



# Climate Action case study

## Wallaroo Community Centre Electrification



MORNINGTON  
PENINSULA  
Shire

*“Improved amenity,  
function, and health  
and wellbeing outcomes”  
– Wallaroo Community Centre team*

### Background

The Wallaroo Community Centre has been upgraded to dramatically cut both its carbon emissions and running costs through using new energy efficient appliances and solar panels.

The electrification of our buildings addresses the climate emergency using renewable energy. By substituting gas appliances with electric equivalents, we can:

- Power our facilities with sustainable energy from renewable sources such as solar and wind.
- Control demand of power through more efficient appliances.
- Ensure resilience and affordability with better building quality.

Electrification safeguards building users from avoidable supply charges and the rising cost of gas, improving access to an affordable, secure, reliable, and safe supply of energy.



**Did you know DELWP estimates completely converting to an all-electric home can save \$1,250 per year?**

In addition to emission reductions and cost savings, further benefits of electrification include:

- Improved health and wellbeing.
  - Improved building amenity and function.
  - Decreased reliance on international trade.
  - Alignment with Victoria’s Gas Substitution Roadmap.
- [bit.ly/3VXlrRc](https://bit.ly/3VXlrRc)

### The Story

#### Wallaroo Community Centre Hastings

The Wallaroo Community Centre and its tenants, the Good Shepherd Youth and Family Service, provides a place for community members to connect, learn skills, and build confidence. The Centre offers a variety of parenting, education, and recreational programs and is used by approximately 3,500 visitors annually.

Through consultation with facility management and user groups, it was decided electrification at the centre would improve facility function and operating costs, particularly when paired with the installation of solar.

#### Electrification works included:

- Replacement of instant gas hot water service with an electric equivalent.
- Replacement of freestanding gas stove/hotplate with electric equivalent.
- Removal and capping of redundant gas wall-mounted evaporative cooler and two freestanding space heaters replaced with two electric reverse cycle units for heating and cooling.

On 22 June 2022, a 12.5kW solar system was installed, further facilitating cost and environmental savings.

*“The electrification and solar panel project at Wallaroo Community Centre was well received from the facility users who can appreciate not only the cost and emission savings, but also improved amenity, function, and health and wellbeing outcomes.*

*This is demonstrated by the multi-function of the reverse cycle air conditioners, which while installed to act as space heaters, can also serve to cool the facility over the summer.*

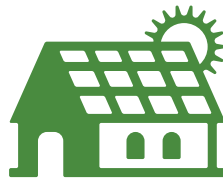
*The solar panels provide our centre with a renewable energy source thus reducing our carbon footprint and keeping costs to a minimum.”*

– Wallaroo Community Centre team

## FAQs/Snapshot



Electric substitution of gas appliances serves to promote the use of renewable electricity



Through electrification, we can supply a larger portion of energy needs with cheap self-generated solar.



Electricity can come from zero-emissions sources, whereas gas produces greenhouse gas emissions



The environmental benefits of electrification increase when paired with solar or 'green' energy



Cost savings can be realised by eliminating the need for gas and going electric.



Electrification can deliver improved amenity and safety, health, wellbeing and energy security

## Outcomes

**Total annual electricity savings from solar alone (including export) is an estimated \$2,792.**

Electrification of the components reduced annual facility running costs by an estimated \$261.14 (pre solar) and \$540.82 (post solar install). The return on

investment for the entire project is 7 years with a total savings of \$48,832 over the life of the products. These savings can be attributed to:

- Improved efficiency of new electrical appliances.
- Lower cost of energy source.
- Enhanced ability to power appliances with self-generated solar power.

- Abolishment of gas supply removing avoidable supply charges.

Savings will further improve over time if gas prices continue to increase. Electrification resulted in emission reductions. Emissions savings can be reasonably expected to increase as the national electricity grid continues to decarbonise.

## How much money and emissions are saved per year by electrifying appliances?



Pre-solar  
\$454.12

Post-solar  
\$733.54



Pre-solar  
977kg CO<sup>2</sup>e

Post-solar  
1270.1kg CO<sup>2</sup>e

*That's 305 cars off the road!*