

# Breese Street Sustainable Urban Living



GIW Environmental Solutions (GIW) is proud to present Breese Street - designed by DKO and Brunswick locals Breathe Architecture and developed by Milieu Property. Breese Street embodies sustainable living and aims to create a vibrant and healthy community.

GIW has been involved to ensure that the sustainable philosophy is well-integrated into the design and that solutions are both cost-effective and practical. Here is a snap shot of how we have realised this vision which will generate significant savings for future residents.

## 7.5 Star Energy Rating

Achieving a 7.5 star average energy rating result requires careful consideration of orientation, window sizes, shading strategy, glass selection and internal layouts. We have been working with the design team to ensure that a balanced outcome is achieved – taking into consideration daylight access, thermal comfort and views.

Compared to a BCA compliant new build in Brunswick, a future resident of Breese Street will save between \$200-250 per year on heating and cooling cost.



Figure 1: Energy Efficiency Initiatives - Breese Street



Figure 2: Solar PV System - Breese Street

### Solar PV system and Embedded Network

The saw tooth roof of Breese Street has been purposefully angled at 15 degrees due north facing – creating a favorable location for a 30kW Solar PV system. Using a high-efficiency panel with a peak power output of 320 Watts, a large system can be accommodated while leaving enough space for communal facilities and plant area. The system has been sized to base load and negates on-site battery storage.

The Solar PV system will feed into an embedded network which will provide all occupants of the building with an equal share of solar power. The embedded network which combines bulk purchased GreenPower and on-site generated renewables will provide occupants with a lower and more stable electricity rate than a conventional electricity supplier. A future resident of Breese Street will save \$200 or more per year on electricity cost.

### Rainwater Harvesting and Reuse

All rainwater captured off the roof, rooftop terrace and balconies will be reused on-site for toilet flushing and landscape irrigation. A 20,000 litre tank in the basement and a 4,000 litre tank at roof will collect the rainwater and distribute it throughout the building. This will save approximately 345,000 litres of potable water and will result in a \$15 annual saving for a future resident of Breese Street.

### Fossil Fuel Free

There will be no gas connection to Breese Street. This, in combination with the solar PV system and commitment to GreenPower, will make this development free of fossil fuels and will future proof it. This strategy is bolstered by central heat pump hot water, high-efficiency split systems and induction cook-tops. While gas prices increase, future residents of Breese Street will benefit from the more stable electricity prices offered through the embedded network and on-site renewables.



Figure 3: Internal Views - Breese Street

## Permaculture and Urban Farming

The rooftop terrace will be filled with landscaping including productive garden plots, herb gardens and native vegetation. It will not only be a place for socialising, but also facilitate healthy living and eating habits. Inclusion of beehives maintained by urban beekeeping collective Honey Fingers will facilitate increased pollination of surrounding gardens and provide a welcome source of organic honey.

Breese Street is a great example of affordable, sustainable, urban living in Melbourne. The future of inner city apartment living looks bright with shining examples like Breese Street.

Are you ready to meet the market? Email or call GIW for a free tailored outline for your next project.



Figure 4: Native Landscaping by MALA



Figure 5: Rooftop Terrace - Breese Street