



ADVECO CASE STUDY

KILLELEA CARE HOME

COMBINED HEATING AND POWER SUPPORTS VULNERABLE PEOPLE



Situated in Bury, Greater Manchester, Killelea Care Home is a newly built high-dependency care home providing individual en suite rooms and support for up to 36 residents. The centre supports a variety of needs, from elderly care to those with physical difficulties, sensory impairments, mental disability or dementia.

The facility also includes an intermediate care facility providing therapy and treatment for adults. Four rehabilitation flats, with updated equipment and assistive technology, are available for people who no longer need to be in hospital but require intensive rehabilitation before going home. Amongst the centres amenities is a commercial kitchen, plus a bistro café, hairdresser's and a small shop are planned. A well designed and reliable heating and hot water system was paramount to the Killelea care facilities, where the comfort and wellbeing of the residents typically requires above average levels of heating year round.

Customer
Bury Council

Sector
Residential Care

Location
Bury, Greater Manchester

Application
Cogeneration of hot water and power

Products
Totem T10 m-CHP
Adveco MSS 1000-litre buffer vessel

ADVECO

EXPERTLY ENGINEERED FOR YOU





MICRO-COGENERATION ENABLING INDEPENDENCE

For the heating and hot water system, Advenco Ltd. supplied a TOTEM T10 m-CHP, a micro-cogenerator with certified high efficiency and ultra-low emissions and a 1000-litre Advenco MSS buffer vessel. Together these serve to pre-heat the building water as part of the care home's heating and domestic hot water (DHW) system.

Designed by Bury MBC Architects Department with consultants DBD Ltd., the system was installed by C.M. Oxendale Ltd. of Blackburn,

Built around the TOTEM, the system has been designed to deliver lasting cogeneration efficiency and performance, maximising the customer's return on investment in a highly reliable system. All components of the appliance are fully replaceable to ensure that the TOTEM has no fixed lifetime, and with its automatic self-change oil system, the maintenance demand on the engine is reduced without compromising the machine's performance. Furthermore, Advenco Ltd. offer a range of complete servicing and maintenance options designed to guarantee that the CHP runs at a minimum set high efficiency

throughout the length of the contract.

Councillor Andrea Simpson, cabinet member for health and wellbeing, said: "This is a fantastic scheme to meet the demands of a growing elderly population who will rely more and more on intermediate care services."

"The new Killelea will provide care and support for vulnerable people with the emphasis on increasing people's independence to live on their own for longer. These new facilities will provide up-to-date approaches to re-ablement, focusing on independence."

By using cogeneration at the core of the heating and hot water installation, the energy efficiency of the building is maximised in a practical and cost-effective manner while meeting the continual energy demand for water and heating.

TOTEM M-CHP

- Purpose-built for operation on natural gas
- Combined Heat and Power range with outputs of 10, 20, 25 and 50 kW_e
- Total cogeneration efficiency up to 107.4%
- Ultra-low emissions: NO_x at <12 mg/kWh and <10 mg/Nm³,
- CO at <10 mg/Nm³
- Unparalleled reliability.
- Eligible for full points under the revised POLO2 category of the 2018 BREEAM New Construction Scheme, even when installed in high pollution urban areas.



With almost 50 years of industry experience, Advenco Ltd. is the trusted specialist provider of bespoke hot water, heating and power systems to the building services industry. Committed to partnering with its commercial and government customers, Advenco helps create comfortable, efficient, functional, safe and sustainable buildings through invaluable support in the design, supply, commissioning and service of business-critical hot water, heating and power. Headquartered in the UK, the company operates across Europe from offices in the Netherlands and Belgium.

Visit www.adveco.co