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WESTERN AUSTRALIA

APRIL/MAY 2005



## HIA GREENSMART AWARDS 2005 SPECIAL ISSUE

**BUILDING OF THE YEAR**  
Ecotect "Eco-Compound"  
Cottesloe

**CITY OF SUBI**  
Display Home of  
the Year

**RHEEM**  
Hot Water System  
Shows Promise

**PEET & CO**  
Awarded for  
Lakelands

# HIA GREENSMART ENERGY EFFICIENCY AWARD 2005 (Joint Winners)

**Winner:** Ecotect Architects and Econstruct for "Eco-Compound Project", Cottesloe. [www.eco-development.com/ecocompound](http://www.eco-development.com/ecocompound)

**Winner:** H & M Tracey Construction & Project Management for "The Filter House", Broome. Ph: 08 9192 1437

**Finalist:** Solar Dwellings for "Martin Road home", Mundaring

This year produced a very high standard of entries for the Energy Efficiency Award. This made the judging extremely difficult and resulted in two very different yet equally deserving winners of the 2005 Energy Efficiency Award: "The Filter House", Broome and the Cottesloe "Eco-Compound Project".

**Winner:** Ecotect Architects and Econstruct for "Eco-Compound Project", Cottesloe

## ➤ Description:

The Eco-Compound in Cottesloe adheres to the principles of passive solar design with regard to orientation, correct amount of glazing with appropriate shading, cross ventilation, thermal mass for climate and appropriate insulation. The buildings have a northerly orientation with the majority of windows positioned to take advantage of the winter sun for light and warmth. In summer, with the sun at a higher angle overhead, glazing is shaded by roof overhangs and pergolas.

The Eco-Compound utilises a range of energy efficient principles including passive solar design, energy efficient appliances and recycled materials, which

result in an overall reduction in ongoing energy use. The compound has no air-conditioned cooling or heating but spaces that remain comfortable year-round. The smart layout and orientation of rooms and windows enable ample natural lighting and outdoor living that can be used in all weather. It utilises the sun for water heating and the photo voltaic cells to generate electricity to meet the home's requirements - surplus electricity is fed directly back into the power grid.

## ➤ Judges Comments:

"The Eco-Compound represents a holistic approach to energy efficiency in a typical urban/suburban setting. Whilst the development is complex in its need

to accommodate a range of residential requirements all on the one site, the basic principles of energy efficiency and passive solar design have been a key priority.

The project demonstrates that an energy efficient home can look contemporary and stylish, and fit in with the streetscape and character of an area. There are many principles used in the design that can be replicated in the urban environment. These factors, combined with the overall energy efficiency of the Eco-Compound, makes it a deserved winner of the 2005 HIA Energy Efficiency Award."

(This house also won the Building of the Year Award, see following page for photographs.)

**Winner:** H & M Tracey Construction & Project Management for "The Filter House", Broome

## ➤ Description:

Designed by Sustainable Built Environments (SBE) Architects and constructed by locally based builder H & M Tracey Construction, this family home has been specifically designed for the tropical conditions of the State's North West, incorporating effective cooling measures and lightweight construction to minimise the use of heat absorbing building elements. Moveable doors on the eastern side and panels on the western side of the home can be opened or lifted to let in breezes, block strong winds

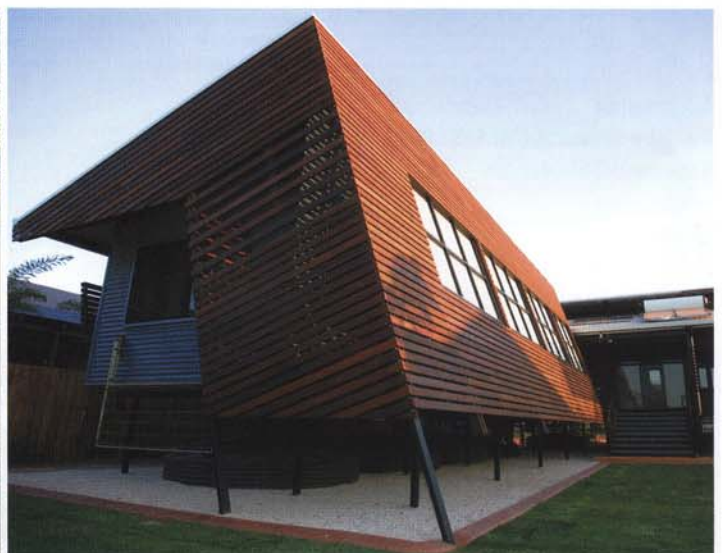
or protect against the heat of the sun. Sub-floor ventilation and louvred windows also assist in temperature control.

## ➤ Judges Comments:

"The Filter House, Broome represents an innovative, climate sensitive approach to energy efficiency in a North-West setting. The design of the house is a direct response to all of the local sustainable issues including water, but also handles the issue of reducing energy use in this difficult climate extremely well. It utilises the sun for

water heating and has photo-voltaic cells for the generation of electricity to meet requirements - surplus electricity is fed directly back into the power grid.

The house proves that function and comfort can exist with character and style. The result is a home that perfectly fits the Broome street scape and lifestyle, and embodies the many principles of Greensmart. The Filter House, Broome is a deserved winner of the 2005 HIA Energy Efficiency Award."

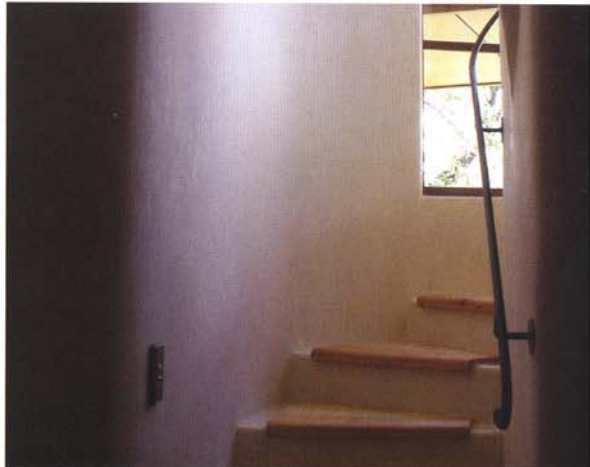


# HIA GREENSMART BUILDING OF THE YEAR 2005

**Winner:** Ecotect Architects & Econstruct for "Eco-Compound Project", Cottesloe.

[www.eco-development.com/ecocompound](http://www.eco-development.com/ecocompound)

**Finalist:** H & M Tracey Construction & Project Management for "The Filter House", Broome



## Description:

The Cottesloe Eco-Compound is an environmentally sensitive development that considers and responds to all factors associated with the environmental impacts of building construction. The complex includes a two storey main dwelling, an aged persons unit, a separate studio and communal utility areas.

Features of the project include excellent passive solar design including correct orientation and shading from summer heat whilst admitting full winter sun, shared solar

power sources, water wise and permaculture gardens, a rainwater tank and grey-water re-use systems. Interior fitout and finishes take into consideration low toxicity materials, materials from renewable resources and support of local community sources and craftspeople.

A grid connected photovoltaic system has been provided to reduce power demand from the four buildings in the Eco-Compound. It contributes to significant greenhouse gas savings and reduced energy bills for the occupants.

## Judges Comments:

"This home in Cottesloe had a different aesthetic approach in incorporating environmental design and construction features. It showed solutions that were effective and appropriate for its environment. The approach to innovation and its visual appeal plus the use of recycled materials and site management was outstanding and a credit to the builder and designer."