

The AVONDALE

2-6 CLYDESDALE PLACE, PYMBLE

Ecological Sustainability Principles Schedule of Features and Finishes

Glenside Group, development manager of The Avondale, is passionate about and totally committed to the Principles of Ecological Sustainability including reducing energy and water wastage. It has been proven that the most effective way to make a difference to the environment is simply by lowering our consumption of resources. At considerable expense to the project, the developer has invested in a number of energy and resource saving initiatives which will result in reduced running costs to The Avondale residents. Some of these initiatives are innovative and entirely new to residential apartment living. The costs are to be incurred by the developer in the project construction and once in place, will ensure significant monetary savings to the residents and immeasurable savings to the environment.

At The Avondale, Glenside Group considered every aspect of the project at the design stage, item by item, with respect to the principles of ecologically sustainable development (ESD) under the guidance of respected expert Michael Mobbs.

Following are the ESD initiatives to be implemented at The Avondale:

1. Rainwater Tank

Avondale will include the installation of a 200,000L rainwater tank, which is six times, (or 165,000L), greater than required by Ku-ring-gai Council. The harvested water will be used for garden irrigation, toilet flushing and washing machines.

2. Low Energy Glass

Viridian "Comfort Plus Neutral 59" Glass will be used where required in west facing windows at The Avondale to reduce the heat load. The benefit of this low energy glass is that it reduces the heat gain from the outside thereby reducing the load on air-conditioning. In winter it reduces heat loss out of the building, thereby reducing the load on the heaters. The improved performance over normal glass is in the range of 32% to 38%.

3. Low energy light fittings

These will be fitted throughout all apartments. All fittings will have fluorescent bulbs and be either surface mounted or recessed downlights. Fluorescent bulbs enjoy a significantly increased lifespan and dramatically reduce energy consumption from 50 watts to 11 watts per fitting, whilst maintaining a high quality of light.

4. Ceiling fans

Ceiling fans will be installed in all bedrooms to increase efficiency of air-conditioning to those rooms by up to 60%. Ceiling fans use considerably less energy than air conditioning. According to US Department of Energy, Energy Efficiency and Renewable Energy, during moderately hot weather, ceiling fans may be effective enough to actually eliminate the need for air conditioning altogether. With a ceiling fan, setting

The AVONDALE

2-6 CLYDESDALE PLACE, PYMBLE

the thermostat on your air-conditioner at about 25°C rather than 21-22°C should be comfortable. As more power is required for cooling, rather than heating, each degree the thermostat is raised allows a possible 3-5% saving on air conditioning costs. Therefore, ceiling fans are a cost and energy effective cooling option for residents.

(http://www.eere.energy.gov/consumer/your_home/space_heating_cooling/index.cfm/mytopic=12355)

5. Car Share Scheme

The Car Share Facility is an initiative where at least one car is provided at The Avondale for use by residents for personal or business purposes. The car will be operated by an independent business which will run and maintain the vehicle. It is proposed that the available car will be parked at The Avondale's car park (subject to council approval). Residents will be able to book the car by Internet or phone and may, with limited restrictions, drive the vehicle anywhere. The developer will fund 12 month's operation for the Owners Corporation.

The Car Share Facility is a low cost service which makes car use cheaper than owning or using a privately owned car. Research sourced by Michael Mobbs on use of car share facilities consistently indicates that one car share car meets the needs of at least six to seven privately owned cars. For further information see <http://www.carsharing.net/> and <http://www.ecoplan.org/carshare/>.

It is anticipated that after the first year that the Car Share Facility will be well used at The Avondale and the financial saving for users is estimated to be several hundred dollars per person annually.

6. CO₂ monitor in car park

The CO₂ monitor enables the Owners Corporation to safely minimise the operation of the mechanical car park ventilation.

7. Organic Edible Garden

This is an exciting and innovative concept where an "Edible Garden" growing organic fruit and vegetables is to be established on site for the residents of The Avondale. (It is now widely recognised that the growing, cleaning, packaging, refrigeration and transportation of food is a major contributor to green house gas).

The developer will fund its operation and maintenance for the first year. It is expected that if just a few residents enjoy operating the garden, then the garden's viability could be ensured, ongoing maintenance and operation would be discussed and assessed by the owner's corporation.

Part of the establishment costs funded by the developer is the training and assistance of the gardening company to the Owners Corporation during the first year.

According to sustainability coach Michael Mobbs, this garden will potentially cut tonnes of CO₂ and provide substantial organic produce for The Avondale residents, helping both the Owners and the environment.

8. Green Energy and Photo Voltaic Panels ("Solar Panels")

The developer has established and funded a green energy trust fund, to enable the Owners Corporation to fund the difference in cost, for all Owners Corporation energy needs, between 100% green energy and the cost of energy provided by coal powered sources.

The AVONDALE

2-6 CLYDESDALE PLACE, PYMBLE

In addition the building will be prewired to enable installation of photo voltaic panels (solar panels) should the owners choose to install them in the future, (at their cost or using government rebates).

9. Gas Heating

There will be a gas bayonet in all living areas to enable heating of all apartments.

Gas is a cheaper and more environmentally friendly source of energy than coal powered electricity.

10. Hot Water

Instantaneous gas water heating – saves water and energy (Rinai 16). Instantaneous only operates when required rather than keeping large tanks of water at hot temperatures and so is more efficient than a central hot water system where heat loss through the reticulating pipes results in larger energy consumption.

11. Air Conditioning

Apartments will have energy efficient day/night zoned, Inverter technology variable speed reverse cycle air conditioning. However, the mass of the building, the cross-ventilation and the use of ceiling fans should reduce its necessity.

12. Energy and Water Efficient Appliances

Apart from carefully selecting the most appropriate dishwashers and clothes dryers for inclusion at The Avondale, the developers have sourced and negotiated an excellent price for new clothes washing machines and refrigerators with the highest energy and/or water ratings currently available. In an effort to encourage the use of efficient appliances in all apartments, the vendor will supply these appliances at cost and arrange disposal (recycling) of your old appliances. Speak to one of our sales people about this offer.

13. Lighting in Common Areas

All common area lighting will be fluorescent lamps with movement sensors or photoelectric control. Fluorescent lighting uses considerably less energy than non-fluorescent lights without compromise to lifespan or quality of light.

14. Lifts

Avondale's gearless traction lifts use less power than the hydraulic lifts used in other projects. They're also quieter and provide a smoother ride. To reduce power consumption even further their lighting is kept in standby mode, activating only when the doors open.

15. Water Meters

Individual water meters for each apartment to enable residents to monitor their water use.

Contact RPM Group

David Poppleton P: 0404 888 363

Jamie Gonzalez P: 0410 888 810