

SUSTAINABLE PROPERTY

ISSUE 2, SPRING 2003

INVESTMENT

DEVELOPMENT

HOTEL MANAGEMENT

FUNDS MANAGEMENT





Mindarie Festival, Perth. Sponsored by Mirvac Fini

Public Art: Mirvac's
current development
projects include
eleven public artworks
around Australia,
including the coastal
inspired works at The
Wharf, Mindarie,
Perth, and Blooms at
The Arbour on Grey,
Southbank, Brisbane.



Blooms



The Whart

snapshot

Who we are & what we do

Over the past five years, the Mirvac Group has:

- Designed and built over 10,700 new dwellings in New South Wales, Victoria, Queensland and Western Australia
- Developed over 14 commercial, retail and industrial properties
- Owned and managed over 50 commercial, retail and industrial properties
- Operated over 25 hotels and resorts, over 2,900 hotel rooms
- Managed funds in excess of \$2.5 billion on behalf of more than 35,000 institutional, superannuation and private client investors
- Grown to be one of Australia's largest and most respected diversified property groups, incorporated in the ASX S&P/100 Index, with a market capitalisation of over \$3.0 billion

The Mirvac way

- Culture of excellence
- Consistent quality
- Continuous improvement
- Sustainable practices

Memberships & affiliations

- Green Building Council of Australia
- · Facility Managers Association of Australia
- Department of Energy, Utilities & Sustainability (formerly SEDA)
- 3CBDs Initiative (City of Sydney Council, North Sydney Council)

 Parramatta City Council)
- NSW Department of Infrastructure, Planning & Natural Resources - Sustainable Unit (BASIX modelling)
- Royal Australian Institute of Architects
- Australian Architecture Association
- Property Council of Australia
- Urban Development Institute of Australia
- · Business Council of Australia
- Housing Industry Association
- University of Technology, Sydney (Graduate Diploma in Property)
- Committee of Melbourne
- Master Builders Association
- Planning Outcomes
- Construction Research

Sponsorships

- Platinum sponsor of Green Building Council's development of Retail Green Star Rating Tool
- Platinum Donors Property Industry Foundation
- Institute for Magnetic Resonance Research, Royal North Shore Hospital (charitable donation)
- Mindarie Festival in Perth. WA
- Newington Community Olympics, Sydney, NSW
- River Festival, Brisbane, QLD
- Royal Australian Institute of Architects (NSW) HPA Mirvac Student Award & Exhibition
- RMIT University, Faculty of the Constructed Environment School of Architecture and Design Technology Final Year Student Architecture Exhibition
- RMIT University, Faculty of the Constructed Environment School of Architecture and Design Research Grant
- Delivery partner for George Gregan Foundation "Playground" project - Westmead Children's Hospital

the mirvac journey



Mirvac is committed to being an industry leader in sustainable development.

This is Mirvac's second publication dedicated to the promotion of our sustainability commitment. It demonstrates our leadership in introducing new technologies and practical measures in all our property related activities - including investment and management of commercial, retail and industrial assets, development (including residential and non-residential assets), hotel management and funds management.

Across all these activities, our flagship projects are proving to be industry firsts; from the corporate leadership awards for reduction in greenhouse gas emissions in our property portfolio and the promotion of energy saving best practices for commercial tenants with the creation of our tenant handbook; the launch of the Australian Sustainable Investments Fund and the latest retail project currently under construction at Orion Greater Springfield; to the continuing successes of the suburb of Newington in Sydney. Mirvac is setting new standards.

Mirvac's commitment to sustainability is to:

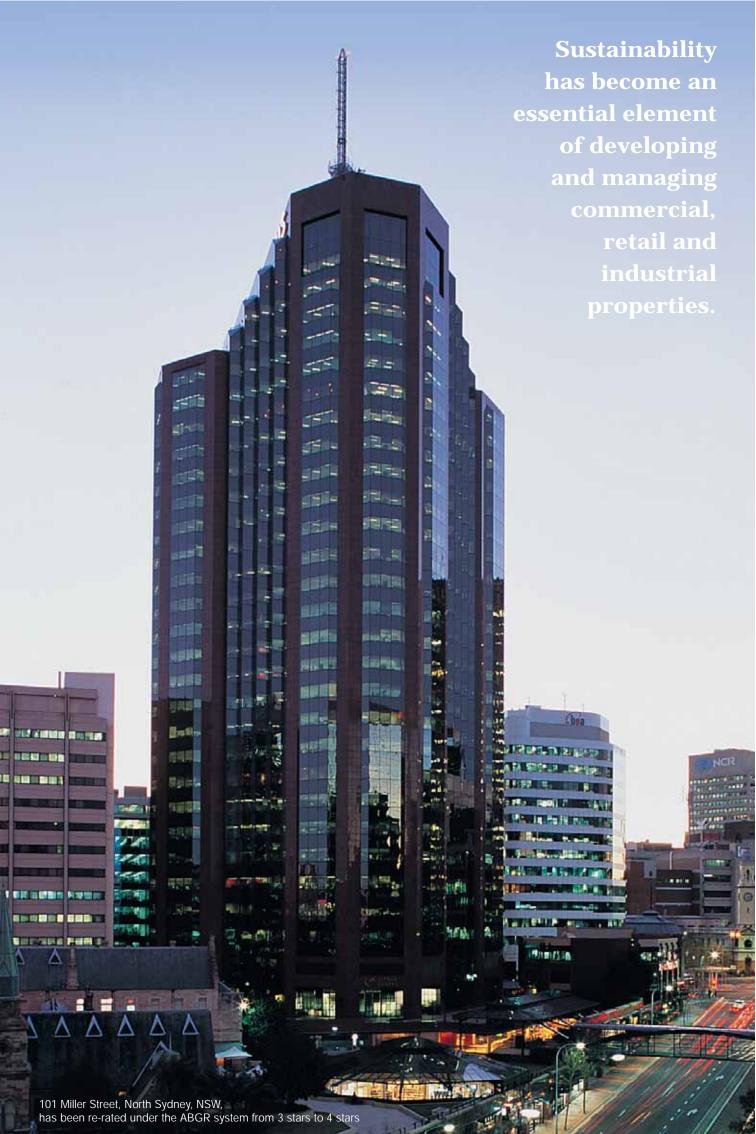
- implement responsible and practical sustainability management procedures
- develop and maintain a national focus on sustainability issues
- assign resources to assess appropriate sustainability practices
- participate in and develop associations with the sustainability industry
- promote sustainability education and awareness amongst all staff and users
- market sustainability technology and principles applied to its products, services and investments

The challenge ahead lies with all Mirvac staff, to sustain their expertise and dedicated focus on quality and innovation and bring ideas into main stream practice.

Greg Paramor Managing Director Mirvac Group



Waverley Park, VIC - brand new suburb in Melbourne.



investment

- Mirvac's commercial properties provide workplaces for over 60,000 people
- Mirvac's retail properties provide a place of business for over 45 major retailers and over 1,175 specialty stores, supporting both national and small businesses throughout Australia
- Over two million people Australia-wide are served by a Mirvac retail centre

existing investment portfolio

In recognition of involvement with the Australian Building Greenhouse Rating System (ABGR), Mirvac was awarded the Gold Compliant status for Stage 2 of its program in 2002 and Stage 1 of its program reached Silver Compliant status in 2001. Mirvac was also awarded the Energy Smart Green Globe Leadership and Champions awards in 2001.

Since that time, several more existing buildings owned and managed by Mirvac have been rated under the ABGR system, and all properties have achieved 3 stars or better. With continual improvements to our portfolio, 101 Miller Street, North Sydney NSW, which was 3 stars has just been re-rated to 4 stars.

To date, Mirvac has made CO2 savings in excess of 14,681 tonnes, energy savings of more than 14,094 MWN and gas savings of 8,250 GJ.

Energy monitoring

Mirvac has recently introduced a new sophisticated and powerful software package to aid in its management of buildings - the **Energy Monitoring Program.** It simplifies management and reconciliation of energy purchases, aiding building managers to maintain a focus on energy use.

It provides the ability to monitor benchmarking capabilities, historical data analysis, demand load management capabilities, greenhouse emission analysis and reporting functionality.

Tenant handbook

The impact of an energy efficient building can only be maximised when users of the building play their part in practical day to day measures to reduce energy consumption.

Mirvac, in conjunction with the Department of Energy, Utilities and Sustainability (formerly SEDA) produced the **Tenant Energy Management Handbook.** All Mirvac tenants have a copy, and it aims to foster "energy smart" work practices, introduce energy efficient technology, provide tools for measuring performance and other energy management tools.

3CBDs

Mirvac is a partner in the **3CBDs Greenhouse Initiative** for its tenanted space, in conjunction with the Sydney, North Sydney and Parramatta City Councils. The initiative formalises and recognises many of the practices and activities already being completed by Mirvac in benchmarking and measuring its own performance as a tenant in its own buildings.



investment property development

Commercial

Mirvac was one of the first organisations to sign a Memorandum of Understanding with the NSW Department of Energy, Utilities and Sustainability (formerly SEDA) to audit, analyse and implement a range of energy saving initiatives throughout its commercial property portfolio. As part of the Memorandum, the design and documentation of the Mirvac head office at 40 Miller Street, North Sydney, NSW was assessed by the Department and was the first building in Australia to pre-commit to a 4-star ABGR rating.

Although pre-commitments of this kind are relatively common now, Mirvac pioneered the practice and has since extended it further with 4.5-star precommitments at **ONE Darling Island,** Pyrmont, NSW, currently under construction.

189 Grey Street, Southbank, Brisbane, QLD was designed and developed by Mirvac and completed at the end of 2004. The building is anticipated to achieve a 4 star rating and will have its rating confirmed after its first 12 months of operation.

Retail

Mirvac is the platinum sponsor of the Green Building Council of Australia's Green Star Retail Rating Tool. Mirvac's sponsorship is providing the financial resources for the creation of the tool, which will be the only one of its kind in Australia for retail developments.

Pre-empting the requirements of a rating tool, Mirvac is developing **Orion Greater Springfield** as a world leading, best practice, sustainable retail project. Located in the western corridor of Brisbane QLD, Orion Greater Springfield will be a 194,000m² greenfield town centre development in the master planned Springfield community. An Agreement is currently being negotiated with the QLD Environmental Protection Authority (EPA) to define a working partnership relating to the sustainability initiatives and performance at Orion.

The **Hinkler Centre** in Bundaberg, QLD, combines two existing retail premises in the heart of the Bundaberg CBD. With strong support from the local council, the new centre will revitalise and invigorate the town centre and CBD, and strengther retail business.

Ballina Central is a new district shopping centre on the NSW north coast, to be completed in early 2006. The centre's landscaped areas will feature native planting to reduce demand for irrigation, and will re-use stormwater collected from the site for toilet flushing. The civil works for the project incorporate Water Sensitive Urban Design (WSUD) principles throughout.

The recently completed neighbourhood shopping centre **Stanhope Village** at Stanhope Gardens, NSW, features a 3,500m² Coles and over 25 specialty stores including medical centre. The centre uses recycled water drawn from Sydney Water's Rouse Hill reticulation system, for toilet flushing and irrigation of the native landscaped areas.

The redevelopment of **Waverley Gardens**, VIC, will provide a sub regional shopping centre to serve the needs of the new 4,000 residents of Waverley Park, the new urban infill residential suburb also being developed by Mirvac. The focus is on providing convenient shopping and services, and reducing the number of vehicle trips made by the residents.

Industrial

Nexus Industrial Park at Prestons, NSW is currently being designed and development by Mirvac. The first building is a 13,000m² industrial facility which will utilise simple passive solar design principles to minimise heat loads, such as orientation, high performance glass and large overhangs. The site will also collect and re-use stormwater for landscape irrigation.

New headquarters for GM Holden Ltd

Mirvac Group launched the new headquarters for GM Holden Ltd, at 191-197 Salmon Street, Port Melbourne in May 2005. The headquarters covers 23,000m² of office space inside the three-storey building which includes two full height atrium spaces and links to the new multi-storey car park

The building introduces new environmentally friendly features including:

- a rainwater landscape irrigation system which uses water from the car park roof to reduce water consumption
- programmed lighting system which senses the levels of external light and automatically adjusts internal light levels to compensate and
- roof-mounted solar panels which provide the building with hot water.



residential property development

Mirvac understands that development is not just about building but creating modern lifestyles and the communities where we will continue to live and work.

During 2004, Mirvac completed just over 2,700 dwellings throughout Australia; that's homes for an estimated 7,000 people.

Quality first

Mirvac's residential property development is recognised for its focus on quality: sound design principles, appropriate materials and our sensitivity to social amenity and lifestyle impacts of homes and communities.

Along with water conservation and energy efficiency initiatives, privacy, comfort and quality of outdoor space differentiate a Mirvac home.

Mirvac's national register of approved materials and master sustainability checklist for new projects ensures our in-house expertise, research and performance of past projects is readily referenced - all part of our continuous improvement.

Ephraim Island, QLD

Mirvac Queensland face specific challenges designing in a sub-tropical climate. Their commitment is to continuing the journey toward smart and sustainable development of Queensland and contributing to the envied Queensland way of life.

Currently under construction, **Ephraim Island** on the Gold Coast Broadwater, a joint venture with The Lewis Land Group, includes a range of water conservation initiatives, including grey water for irrigation, and achieves a 5 star energy rating for its feature "through" apartments.

This year alone, our residential projects included:

- Planting of over 8,800 trees, over 110,000 shrubs and over 115,000 groundcovers
- Creation of over 49 hectares of open space
- Completion of over 1.7 kilometres of waterfront promenade or beach

Research & development

Aside from utilising Ecospecifier to assist in materials selection, Mirvac also works with its suppliers and manufacturers in the development of products used in our projects, often relating to performance and sustainability. Recent examples include the development of new plumbing ware which controls the flow and water pressure of the hydraulic systems in high rise apartment buildings, to ensure performance of AAA rated tapware for water conservation, the design and installation of solar hot water systems and water tank and reticulation systems, and acoustic wall systems.

Working on the BASIX

Mirvac has collaborated with the NSW Department of Infrastructure, Planning and Natural Resources to fine tune the multi dwelling BASIX - the Sustainable Building Index. Pioneering the testing of the rating tool, Mirvac have piloted a current Mirvac project in Chatswood to evaluate its practical implications and cost effectiveness.

Sustainable House, Mandurah, WA

Mirvac Fini, in partnership with the City of Mandurah, have built what is thought to be Western Australia's first sustainable display home aimed at the \$100,000 to \$150,000 project home market.

The stylish, single storey house will demonstrate how everyone can adopt simple features to make their home both energy efficient and a pleasure to live in. The home recently won the 2005 Housing Industry Association Greensmart Partnership Award.

Newstead Riverpark, Brisbane, QLD

The 16.4 hectare **Newstead Riverpark** urban renewal project on the Brisbane River will evolve into an \$800 million plus world-class residential, retail and parkland precinct over the next seven years. Two kilometres from the CBD, it will be a fully integrated community with apartments, restaurants, cafés and retail facilities, five hectares of parkland including a one hectare perched lake, connection to the Brisbane River Walk, landscaped grounds, barbeque areas and public art.

Formerly the historic Boral Gasworks site, **Newstead Riverpark** is currently the largest urban renewal project in Brisbane. Remediation of the site is two thirds complete, and once completed, the industrial eyesore on the Brisbane River will be transformed into a world class, integrated development for the people of Brisbane to enjoy.

Beacon Cove, Melbourne, VIC

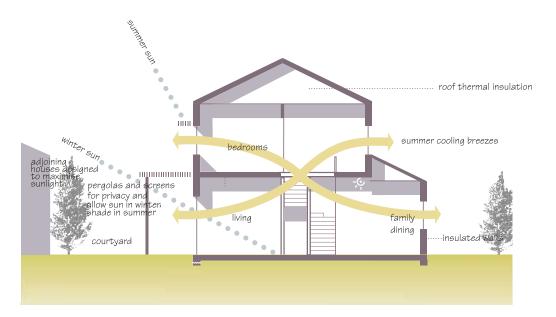
Beacon Cove, Melbourne's only inner-city beachfront residential suburb, is in its final stage. The 32 hectare, planned bayside community located at the historic Station Pier on Port Melbourne, features four hectares of parkland, and over half a kilometre of new beach and public promenade, along Port Phillip Bay.

The existing historic pier remains as a bustling port for cruise ships, and the original beacons, which gave the area its name, remain as iconic landmarks, preserving the existing character while offering modern bayside village lifestyle.

energy and the environment maximum sunlight, maximum ventilation



best orientation to maximise winter sun

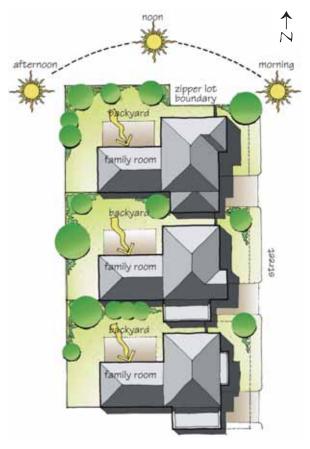


Waverley Park, VIC

Waverley Park is a brand new suburb in Melbourne which will be home to approximately 4,000 residents, with its own lifestyle centre set in the historic stadium, incorporating a café, convenience store and gymnasium. The restoration and re-use of a portion of the heritage listed stadium and oval for community and football use will be a focal point for the suburb, and will be the new home of the Hawthorn Football Club.

The suburb is planned around a new lake, which forms part of the Water Sensitive Urban Design (WSUD) for treatment of stormwater run off. The lake will be the source of water supply irrigation of the three hectares of parkland throughout Waverley Park, eliminating the use of mains water for irrigation and water restrictions for landscape.

Mirvac's unique planning and home designs at Waverley Park provide maximum privacy and space. All backyards are designed to give the greatest amount of usable private outdoor space possible and the flexible living zones within the house give maximum lifestyle choices. Homes are orientated on their block to maximise sunlight all year round, filling them with light and warmth.





Yarra's Edge, Melbourne, VIC

Located within Melbourne's Docklands precinct, the Yarra's Edge joint venture comprises 1.4 kilometres of north facing river frontage. The first stage, Marina Precinct, is nearing completion and features a marina with public births, ferry stop and water taxi stop, over half a kilometre of riverfront promenade, approximately two hectares of public open space and several public art works.

Newington, Sydney, NSW

Newington, Australia's first solar suburb, developed by a Mirvac and Lend Lease joint venture, can now boast about its water conservation credentials. According to the Sydney Olympic Park Authority, Newington residents use about one third of the amount of drinking water per capita compared with the rest of Sydney.

The dual water supply system installed throughout the suburb recycles grey water for toilets and landscape irrigation. It means that while the rest of Sydney is facing water restrictions, these do not apply to recycled water for the residents of Newington.

Recycled water at Newington also costs 15 cents per kilolitre less than mains water.

Combined with additional water conservation features of the suburb and the homes, residents of Newington have saved millions of litres of precious drinking water over the past four years, and in turn, helped reduce sewage pollution of our waterways and oceans.

Esperence, Randwick, NSW

In a Mirvac first, 34 boutique four bedroom family homes at **Esperence** in Randwick feature their own individual 5,000 litre water tanks to collect rainwater for irrigation, toilet flushing and washing machine cold water supply, plus solar hot water systems.

An average house using solar hot water can help prevent up to three tonnes of carbon dioxide being released into the atmosphere each year - about the same emissions being produced by one car on the road every two years (source: Energy Australia). At Esperence, that amounts to a reduction in greenhouse gas emission over the next five years which is the equivalent of taking 85 cars off the road.

Newbury Estate at Stanhope Gardens, NSW

Situated at Stanhope Gardens in Sydney's burgeoning northwest, **Newbury** is an 1,800 lot partnership development between Mirvac Homes and Landcom, the NSW state government's development body.

Winner of many environmental and design awards including the 2002 Urban Development Institute of Australia's NSW Awards for Excellence in Energy Efficiency and the Planning Institute of Australia / Urban Design Forum's National Urban Design Excellence Merit Award, Newbury features 30 kilometres of underground powerlines, which both improves the visual impediment of the structures on the landscape and frees up an estimated two hectares which is dedicated to open space.



With hotels and resorts in over 25 locations throughout Australia and New Zealand, Mirvac Hotels are undertaking several sustainability initiatives.

These initiatives range from daily monitoring of energy consumption by each hotel; water conservation; building operational and maintenance training; capital expenditure analysis; waste control; indoor air quality and participating in community partnerships.

Some examples include:

- identifying potential reductions of up to 40 per cent on electricity use at Quay West Suites Sydney
- the Sydney Marriott Hotel joining The City of Sydney as a Clean Harbour Partner
- the planting of 80 new trees and 200 native grasses at The Sebel Heritage Yarra Valley, VIC
- using bore water and water catchment tanks to source water for landscape irrigation of lawns and gardens at the The Sebel Resort & Spa Hawkesbury Valley NSW, The Sebel Kirkton Park Hunter Valley NSW and The Sebel Reef House and Spa Palm Cove, QLD and
- installation of water reduction facilities, such as low flow shower heads and taps, in all Victorian hotels.

The recently completed, Mirvac designed and developed **Quay West Resort Bunker Bay**, WA, is spectacularly located, facing northward over Bunker Bay. The five star resort offers 150 villas, served by resort and conference facilities, and features the essence of vernacular Australian architecture with profile metal roofing, timber and stone feature walls and exposed timber trusses.

The resort retains several aboriginal sites and significant trees, protected by restricted covenant, and includes over 700 new trees, 50,000 shrubs and 20,000 groundcovers, native vegetation, reforestation of sand dunes and a Foreshore Management Plan. The man-made lake supports the local wetland system and design features include a smart lighting system, cross ventilation, recycle ironbark columns and the use of local timbers, stones and materials.

www.mirvachotels.com.au Central Reservations: 13 15 15





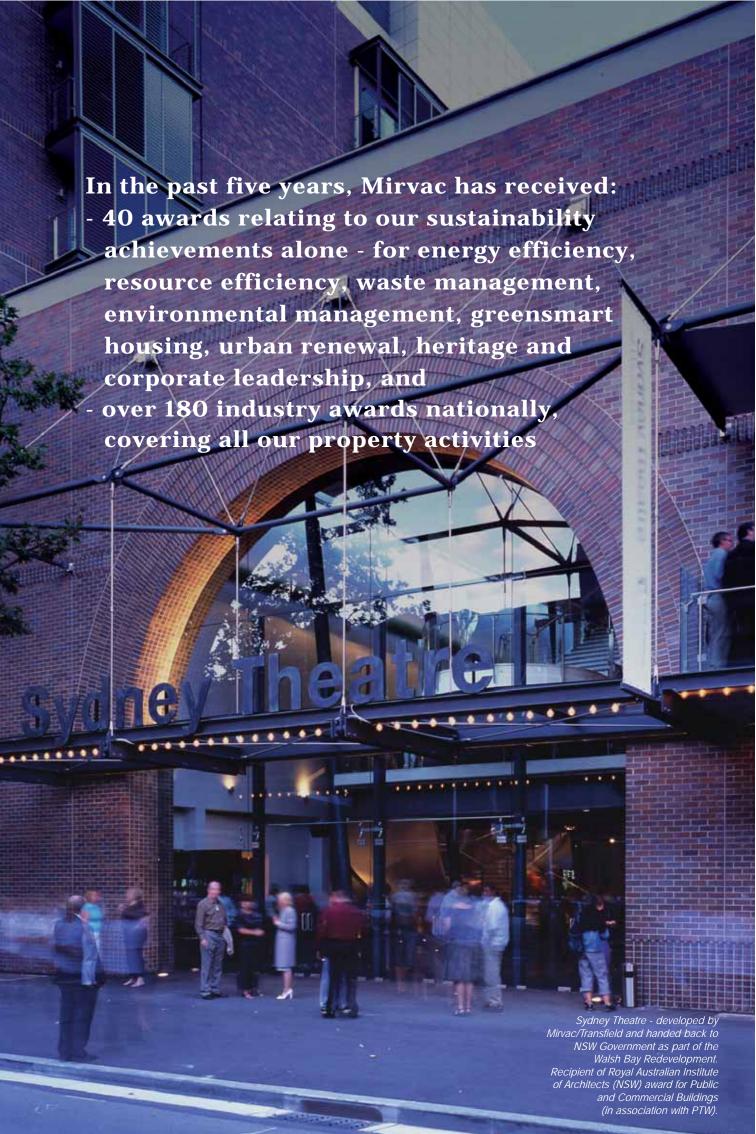
Mirvac, through its funds management division -James Fielding Funds Management - has recently launched two new innovative sustainability funds: Australian Sustainable Investments Fund (ASIF) and the James Fielding Infrastructure Sustainable Equity Fund (SEF).

The development of these funds has been prompted by considerable demand for investment product in the area of forestry and sustainability, and the desire to bring together investors that share a common view towards sustainability and investment.

A key component of the ASIF business model is the selection of investments based on the land component being "Kyoto compatible" which provides the ability to register carbon sequestration rights and the potential to trade carbon credits in countries committed to addressing the problems of global warming through greenhouse gas emissions.

The investment philosophy of the funds, which are among the first vehicles of their type in Australia, is driven by the recognition that an investment in Australian forestry related projects presents an opportunity to supplement core forestry based income returns via complementary revenues, including environmentally sustainable activities such as:

- · carbon credit sales
- biodiversity and salinity credits via reforestation and
- renewable energy incomes (eg: wind farm rentals and biomass sales)



award winning

Sustainability awards only. Refer to mirvac.com.au for full list of awards.

2005 to date

HIA Greensmart - NSW

HIA Greensmart - National

National Trust of Australia - NSW

Inaugural Asia Pacific Public Participation Award - WA

HIA Greensmart Partnership Award - WA

Greensmart Development of the Year

Greensmart Resource Efficiency Housing Award

Corporate/Government Category

Robust Public Participation Process

Mirvac in conjunction with City of Mandurah

2004

Western Australia Water Industry Award

Royal Institute of Chartered Surveyors - UK

Master Builders Association - NSW

Master Builders Association - NSW

Master Builders Association - NSW

Urban Development Institute of Australia - NSW

Urban Development Institute of Australia - NSV

Urban Development Institute of Australia - QLD

Urban Development Institute of Australia - VIC

Australia Award for Urban Design - National

Year of the Build Environment Exemplars Program

Australian Property Institute

Water Treatment/Recycling for Reclaimed Wastewater Supply

Excellence Awards in Sustainability Commendation

Energy Efficiency & Sustainability for Medium Density

Public Landscaping

Environmental Management - Medium Density

Design for Water & Energy Sustainability

Urban Renewal

Urban Renewal

Judges Award for Landscape Excellence

Urban Design (Heritage Waterfront)

Excellence in Building

NSW Heritage Office Award

2003

Royal Australian Institute of Architects - NSW

MBA Housing Award - Nationa

MBA National Building & Construction Award

Housing Industry Association Greensmart Award

Special Jury Award for Innovative Design

Energy Efficient Home of the Year

Merit for Energy Efficiency for Commercial Building

Smart Housing

2002

Urban Development Institute of Australia - QLD

Urban Development Institute of Australia - NSW

HIA

SEDA

SEDA

Advancement of Sustainable Urban Developmer

Excellence in Energy Efficiency

Greensmart Award

Building Greenhouse Rating Leadership Award

Gold Energy Smart Award

2001

MBA Excellence in Housing - NSW

SEDA

Adaptive Re-Use

Building Greenhouse Rating Leadership Award

Silver Energy Smart Award



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