

SOLAR CASE STUDY: LIFESTYLE WORKING



Lifestyle Working's innovative strata-titled solar lots in Melbourne's Docklands are giving business a new way to invest in solar.

Tenants at Lifestyle Working have the opportunity to buy strata-titled 1.5kW solar lots on the building - an initiative that gives business the opportunity to invest in solar and reduce their energy demand, without owning the base building.

Features:

Lifestyle Working is a new, four storey building in Victoria Harbour with approximately 2,400sqm of roof area. The design includes a 528 panel solar installation on the roof with a total size generating capacity of 132 kW.

In an innovative approach the system has been divided into 64 1.5kW lots available to tenants as individual strata-titles. Plus a 36kW system that will supply a significant proportion of the base building energy demands.

Lend Lease's Sustainability Manager James Wewer, says "we expect the majority of base building energy needs during daylight hours will be supplied from the 36kW solar system."

Funding model and business case

The solar array was directly purchased by incorporating it into Lifestyle Working's design and construct contract which covered the supply, installation and commissioning of the system.

The set-up of the system has allowed Lifestyle Working to offer 1.5 kW "solar lots" for sale to owners of suites within the building. Each lot features six 250W solar panels and sits on a separately owned strata-title – giving business owners an opportunity to invest in solar and supplement their energy needs without needing to own a building or roof space outright.

The solar array was one of a range of sustainability initiatives included within the building which is designed to reduce operational carbon emissions. A low reliance on mechanical ventilation with solar energy complementing demand will help keep operating costs down for tenants and contribute to improved economic performance.

Location:

Victoria Harbour, Melbourne

System Size:

132 kW

Estimated Annual Production:

111 MWh

CO2 Avoided Annually:

146.5 tonnes

Solar inverter:

Fronius IG Plus

Solar panels:

528 Trina Honey Module panels -
1650 mm x 941 mm

Mounting system:

Clip-on brackets fixed to the roof cladding ribs. No penetration of waterproof membrane.

Funding model:

Outright Purchase

Installation date:

2013

Installer:

CITY OF MELBOURNE ECO-CITY

“The solar lots will give tenants the opportunity to future proof their business against energy cost increases”, says James.

Key challenges:

The largest challenge to making the project a reality was gaining the right approvals from the electricity distributor. James says, “we had to jump a number of hurdles to get distributor sign-off which took a lot longer than we expected.”

This included the time taken for the distributor to undertake a feasibility study into the impact of the system on sub-station fault levels, and the time-consuming task of providing serial numbers for each of the 528 solar panels.

“If you’re considering a major installation get in contact with your electricity distributor and retailer early,” advises James. “Early contact helps get the timing right and improves the accuracy of cost estimates.”

Lifestyle Working Collins Street incorporates solar energy as a viable and established component of the design which will significantly reduce the Owners Corporations energy costs. Additionally, individual owners and tenants can also supplement the energy needs of their individual office suites with extra solar panels as required

The innovative approach is showcasing new and innovative approaches for meeting solar demand of tenants and building owners alike.



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