



## Mechanical Services Upgrade

BCHS Eaglehawk



### Certified Professional:

Graham Davies (CEES)



### Client:

Bendigo Community Health Service

The objective of the project was to ensure a fit-for-purpose and value for money mechanical services upgrade, whilst maximising energy savings. It was conservatively estimated that total site energy consumption would be reduced by at least 30% through the upgrade of heating, ventilation & cooling systems and the installation of system controls.

### Project Outcomes

The project maximised performance and associated energy savings by upgrading from centralised plant to a decentralised and zone controlled variable refrigerant volume (VRV) air-conditioning system and eliminated the natural gas energy requirement through the removal of an old hot water boiler. Overall electricity savings achieved 12 months post-retrofit amount to around 53,286 kWh with avoided gas savings estimated at 290,000

MJ, a total site energy reduction of 48%. In addition to the energy savings, the client also experienced reduced operational costs including reduced energy utility and reduced ongoing maintenance; increased awareness of new control parameters for both optimal operational and thermal comfort requirements; and improved amenity through better and tighter control of indoor building temperature via multiple zones.

*// We found CarbonetiX to be a wonderful asset as the project managers / consultants on this project due to their collaborative approach and the guidance they offered. Peace of mind for the client was gained from the CarbonetiX' professional and courteous approach to the project //*

Maxine Plant, Bendigo Community Health Services

### About the Energy Efficiency Certification Scheme

The EECS certifies professionals that have the skills and experience to lead and manage all scales of building energy upgrades, up to and including an Integrated Building Energy Retrofit (IBER) and to work effectively with their clients. The Scheme is delivered under the supervision of an independent Steering Committee made up of experts from industry, government and the property sector and is administered by the Energy Efficiency Council, Australia's peak body for energy efficiency, cogeneration and demand management.

BEFORE PHOTOS



AFTER PHOTOS

