

ROSSTOWN HOTEL - CARNEGIE, VIC

Designed and installed by Pacific Solar

INDUSTRY: HOSPITALITY

REQUIREMENTS: Reduce energy costs

SYSTEM SIZE: 36.6kW

PRODUCT: LG NeON[®] 2 325W

ESTIMATED ANNUAL OUTPUT: Approx. 49,400kWh¹

INSTALLED: May 2018

> Higher efficiency, larger system capabilities, better impact into the powerbill, greater ROI.



Estimated annual savings on electricity usage fees approx \$10,000 ¹



Approx 45 tonnes of CO₂ emission avoided per annum²



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BACKGROUND

The Rosstown Hotel is an award winning pub located in the heart of Carnegie, Victoria.

Whether customers want to meet for a drink in the beer garden, enjoy the restaurant, or simply relax and enjoy live streaming sports in their world class sports bar, the Rosstown Hotel has something for everyone. The Sports Bar is a sportslover's dream, recently awarded the AHA State's Best Sports Bar award, it has private booths containing split screens for customers to watch up to 5 games at once.

The hotel also offers four unique functions spaces to suit any social or corporate event.

CHALLENGE

The Rosstown hotel is a large pub/hotel with a large kitchen, bottle shop, numerous bars and a significant number of poker machines that consume a large amount of power.

The energy bills are quite a large portion of the overall running costs, and the hotel management team decided to engage Pacific Solar to design and install a solar power system to reduce energy costs significantly.

SOLUTION

Pacific Solar recommended LG NeON® 2 325W high efficiency panels to generate a high power output from the available roof area, SolarEdge inverters and optimisers for individual panel level monitoring.

There was substantial shading from equipment in multiple areas which limited the roof size available for the panels.

The LG NeON[®] 2 panels are well suited for shady areas due to their low light efficiency. The panels were installed using larger tripods to get the required clearances over refrigeration pipes in various areas on the roof.





LG NeON® 2 panels were chosen for their higher efficiency, larger system capabilities, better impact into power bills and greater return on investment for the customer. The NeON® 2 have great low light and excellent high temperature performance, double sided cell technology and 12 wire busbars.

LG NeON[®] 2 panel generate more power per square metre, this panel is able to deliver up to 16% more electricity per square metre than many competing 280W panels of the same physical size. The LG NeON[®] 2 also has a 25 year performance as well as product warranty which includes labour and parts. This warranty is industry leading and makes a significant difference in the client's return on investment.

¹ The estimated average annual electricity usage fee savings are estimates made by LG Solar[™]. The estimates made by LG Solar[™] are based on the actual system size, estimated annual output of the system in the post code of the location with degradation of rated electricity production of 2% in the first year and 0.5% in subsequent years, as well as a lifetime of 25 years. We assume a flat electricity rate of \$0.25 per KWh, and a feed-in tariff of \$0.1 per KWh (with annual increases of 2.5% per annum). Based on the industry the end-customer is in, we assume 80% self-consumption of solar electricity generated (e.g. for end-customers in the manufacturing industry we assume 80% self consumption from Monday to Friday and 20% on weekends (with corresponding 20% and 80% being exported into the grid), while for leisure based clients we assume 80% self-consumption everyday and 20% being exported into the grid), we do not apply a net present value discount on the estimated annual electricity usage savings. Of course actual annual electricity savings will vary on a wide-variety of factors including installation conditions, usage and self-consumption patterns, actual hours of sunlight, electricity rates, feed in tariffs, increases in electricity rates as well as other factors. For further details and other solar calculators, please see: https://www.lgenergycom.au/solar-calculators.

² The estimate for CO2 emissions avoided assumes that the entire electricity output of the system is consumed and the emission factor used is the weighted average for all Australian States based on the calculator available at carbonneutral.com.au. For more information, please see: https://carbonneutral.com.au/carbon-calculator/.