

SMART SOLAR FOR NSW CLASSROOMS



Image: Hivve

HIVVE SUSTAINABLE MODULAR CLASSROOMS

Lead organisation: Eastern Portable Buildings

ARENA funding: \$368,000

Total project cost: \$736,000

Location: Holsworthy and Wollongong, NSW

ARENA is supporting a trial of two self-powering modular classrooms that could drastically cut power costs for Australian schools.

Manufactured by Sydney-based Hivve, the modular classrooms are portable and highly energy efficient. Each building incorporates solar panels with smart technology, including real-time energy metering and CO₂ monitoring. This gives schools the ability to actively manage their energy use as well as indoor temperature and air quality to keep the classroom environments just right for learning.

Hivve classrooms are designed to generate enough electricity to power themselves as well as two other classrooms, an estimated net energy generation of 7600 kilowatts each year.



Participants in the trials have reported the advanced design of the classrooms, emphasising sustainable materials, energy efficiency and ergonomics, has inspired students to learn more about renewable energy. The project has also raised awareness within the schools sector that it could follow the lead taken by almost two million Australian households and slash its energy costs by installing solar.

The success of the Hivve project could help inform thinking about how such a model could be rolled out nationwide, reducing pressure on the grid and even providing a significant amount of power back to the National Electricity Market.