Case Study

Abbotsford Convent

Solar Energy

Challenge
Abbotsford Convent is Australia's largest multi-arts precinct. The Convent is home to over 100 studios, two galleries, cafes, a radio station, a school and an abundance of green open space.

In May 2016, the Abbotsford Convent Foundation (ACF) embarked on its first ever crowd-funding campaign in partnership with Energy for the People and CERES, with the aim of raising $60,000 to help the Convent go solar. The ACF was spending more than $130,000 every year on electricity alone.

Abbotsford Convent is a Heritage Listed site and due to the many steep terracotta roofs, Cherry had limited roof space to work with. The West side of the roof starts to become shaded from 2.30pm and as much as one third of the roof is shaded by 3.30pm each day.

Solution
Working in partnership with the Tender Managers, Choice Energy and Energy for the People, Cherry were able to successfully gain approval from Heritage Victoria for the 98.04kW system. Our expert solar design team worked with Fronius Australia to find a solution to the shading problem by utilising the tracking system in their inverters so that the entire arrays are not affected by the minimal sunlight hours. The shaded panels were isolated on their own tracking system to maximise the system's efficiency.

Over the next 10 years, the system will produce more than 1,230,692 kWh of energy for the Convent and reduce carbon emissions by 156,167 kg CO_2.

1,230,692 kWh

saved in the next 10 years

CHERRY


Tracking system
to maximise efficiency
on shaded panels