

SOLAR CASE STUDY: CHOCOLATE BOX, PORT MELBOURNE



Port Melbourne has a new solar powered chocolate warehouse.

Air conditioning is a necessity, not a luxury, for chocolate manufacturer The Chocolate Box. The office of their current building was air conditioned when they first moved there in 2010, but the rest of the warehouse wasn't. Installing air conditioning to keep the chocolates cool, particularly in summer, was a priority for them. However, despite, insulating the warehouse area to ensure energy wasn't being wasted, the majority of Chocolate Box's power was still going towards the constant air conditioning.

Gary Adler, Managing Director at Chocolate Box, had considered installing solar panels for a while. According to Gary, doing so fits in with their aim of going fair trade and generally becoming an ethical business.

"I was concerned about the environment, as everyone is, and wanted to do our bit," explains Gary. "And we also wanted to reduce our power bill in the long term, and to be more independent from the grid."

Over the last few years, Gary had watched the solar industry become more accessible, but he found it hard to find credible and reliable information and was unsure who to trust with the job. That was until City Of Melbourne stepped in to assist Gary and the company with an initial feasibility assessment and facilitating obtaining and comparing quotations.

"The process was laborious to start with," says Gary, "but when we became aware that City of Melbourne was able to provide advice, it became more appealing and we felt more confident. The companies were quick and efficient, and the staff were good on site and pleasant to have around. They did a good job efficiently removing the bird netting we have on the roof, and then replacing it after the installation. And there was no disruption to our work."

Location:

15 Central Boulevard,
Port Melbourne

System Size:

27 kW

Estimated Annual Production:

37 MWh

Solar panels

108 x 250 Watt Yingli
Multicrystalline

Solar inverter:

1 x SMA STP 25000TL Tripower

Mounting system:

Clenergy

Upfront cost:

\$40,000 incl. GST

Payback period:

7.4 yrs

Funding model:

Upfront payment with City of
Melbourne rebate awarded

Installation date:

July 2015

Installer:

EnviroGroup

CITY OF MELBOURNE ECO-CITY

System

The 108 panels making up the 27kW system were mounted on tilt frames. The power generated will be distributed generally but will primarily be used to offset the air conditioning in summer.

While the primary motivation for the solar installation was to be a greener company, financial payback was also a factor. Electricity bills were calculated to reduce by 69%, and have already started to be significantly reduced, justifying the upfront system cost of \$38,379.

Chocolate Box, according to Gary, is a conservative company that saves before they spend. They covered the cost of the solar install with savings they had intended to go towards new shop fittings. The payback period for the system is calculated at 7.4 yrs.

Gary is also very aware that the steps they are taking to be a more ethical company could be used as a marketing opportunity and plan on promoting their use of solar electricity to customers. Who could go past solar powered chocolate!

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A few of the 180 panels atop The Chocolate Box