

HIVVE MODULAR CLASSROOM

Powerwall + Solar

"This is a great way to get the next generation involved in renewables at an early age and educate them as to what the positive benefits will be as Australia continues its shift towards a renewable energy future. The success of the Hive project could lead to a nation-wide adoption of the modular classrooms, reducing reliance on the grid and even providing a significant amount of electricity back to the NEM."

Ivor Frischknet, CEO Australia Renewable Energy Agency

OPPORTUNITY

With NSW student populations forecasted to grow 25% over the next 20 years, and ever-increasing energy costs constituting significant operational costs for schools, administrators are looking for innovative approaches to expand learning spaces. Dapto High School in NSW was challenged with how to meet the demands of their growing student body and reducing operational costs while still incorporating leading technologies into their expanding learning spaces.

SOLUTION

In response to capital restraints and sustainability targets, Hive revolutionised the modular classroom space through its combination of intelligent design, smart technology, solar energy production and Powerwall. These modular learning spaces combine solar and 13.5 kWh of storage for a sustainably-powered classroom that powers all systems without impact to ongoing operational costs. These modular classrooms enable real time data measurement allowing schools to actively manage and optimise energy demands.

RESULTS

Dapto High School's Hive classroom is 97% grid-independent, while fully powering the classroom with clean, sustainable energy including lighting and year round air-conditioning. Even in the hottest months of the year, the Hive is able to maintain comfortable indoor temperatures without drawing energy from the grid. During the day, when excess solar is being produced, the modular classroom is able to off-set energy usage of four existing classrooms within the school, thus reducing ongoing operational costs for the entire school and the need for costly infrastructure investment.

Customer

Dapto High School

Location

Dapto, NSW



Solar

8.4 kW

Powerwall

13.5 kWh

Applications

Solar Self Consumption
Back Up

Commissioned

April 2018