CITY OF MELBOURNE ECO-CITY

SOLAR CASE STUDY: 1 LYGON STREET



One local building owner is giving his tenants free solar electricity.

Businesses at 1 Lygon Street are receiving free electricity from the 4 kW solar system on the roof, but they didn't have to pay a cent for the installation and their rent wasn't raised to cover the initial outlay. Their landlord, Clive Silvester, has absorbed all the costs while passing on all the savings. Why?

Clive, who works in the commercial real estate sector, says that although the solar installation doesn't give him an immediate financial return, it's an incredibly valuable marketing tool. "There's a promotional benefit for me to secure tenants when you say there is free electricity," he explains.

Location:

1 Lygon Street, Melbourne

System Size:

4.18 kW

Solar inverter:

1 x SMA SB2000HF

2 x SB 1700

1x SB 2000 HF

Solar panels:

22 x 190W panels

Upfront cost:

\$17,000

Funding model:

Paid outright

Installation date:

February 2012

Installer:

Akora

Features:

In 2012, 22 panels were installed on the roof of 1 Lygon Street and wired directly to the building's three tenancies. The installation of solar complemented previous upgrades that have delivered both improved environmental outcomes and economic returns. The result is an attractive win-win situation – lower electricity bills for the tenants, and improved tenant retention for the owner.

"Everything has been done environmentally to mitigate the occupational cost and to reduce the carbon footprint," says Clive. "It has already helped to retain one tenant."



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Funding model and business case:

The recent boom in residential solar spurred Clive to consider the viability of solar for 1 Lygon Street. "I had already installed solar panels on my house and it made financial sense, so I thought why not on my commercial property too," he explains.

Before installing the solar system, Clive implemented other 'low-hanging fruit' environmental upgrades. Insulation was installed and the roof was painted white to reflect sunlight, improving thermal performance and reducing heating and cooling costs. A cooler roof also increases the efficiency of solar panels, which work better at lower temperatures.

The relatively small size of the installation enabled it to be purchased outright, strengthening the business case. Once connected, the system delivered immediate benefits. "Bills were cut to a quarter of what they were before," says Clive.

Nick Hagger, creative director of Robot Circus, a software developer that occupies the second floor, was one of the recipients of those savings. "We've noticed that it's actually been quite effective at reducing our power bill."

The panels also played a role in Robot Circus deciding to sign up for another lease term. "Knowing that the building is as efficient as it could be and that the landlord is working in both the interests of the environment and the interests of the tenant was a significant factor in us staying," says Nick.

Key challenges:

Electricity to the building is controlled through three individual meters, one attached to each tenancy. Lack of flexibility with this option means when a tenancy is empty the solar energy flows into the grid rather than cascading into the other tenancies. A metering option allowing the energy to be shared between all the tenancies would make more sense and further improve the economic case.

Clive is concerned about the potential for future overshadowing if neighbouring properties are developed, but he accepts that this is an unavoidable risk for CBD buildings. "Overshadowing considerations are just part of the reality when installing solar in the city centre and need to be factored into your decision."

Overall, Clive has no regrets about installing solar. "If I had my time again, I'd do exactly the same. Except I'd add more panels," he says.

Other benefits:

Solar panels also provide a feel-good factor, which can be important to some tenants. "There's a warm inner glow that one gets from knowing you're not contributing hugely to the carbon footprint of this building," says Nick.

melbourne.vic.gov.au/solar

