

Cutting Carbon with the Ecopod Heating System

City West Housing Trust, Barton Village Redevelopment

Carillion has an exclusive partnership agreement with building services firm Belfry to design and deliver Ecopod - a highly efficient centralised modular heating system with separate billing and controls.

It can be installed in all types of multi-occupancy dwellings, residential or industrial. Developed by Belfry, Ecopod is designed to cut energy costs and carbon emissions by up to a half.



Case study

City West Housing Trust own 14,600 homes in West Salford and were one of the first housing trusts in the UK to benefit from the innovative Ecopod Heating System.

Designed and developed by Belfry MD Keith Rimmer to help alleviate fuel poverty utilising a combination of renewable technologies, the Ecopod heating system can halve heating costs and carbon emissions in a wide range of buildings.

City West undertook a £14.3million regeneration project at Barton Village in Eccles, which saw four high rise blocks transformed into some of the greenest high rise developments in the country.

Located on the roof, the Ecopod combines six highly efficient cascade boilers with a solar thermal array. A heat control panel and radiators controlled by thermostatic valves and fuelled by the Ecopod have replaced inefficient storage heaters.

In practical terms it means customers will only use heat and domestic hot water when required because the heat distribution units have a heat meter installed, which is monitored via the bespoke web-based Building Management System (BMS) which monitors energy usage.

Prior to the improvement work getting underway, City West worked in partnership with Cambridge University to carry out an Energy Demand Assessment. The study identified fuel poverty issues and found tenants were only heating one room or not at the optimum temperature.

The BMS system allows tenants to check their credit and incorporates a multi-billing platform allowing tenants to select the billing and payment method which suits them. For those with 'at risk' tenants, the system will automatically alert landlords when they fail to adequately heat their properties.

City West have found the Ecopod cascade boiler system is energy efficient and cheaper to use, when the solar gain has been consumed, only then the gas fired cascade boilers come into effect.

Colin Fagan is a resident of Barton Village who has already seen his monthly heating bill reduce by 60%. He is happy with the improvements and the new technologies installed in his home.

"The heating system is fantastic. It's very easy to control and the cladding is doing a fantastic job of keeping the heat in. Not only is the heating far more efficient and controllable but the new radiators are far more pleasing to look at than the old storage heaters. The whole apartment feels warm and comfortable to be in and we even have constantly aired towels in the bathroom which is a luxury a five star hotel can boast".



"The regeneration of Barton Village showcases innovative solutions to the issues faced by our high rise tenants, addressing the rise in gas and electricity prices. In the past, these residents, many of whom are vulnerable, have been faced with fuel poverty - we now have a solution to address this. We are very proud of the new standard we have been able to set when retro-fitting high rise living in Salford."

Colette McKune, Director of Asset Management at City West