

Case Study

FIMER'S PVS-15 INSTALLED AT A NEW ZEALAND PRIMARY SCHOOL TO REDUCE COSTS AND EMISSIONS



In early 2023, **Rotokauri Primary School** in Hamilton, New Zealand, wanted to install a solar system to reduce the school's energy costs and environmental footprint and give the opportunity for the students to learn about alternative energy sources. The school spoke with Solar Partners NZ to help them design a solution for their needs.

Solar Partners NZ is a leading solar wholesaler in New Zealand and has been an authorised FIMER reseller for over five years. Solar Partners NZ designed the 16.5kW system utilising:

- 30 x Canadian Solar CS6W-550MS modules
- 1 x FIMER PVS-15 Inverter with a B23 meter
- IMO AC and DC Switchgear
- S-5! PV Kit for the module mounting

Managing Director of Solar Partners NZ, Bernie Dombroski, said, "We have been a big advocate of FIMER's inverters. We wanted to offer the school value for money without compromising the quality or safety. It's hard to surpass the quality and reliability of a FIMER inverter."



"FIMER's PVS-15 was selected for its compact size, high levels of safety features, ease of maintenance, plus the design flexibility and advanced communications," Bernie added.



The PVS-15 three-phase inverter is part of the wider FIMER PVS-10/33 family, an Italiandesigned and manufactured solution that comes in six sizes: 10, 12.5, 15, 20, 30 and 33kW.

A cutting-edge solution, the PVS-15 comes with a fuse-free design to ensure reliability, reduce maintenance hassles and offer peace of mind. Its fan-free operation enhances its durability by eliminating a common point of failure and reducing noise.

The PVS-15 boasts two Maximum Power Point Tracking (MPPT) inputs, with two input pairs per MPPT, allowing for efficient energy harvesting from the photovoltaic arrays and providing flexibility with the system design for different roof profiles or shading issues.

Additionally, the inverter comes with single-string monitoring that can provide real-time insights into the performance of individual strings, enabling prompt detection and resolution of any issues and ensuring long-term reliability. Plus, when installed in Australia or New Zealand, the FIMER PVS-10/33 range comes with a full ten-year replacement warranty to offer further peace of mind. The PVS-10/33 range is a game-changer for small to large schools, businesses and facilities and offers unmatched efficiency, reliability, and ease of maintenance.



Solar Partners NZ brought in **Ace Electrical**, a FIMER Certified Installer, to install and commission the system on the school's multipurpose facility.

Allan Gellert from Ace Electrical said, "The installation and commissioning process was a breeze. With its lightweight design, a single person was all it took to get it up and running. We had it seamlessly integrated into FIMER's monitoring solution in record time.

The system was connected to FIMER's Aurora Vision monitoring solution. An installer or retailer like Solar Partners NZ can manage the system through FIMER's <u>Plant Portfolio</u> <u>Manager</u>. As the system owner, the school can view how the system is performing through the <u>EnergyViewer App</u> and showcase this to the school community through FIMER's KIOSK function, allowing the students, staff, parents and board members to view the system on the television screen or in class.

The system has generated over 3.5MWh of energy in the first three months. It is estimated to generate over 15MWh annually, equivalent to 13 tonnes of CO₂.

Thinking about your next renewable energy project?

You can count on us with our huge portfolio of solar solutions, integrated digital services, and local technical support. To find out how FIMER can help you achieve even more with your next project, visit <u>www.fimer.com</u> to find your local sales rep.

About FIMER

FIMER is the fourth largest solar inverter supplier in the world. Specialising in solar inverters and e-mobility systems, it has over 800 employees worldwide. It offers a comprehensive solar solutions portfolio across all applications. FIMER's skills are further strengthened by the bold and agile approach that sees it consistently invest in R&D. With a presence in over 20 countries, local training centres, and manufacturing hubs, FIMER remains close to its customers and the ever-evolving dynamics of the energy industry. <u>www.fimer.com</u>