is maintained across all sites in order to recycle as much as possible.

“I assist by helping the sites understand that recycling is not a scary process but rather something that is easily achievable,” she says. “It's very rewarding to work in partnership with our customers and to use my influence and position at Veolia to effect environmental and social change.”

Regular reporting by the waste companies is allowing the residential aged care facilities to benchmark their recycling and identify where improvements are possible. In the past this service was not requested, meaning sites had no idea how much waste they were generating.

Veolia has designed special reports which show waste and recycling per resident so that providers can identify if they are doing well.

“It also helps me identify where I need to perhaps either improve education or increase or decrease service frequencies,” says Olivia.

“We wanted the waste surveys to closely examine the different waste streams and practices of residential care homes and to then present improvement opportunities in a practical way which care home staff could act upon”

**Andrew Hutcheon**

Principal Adviser for Industry Sustainability  
Zero Waste SA

“I assist by helping the sites understand that recycling is not a scary process but rather something that is easily achievable.”

**Olivia Rundle**

Key Account Manager  
Veolia



*David Staunton, a resident at Southern Cross Care's Phillip Kennedy Centre, makes use of the new recycling system*

“The really good thing is that the approach we’ve used for aged care would work equally as well in other industries with similar waste streams, from pubs, clubs, restaurants and hotel accommodation to the medical business sector.”

**Andrew Hutcheon**

Principal Adviser for Industry Sustainability  
Zero Waste SA

## Eldercare rolls out comprehensive recycling

Eldercare is well on the road to having comprehensive recycling in place after responding quickly to the results of the Industry Program waste review.

The organisation accommodates nearly 1000 residents at 12 aged care facilities in Adelaide and on the Yorke Peninsula.

Procurement and Contracts Manager Tony Pascoe says the audit identified some enormous gaps in the organisation’s waste management program.

“The analysis showed that apart from makeshift recycling at some sites, there really wasn’t an awareness at site level about waste management.,” says Tony.

“Every site was doing its own thing and we were using multiple waste companies which made it hard to facilitate change. To introduce company-wide recycling involved entering uncharted territory.”

Eldercare tendered for a new waste management provider using a 10-point evaluation sheet to rate the responses. The main criteria included fees, an ability to recycle multiple waste streams, monthly reporting and training by Veolia for staff in the new systems.

Tony says a comprehensive communications strategy was developed to gain the support of senior management and prepare staff, residents and contractors for recycling.

A colour-coded three-bin system was introduced at all sites for general waste, co-mingled and organics, with additional bins for other recyclables, such as batteries, fluorescent lights, cardboard, white paper and medical waste.

To ensure staff embraced organics recycling all food waste disposal systems were removed from kitchens.

“Medirest, our outsourced caterer, is actively involved in separating and collecting waste internally at all our facilities,” says Tony. “Every site also has a continuous improvement coordinator and recycling has been added to their list of activities to make sure the changes are implemented.”

## Major turnaround at Southern Cross

The switch to recycling is expected to save one of South Australia’s largest not-for-profit aged care providers, Southern Cross Care, about 30% in waste management costs a year.

The organisation has 33 properties in Adelaide, including 14 aged care facilities providing accommodation for 1,300 people and a head office with nearly 100 staff.

“The review found that about 79% of our waste was going to landfill so implementing recycling was a no brainer,” says Procurement Manager Charlie Way. “It was also a huge challenge because recycling was virtually non-existent across our entire business.”

After the review, the Southern Cross Care executive gave the recycling program priority status with the changeover beginning in mid 2014. Among the highlights:

- A new waste management contract was awarded to Veolia after a full tender and included new bin systems, signage and staff training.
- A rigorous change management and communications program was developed to implement recycling. This included flyers, site booklets, posters and regular online alerts.



Recycling bins at Southern Cross Care's Philip Kennedy Centre at Largs Bay

- Central office was used as a pilot for the new system and achieved a 78% landfill diversion rate almost immediately.
- A green team comprising staff and residents was formed at Buckland Nursing Home to help with the roll-out. Similar teams are likely to be established at other centres.
- Veolia is sponsoring quarterly trophies to recognise the aged care facilities which achieve the best recycling rate and provide a benchmark for other sites.

"We're more than happy with the way it's progressing in such a short time," says Charlie. "We've been supported all the way by our board and senior management who are really passionate about the program, which is fantastic.

"Now it's just a matter of getting people used to a culture of recycling. We will achieve that by constantly reinforcing what we are doing so that people don't slip back into their old ways."

## Providing a catalyst for change

Increasing numbers of aged care facilities in South Australia are requesting waste management reviews since Zero Waste SA began targeting the sector.

By August 2014 more than 40 of the 167 aged care facilities in South Australia had taken steps to implement recycling.

"The aged care sector has soon realised there's real value in this," says Andrew Hutcheon. "Aged care is a close knit network

so the news travelled fast once the benefits were demonstrated.

"As more aged care centres come forward we've reached a tipping point so that it's in the interests of the waste management industry to adapt its services to meet this new demand. To their credit they've accepted the challenge and responded very quickly."

## Overcoming the problem of pads

Incontinence pads represent about one-third of all aged-care waste – but keeping them out of landfill continues to be a major challenge.

Zero Waste SA is a founding member of the Absorbent Hygiene Products Recycling (AHPR) Group of SA which has been exploring options since 2010.

A review published by Zero Waste SA in 2013 estimated about 36,000 tonnes of sanitary pad waste is sent to landfill every year in South Australia – enough to fill Adelaide Oval up to a height of more than 14 metres. Nearly 7,000 tonnes of this is generated by aged care. The pads are highly biodegradable and when left in landfill generate significant quantities of greenhouse gases.

John Freeth says it's a global problem and is confident a solution is close to being found.

"Waste to energy through incineration is one option and the development of new plastics means the pads could be made 100% compostable," he says. "But if composting is the solution we have to overcome public resistance to compost that is partly made from human waste."

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## Zero Waste SA

A South Australian Government agency that advances improved waste management policies and the development of resource recovery and recycling. The Zero Waste SA Industry Program advises and supports companies to achieve sustainability goals in waste, water and energy.

[www.zerowaste.sa.gov.au](http://www.zerowaste.sa.gov.au)



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