Community Microgrids & Sustainable Energy Program

Omeo FoodWorks - Case Study

Keeping the essentials open - improving energy resilience in regional communities

In the aftermath of the 2019/20 Black Summer fires, the Victorian Government committed $9.85 million in funding to deliver the *Community Microgrids and Sustainable Energy Program.* In Mallacoota, Omeo and Corryong, sophisticated power back-up systems were installed to support these small rural communities in the event of an emergency.

Omeo, a community of over 1300 people in East Gippsland Shire, is the perfect place for power back-up systems. It acts as a regional centre, supporting several satellite and agricultural communities in an isolated district that covers an expanse of nearly 600,000 hectares.

The local FoodWorks, an essential service for Omeo and its surrounding communities, provides an ideal spot for the energy back-up system, as it plays an active role supporting food security and community organisations.

> ‘We were one of the top priorities as a business because people needed to be able to come and get bread and milk. The next major supermarket is in Bairnsdale. If you go west, it's in Bright. And North would be Wodonga because there's nothing else around. So we serve a very large area of people,’ FoodWorks Manager, Glenda Pagram explained.

Omeo has a long history of power outages from storms and fires damaging power lines. This includes prolonged power outages in the 2003

Photo: Omeo FoodWorks

fires and more recently the Black Summer fires of 2019/20, when Omeo was cut-off from the rest of Victoria’s electricity network, leaving some of the town’s residents and businesses without reliable power for up to three weeks. The township also experienced communication failures and limited road access, hindering relief and recovery efforts.

> ‘We can have the power out anytime. If a tree goes down between here and Bairnsdale, you've got 120 kms of remote power line. It takes them a while to find the fault and then a while to get in there and fix it. We can have the power out for hours,’ the Omeo FoodWorks Manager said.

Previously FoodWorks had relied on an insufficiently sized generator to provide small amounts of electricity in outages, alternating power between fridges, freezers and the store in general.

The new system includes a total of 40kW of solar PV, a 136 kWh battery storage unit, a 60kVA backup diesel generator, inverters and an energy management system. The system can operate up to 42 hours on battery back-up alone, and up to several additional days on the diesel generator before being refuelled.

Now the FoodWorks has reliable access to power for the store, as well as allowing them the ability to generate and store their own power. This has resulted in a significant cost reduction, with power bills 'cut in half.'

What's more the system has worked smoothly, keeping the fridges and freezers cool and shopping available through both planned and unplanned outages.

> 'We've had two planned outage events where the network would be down, which we knew about. And for both of those we ran fully without the generator…. [and] there have been a few small power outages in town that we didn't even notice at the shop,' the Manager said.

For FoodWorks, that means there is now confidence they can stay open to provide groceries to the community, as well as ensuring food is safely refrigerated and kept fresh. And for residents, they know there is now access to food and other essentials during power outages.

The success of Omeo FoodWorks has demonstrated one way in which the energy resilience of communities can be improved across the state. Importantly, it has also improved community knowledge of energy back-up systems and upskilled technicians to be capable of replicating similar systems across the state.

Who was involved

The Omeo FoodWorks energy back-up system was heavily subsidised by the Victorian Government's Community Microgrids and Sustainable Energy Program. It was designed by AusNet and Mondo and installed by RACV Solar. East Gippsland Shire Council also supported the project.

Community Hubs with energy back-up system further information

Please visit the Victorian Government community hubs with energy back-up systems website: https://www.energy.vic.gov.au/about-energy/safety/community-hubs-energy-backup-systems

We acknowledge Victorian Traditional Owners and their Elders past and present as the original custodians of Victoria's land and waters and commit to genuinely partnering with them and Victoria's Aboriginal community to progress their aspirations.

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