



MEDIA RELEASE

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Refurbishment of commercial property wins ACT Sustainable Cities Award

Winners of the 2007 **ACT Sustainable Cities Awards** were announced today, 14 August 2007.

Rolfe Hartley, Chairman of the ACT Sustainable Cities Awards Committee commended the 2007 winners. 'The standard of entries in 2007 was very high and I congratulate all the winners for their outstanding projects and continued commitment to ensuring Canberra's future as a sustainable city.'

ACT Chief Minister, Jon Stanhope joined major sponsor, Packaging Stewardship Forum representative, Jenny Pickles, to present the winners' award to **Australian Ethical Investments for the sustainable refurbishment of Trevor Pearcey House.**

This project involved the detailed application of sustainability principles to the design and construction of the refurbishment of an existing commercial building. The judges were impressed with the detailed analysis and planning for the project, which for example considered embodied energy and sustainability footprints in the selection of all materials and work methods used on the project. Even packaging materials used for the shipment of materials became part of the final refurbishment!

Rolfe Hartley, Chairman of the ACT Sustainable Cities Awards Committee said 'This is a true 'lighthouse project' which clearly demonstrates that sustainability principles can be applied successfully to existing, as well as new buildings'

The Australian Ethical Investments entry will now go on to the National Awards. A description and outlined of the winning entry is included at the attached page.

Entries were submitted across nine categories: Community Pride, Environmental Innovation, Water Efficiency, Resource Efficiency, Sustainable Transport, Sustainable Building, Sustainable Schools, Urban Habitat and Young Legends.

Winners were announced at an awards lunch held attended by approximately 100 local representatives of government, business and community

Category winners and highly commended awardees are listed on the attached page.

For further information, contact: **Helen Leayr 0438 041 524**



Winner – ACT Sustainable Cities Award

Australian Ethical Investments – refurbishment of Trevor Pearcey House

Project Description

Trevor Pearcey House is the new head office for Australian Ethical Investment. An extensive refurbishment has transformed an existing building and set a new standard on how a world's best practice green building can be achieved on a conventional budget. The project was undertaken using accepted conventional and low-technology design principles, technologies and materials which can be easily transferred to other projects.

Objectives

Australian Ethical Investment from the outset stipulated that they wanted a passive building that focused on an efficient building fabric first, with mechanical systems being provided as a 'backup'. They wanted a building that users could interact with and operate themselves to manage their own environment, and most importantly they were happy for the building to run with a wider air temperature band and utilise other design and operational features to ensure user comfort. This innovative approach by Australian Ethical Investment allowed the design team to focus on delivering a thermally efficient building fabric and passive systems to provide comfort rather than relying on mechanical systems. A submission has been made to the Green Building Council of Australia to achieve a 6 star Green Star Office Design rating ('World Leader').

Method

In February 2006 Trevor Pearcey House was purchased for refurbishment. A charette process was used with frequent meetings between the client and design team. The design team included the standard design professionals as well as a dedicated ESD/Green Star consultant who was responsible for ensuring that the project met its' environmental intent. A "green customised" construction management contract was used to ensure the construction manager also shared the environmental intent. At each construction meeting progress toward environmental aims was assessed as well as time and budget progress.

Partners

The key project stakeholders were the Australian Ethical Investment staff and shareholders represented by the Australian Ethical Investment Board who needed to ensure the project was delivered "on green, on time and on budget". Australian Ethical Investment staff contributed to the brief for the design team and also commented on the design progress. Prior to, and post occupancy, formal "how the building works" briefing sessions were held for all staff. A detailed environmental user's guide has also been developed.

Reflecting the company's charter the Australian Ethical Investment Board took a very strong interest in the project. The Australian Ethical Investment Board was briefed on the benefits of green buildings and during the entire process were regularly briefed on progress.



Results:

The building has been modelled to achieve a 47% better than 5 star Australian Building Greenhouse Rating. This is 75% better than the original 'average' building. Australian Ethical has also committed to purchasing 100% renewable electricity. South/east façade of building showing external shading, exhaust stacks, solar hot water and weather station that all assist in reducing energy consumption Australian Ethical Investment wanted a passive building that focused on an efficient building fabric first, with mechanical systems being provided as a 'backup'. They wanted a building that users could interact to manage their own environment and, most importantly, were happy for the building to run with a wider air temperature band and utilise other design and operational features to ensure user comfort.

Substantial improvements to the building fabric were achieved through:



- External insulation added to the existing building increased overall wall insulation to R3.7.
 - Upgrading the ceilings/roof with additional batts and foil insulation.
 - Replacing single glazed windows with double glazing. Exposed internal mass
 - The ceiling was removed on the ground floor to expose thermal mass and provide more height. Natural ventilation:
 - The majority of windows are operable, with high and low level openings. Low level openings are manually operated by the user; high level openings are controlled by the building management system.
 - Thermal chimneys provide a natural pathway for warm air to exhaust out of the building via the stack effect
 - A 'night purge' system pre-cools the building overnight. When outside temperatures are lower than internal temperatures (and cooling is required) windows open automatically to allow in cool air. This cool air absorbs heat collected during the day in the exposed mass and then is extracted out through the thermal chimneys with the support of an extraction fan. Operable windows, external shading, exposed internal mass, ceiling fans. Water: Reduction in mains water use is estimated at more than 80% through water efficiency and capture of rainwater to supply toilets. Substantial water savings achieved through:
 - Replacing single flush cisterns (12L/flush) with dual flush (9/4.5 L/flush) achieving a 56% reduction in water use.
 - Upgrading urinals with a 'Sani-Sleeve' system that combines a waterless urinal cartridge with an automated low volume flush system. This system avoids replacing the original urinals and delivers a 96% reduction in water use.
 - Replacing existing showerheads (15 L/min) with 6 L/m showerheads, delivering a 60% reduction in water use.
 - Installing two 3000 litre water tanks to provide all water required for toilets. One of two rainwater tanks installed to supply water to toilets
- Materials: Most refurbishment projects see existing internal fitout as either waste (to landfill) or materials to be recycled



2007 ACT Sustainable Cities Award Winners

Category	Winner
<p style="text-align: center;">Community Pride</p> <p>PACKAGING STEWARDSHIP FORUM </p> <p style="text-align: right;"><small>AUSTRALIAN FOOD AND GROCERY COUNCIL</small></p>	<p>Winner- Ginninderra Catchment Group Inc For Improving the Health of the Ginninderra Catchment.</p> <p>Highly Commended - ACT Government Department of Territory and Municipal Services, Parks Conservation & Lands branch for Graffiti Art Workshops, Directions Mural</p>
<p style="text-align: center;">Environmental Innovation</p> <p style="text-align: center;"></p>	<p>Winner- Minchem (Canberra) Pty Ltd for The controlled processing of commercial grease trap waste residues using earth worms</p>
<p style="text-align: center;">Water Efficiency</p> <p style="text-align: center;"></p>	<p>Winner- Northrop Consulting Engineers Pty Ltd for Yarralumla Nursery Water Recycling</p>
<p style="text-align: center;">Resource Efficiency</p> <p style="text-align: center;"></p>	<p>Highly Commended- ANUgreen for HotRot Organic Recycling Project</p>
<p style="text-align: center;">Sustainable Transport</p> <p style="text-align: center;"></p>	<p>Winner- LEAD Development, ANUgreen & The Canberra Environment & Sustainability Resource Centre for Australian National University Bicycle Cooperative</p>
<p style="text-align: center;">Sustainable Building</p> <p style="text-align: center;"></p>	<p>Residential Winner- Nick Mayo & Sarah Clayton for Canberra's Sustainable House</p> <p>Commercial Winner- Australian Ethical Investment for Trevor Pearcey House</p> <p>Highly Commended - Vogue Constructions for Provis Penfold Residence</p> <p>Highly Commended - Complete Constructions Pty Ltd for Rural House – Bendora Dam, Namadgi, National Park</p>



<p>Sustainable Schools</p> 	<p>Winner- Bonython Primary School for Bonython Primary School: Journey to Sustainability</p> <p>Highly Commended - Majura Primary School for Revitalising Majura Primary School</p> <p>Highly Commended- Canberra Montessori School</p>
<p>Urban Habitat</p> 	<p>Winner- Friends of Mount Majura for Project Dragonfly: Rehabilitation of the Majura Dams</p> <p>Highly Commended - Australian National University for Life in the Suburbs</p>
<p>Young Legends</p> <p>The Canberra Times</p>	<p>Winner- The Australian National University Sustainability Learning Community for Empowering Change Agents in the Campus Community</p>
<p>Overall Winner</p> 	<p>Over-all Winner- Australian Ethical Investment for the refurbishment of Trevor Pearcey House</p>