

Keeping the Lights On in Aged Care

Lynden Aged Care Camberwell, Melbourne



Project Notes

Site Owner:

Lynden Aged Care

Commission date:

April 2014

System components:

2 x Capstone C65 Microturbines and heat recovery units

Cogeneration capacity:

130KW power and 200KW heat

Fuel source:

Natural Gas

System Application:

Two units operating as combined, heat & power, supplying most of the sites power demand and heating

Key outcomes

- Energy costs lowered by 20%
- 90% of electricity is generated
- Carbon emissions are reduced by 40%

Innovation

Dual purpose of Combined, Heat and Power capabilities and as a back up generator in case of power outage.

Watch the video [here](#)

Lynden Aged Care Camberwell, Melbourne

Lynden Aged Care are an independent, not for profit organisation that provides multiple levels of care for their residents. In early 2017, they completed a major capital development project, resulting in an exciting refurbishment and new wing to accommodate for a further 22 residents. Like many establishments, Lynden significantly rely on their electricity for a multitude of reasons such as communications, proximity carded door locks and nurse call buttons. For the safety and comfort of their residents, it was imperative that Lynden found a secure, cost efficient and most importantly reliable power solution.

As part of the redevelopment in 2014, Optimal provided the aged care centre with 2 C65 Capstone microturbines, to combat their power concerns. These microturbines were installed atop their roof to generate 90% of Lynden's electricity with natural gas. The installation also incorporated Combined Heat and Power (CHP) capabilities, meaning that the excess gases are converted into free heat to cover the majority of their heating needs.

The heating and energy savings that Optimal's technology and service provides is especially instrumental for Lynden Aged Care, who rely on donations to run. By installing these microturbines, Lynden's energy costs have been cut by 20%, meaning they will no longer have to fear the ever increasing power prices from being on the grid. Providing further peace of mind, Optimal offers a full 9 year Factory Protection plan. This ensures that their maintenance is at a fixed cost for the life of their equipment, which is often unheard of with conventional engines.

Lynden's most apparent issue of all, was the need for a low impact solution. The centre is surrounded by parks and gardens, in a quiet suburban street in Camberwell. To ensure the comfort of residents and the serenity of it's surrounds, the microturbines are non vibrating, proving extremely quiet and have successfully cut their carbon emissions by 40%.

Optimal are proud to have provided Lynden with such a secure source of power that has reduced their long term energy costs. This will allow them to concentrate on what they do best - providing high quality care to their residents.

