

Case Study

Solar.

Grafton District Services Club.

Grafton District Services Club in NSW has a strong history of serving the local community since 1918, with a broad offering including a cafe and bistro, function facilities, live entertainment and lawn bowls.

The Project.

In 2022 Ecovantage was invited by energy analysers Eutility to collaborate in a solar tender to help the Club reduce their energy costs. With their energy supply contract approaching expiration, like many other organisations, the Club was facing substantially higher energy rates on their contract renewal.

Demanding energy requirements to power the facilities including cooling and heating, kitchens, refrigeration, lighting, media screens and poker machines, meant a well-considered large-scale energy solution was needed.

The Approach.

Ecovantage was selected by the client as the preferred contractor for their new solar system.

Following a desktop estimate, Ecovantage deployed engineers to test the structural integrity and condition of the roof surface. Areas of the roof were found to be unsuitable to support a solar structure, and the project became more complex as a result, requiring various adaptations to ensure suitability and meet the required standards.

Ecovantage's team, lead by NSW Commercial Sales Manager Nick Keynes and Solar Engineer Jorge Edim managed the project from start to finish, bringing onboard external contractors, suppliers and installers as required.

All of the available roof space was used to install a total of 416 x Longi 500W panels to deliver a 208kW system. The system is expected to generate an estimated 320 megawatt hours (MWh) per year, at an average of 27MWh per month.



Highlights.



Lifetime savings

\$1m+



Self consumption

99%



Production estimate

320
MWh/yr

The Outcome.

Immediately upon installation, the Club's solar system achieved the estimated energy output, with 35MWh generated in December 2022, and 33MWh in January 2023. This output covered 28% of their 2019 equivalent period energy use, with an incredible 99% self-consumption. Solar is worth much more when it's consumed as it's made - in this case practically none of the Club's clean energy is being exported to the grid - maximising the benefit to the club.

With an estimated short 4.2-year payback period for the large 208kW system, the lifetime savings on energy costs for the Club is estimated to be more than \$1m - an outstanding return on investment.

From start to finish, the Ecovantage team achieved a 20 week project timeline. Given the unforeseen complications around the roof engineering, this was a fantastic outcome to pre-empt the Club's looming energy rate increases.

Takeaway Thoughts.

Energy contracts are limited in length, usually 1 - 3 years, and often organisations are shocked at the increase in their rates when their contract is renewed.

Grafton District Services Club is a great example of an organisation taking a proactive approach to mitigate rising energy costs, while reducing their carbon footprint, with an incredible \$1M+ saving in energy costs predicted over the lifetime of their solar.

If you would like to explore solar to power your organisation, please contact one of our Energy Solutions Specialists.

