

## SOLAR CASE STUDY: POLIVAC, KENSINGTON



### **Commercial cleaning equipment manufacturer Polivac is showing neighbouring businesses the benefits of going solar.**

Sales and operations manager Ray Butterfield knows all about the financial rewards of generating your own electricity. Every house in his street has solar panels on the roof, including his own. So when the company he works for decided to move to new premises, Ray knew it was an excellent opportunity to install a system that would significantly cut running costs.

#### **Features:**

The 20 kW system, installed in September 2013, has an expected payback period of only three and a half years. Polivac receives a feed-in-tariff of eight cents per kilowatt hour, but the big returns come from a reduced electricity bill.

“We’re a manufacturer of polishing machines, so we have a lot of things running and we use a lot of electricity,” says Ray. On a busy weekday, the warehouse is abuzz with the racheting of impact drills, the high-pitched squeaking of a compressor and the whirring of motors, which are tested by running them continuously for four hours.

“But our solar panels are always feeding into the system, and the way we calculate it, it should theoretically nearly halve our electricity bill,” says Ray.

#### **Funding model and business case:**

When Polivac arranged finance for the purchase of new premises in the Kensington Business Estate, the company included the solar panel system in the loan package.

Ray says installing solar panels before moving in minimised any interruptions to the business. Incorporating solar into the construction phase also allowed Polivac to consult the builders on how much weight the roof could hold.

#### **Location:**

70 Bakehouse Drive, Kensington

#### **System Size:**

20 kW

#### **Solar inverter:**

Aurora TRIO-20.0-TL-OUTD-400

#### **Payback period:**

3.5 years

#### **Funding model:**

Packaged with building loan

#### **Installation date:**

September 2013

#### **Installer:**

Solar Recycle

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Although there was an initial outlay of about \$27,000, the system is expected to pay for itself very quickly and to go on reducing electricity bills long into the future. “The panels are supposed to last 25 years so we’re talking about long-term savings,” says Ray.

## Key challenges:

Partly because it started from scratch rather than retrofitting an existing premises, Polivac didn’t face any major challenges when installing the solar panels. The building faces north, giving the panels optimal orientation, and there are no tall trees or high-rises nearby to cast shadows on the system.

The only obstacle was getting the energy retailer, a smaller company with few previous customers on solar, to set up a process for paying a rebate when Polivac returns electricity to the grid.

## Other benefits:

With consumers worried about exposure to chemicals and toxins from cleaning products, having a ‘green’ image is a competitive advantage in the industry. Polivac, which stopped manufacturing chemicals in the 1990s, has capitalised on its solar installation to promote itself as an environmentally aware and energy efficient business. In 2013, trade magazine *INCLEAN* featured Polivac’s eco-credentials in an editorial, adding extra shine to the company’s reputation.

In the same way that solar panels have been installed on all the homes on Ray’s street, they may soon spread to other businesses in the Kensington Estate. The neighbouring warehouse-style offices also have open roofs that are perfect for north-facing panels, making Polivac’s pioneering solar project replicable and scaleable. “I’d recommend it to nearly anyone with a big power bill,” says Ray.

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*Polivac International Owner Tony Antonious and Cr Arron Wood with the 20kW solar panel installation.*