



People and process

Key players

The following table lists the principal members of the fitout team.

Project team for Zero Waste SA green fitout

Role and organisation	Personnel
Client: Zero Waste SA	Piero Fioretti, Client Project Manager Sharon Ede, Greening of Government Project Officer, Waste Management
Risk Manager: Department of Administrative and Information Services	Roland Greiner
Architect and Interior Designer: JackmanParkenEvans (JPE)	Dennis Kipridis, Principal Architect and Interior Designer Anna Pyrzakowski, Interior Designer
Engineer: BESTEC	Martin Rawley and Graham Dyus
Construction Manager: Schiavello (SA) Pty Ltd	Daniel Ross, Contract Manager Scott Charlton, Contracts Administrator
Quantity Surveyors: Davis Langdon	Chris Sale
Sustainability and Facilities Management: Department for Environment and Heirtage (DEH)	Vic Gudiskis, DEH Facilities Manager Phil Donaldson, DEH Sustainability Adviser
Building Manager: Colliers International (SA) Pty Ltd	Ian Paterson

Some key steps

Selecting the project consultant

In October 2005, tenders were invited to bid for the design and implementation of a green fitout, based on numerous criteria, including execution and documentation of the project according to the Green Building Council of Australia's Green Star Rating Tool (Office Interiors v1) and execution in the most sustainable manner achievable within physical and economic constraints. JackmanParkenEvans (JPE) was the consultant chosen.

Workshop with EcoSpecifier

Andrew Walker-Morison, RMIT team leader for EcoSpecifier, an 'eco-preferable' building material knowledgebase, was subcontracted to provide a workshop to review key aspects and goals, and present a range of sustainable products that could be used. Developed jointly by RMIT's Centre for Design and Sydney-based consultancy, Natural Integrated Living, EcoSpecifier offers, among other things, a database of over 1000 independently vetted sustainable products. All key project stakeholders, including representatives of Zero Waste SA, Department for Environment and Heritage, Department for Administrative and Information Services, BESTEC and Davis Langdon, took part in the workshop. A summary of the workshop is included in the case study report prepared by the University of South Australia.

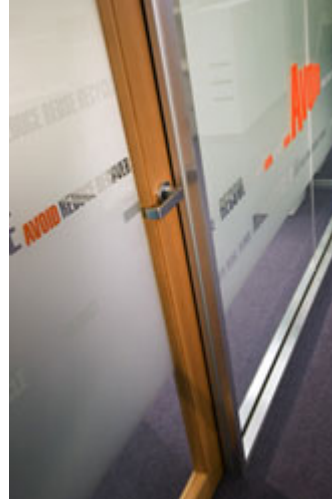
Selecting green ... isn't black and white

While Zero Waste SA selected all new electrical equipment, JPE selected most furniture, fixtures and other materials, based on the brief from Zero Waste SA. The selection process was influenced by the availability and comparability of information relating to environmental performance criteria. It also, necessarily, involved trade-offs: the meeting of specifications is a complex process and there are often different, conflicting requirements. For example, while the brief specified that locally made products were preferred, in several categories (including that relating to the multifunction device purchased for printing, copying, etc), the most sustainable products were not manufactured in Australia and so had to be imported.

This raises the issue of 'embodied energy'... Embodied energy is the energy consumed by all processes associated with production and transport of a component, from the acquisition of natural resources to product delivery. Relevant processes include the mining and manufacturing of materials and equipment used, transport of materials, and even administrative functions. So transport does matter, and bringing an item from overseas (whether by air or sea) does significantly increase its embodied energy. Currently, information on how much embodied energy a product contains is unfortunately not always available.



Recycled timber return air screen at entrance to Zero Waste SA office.



Zero Waste SA entrance to office.

Wood typically has much lower embodied energy than aluminium (depending on whether the aluminium is recycled, and where the wood has been sourced from!) - one of the reasons recycled wood was used for the return air screen at the entrance to the office.

Aluminium door frames

A saving in embodied energy was achieved for the aluminium that was employed, in door frames for instance, by opting for 'mill-finished' or uncoated metal. One less process ... one increment of energy saved and toxic compounds and processes kept to a minimum.

Minimising construction waste

Numerous design decisions – using medium-density fibreboard (MDF) and timber slats in multiples of 300 mm, for instance – ensured that less material was wasted during construction. In addition, prior to the construction phase, the Construction Manager was briefed on the importance of minimising waste and on particular specifications that required variations to standard practice. For example, the use of screws and the requirement to leave them exposed recognises that wall studs make up significant volumes of waste in the construction industry.

Managing HR

In relation to the fitout project, the management of human resources was undertaken in line with Greening of Government Operations Priority Area 7 Human Resources Management objectives to:

- equip employees to meet the requirements of all applicable environmental regulations, guidelines and policies; and
- encourage employees to incorporate environmental considerations into their daily activities.

and Zero Waste SA's own philosophy, which underlines the importance of inclusivity, vision and commitment.

Zero Waste SA's vision

Vaughan Levitzke, Chief Executive, Zero Waste SA, believes that sustainability is most likely to be achieved when a vision – in this case a society free of waste – permeates all aspects of the organisation. 'Practicing zero-waste policy within Zero Waste SA itself demonstrates and reinforces our commitment to the vision, and enables us to show leadership,' says Vaughan. Measurement of progress is important too: 'We can foster commitment to sustainability through the use of measurable outcomes. Part of the job satisfaction here is achieving and making a difference – a difference that you can see and measure.'

The main challenge related to the fact that some staff would be shifting from closed offices to an open space as required by the State Government's office accommodation guidelines. The management approach to this was to include staff in fitout decision-making processes: staff were invited to visit offices and showrooms, for instance, to see open plan arrangements and workstations. Staff reported that their concerns were largely addressed by the inclusive approach employed.

The following table summarises key management processes – what helped in this project and can help in other projects – from the perspective of management and staff.

Key management processes

Management perspective	Staff perspective
Form core staff groups to provide advice.	Provide genuine consultation and opportunities for open discussion and debate.
Involve staff from the beginning, and actively seek staff views.	Be transparent in relation to what is negotiable vs what is not open to change.
Encourage staff to understand the benefits of a green fitout from a work process point of view, and in terms of the broader issues of sustainability.	Provide opportunities to view and consider fitout alternatives.
Ensure that forums for HR issues in relation to the fitout are ongoing.	Actively encourage staff involvement.

Preparing the case study report

In October 2005, Zero Waste SA commissioned two researchers from the University of South Australia – Simon Robb from the Hawke Research Institute and Lachlan Mudge from the Institute for Sustainable Systems and Technologies – to prepare a case study report on the fitout. Research was gathered through interviews and meetings with Zero Waste SA and the fitout architect, email questionnaires with staff, and an analysis of fitout plans and documentation. The report documents the fitout undertaken in relation to its aims, and identifies further opportunities for greening and quantification of benefits for consideration by Zero Waste SA or any other organisation undertaking a green fitout. This web-based case study was prepared after the fitout had reached practical completion and therefore includes additional information.

Case Study Report