

Eco active actions

Energy saving case study



Focus

Energy - Insulation & Boilers

Member

Jersey Cheshire Home

The Organisation

- > Residential Facility for Disabled Adults
- > 25 Rooms
- > 65 employees



Action in a nutshell*:



- > Annual heating bill reduced by an average of **£8,350**
- > Expected payback of **9.3 years**
- > Carbon footprint reduced by **37 tonnes per year**

- Loft and cavity wall insulation installed
- 29 year old cast iron boiler replaced
- 20 year old Aquatherapy Pool boiler replaced

* All savings figures verified and modeled independently by the Carbon Trust



The home's kitchens use "induction technology" for cooking, the premises are lit using low energy lighting, heating and hot water is supplied by modern highly efficient boilers; all this work has been undertaken with assistance from the Energy Efficiency Service."



Basics

The Jersey Cheshire Home is a charity providing full time residential care for 25 physically disabled residents. The facilities comprise of the main building, opened in 1983, with an extension incorporating an Aquatherapy pool and gym, constructed in 1994. The Aquatherapy Centre provides rehabilitation to not only the Home's residents but also many outside users and community groups.

Energy efficiency has been high on the home's agenda for many years. The Cheshire Home was one of the first users of high efficiency electrical induction cooking on the Island back in 2009. Since 2011, a suite of refurbishments focused around insulation and heating were completed through the Energy Efficiency Service Community Buildings Programme.

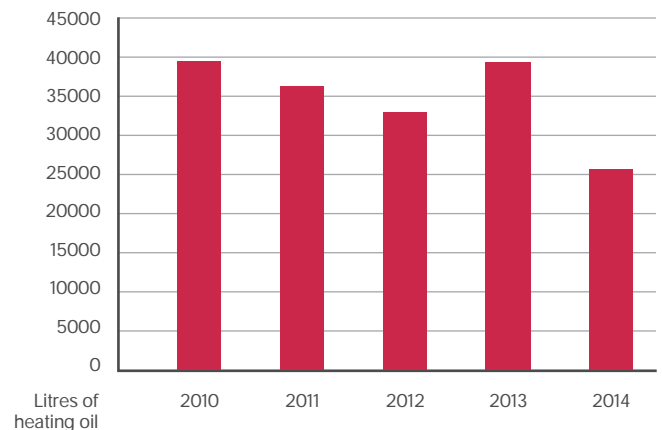
Impact

When carrying out a building energy efficiency refurbishment insulation comes first. A warm hat and jacket were certainly placed on the Cheshire Home with over 680 square metres of 200mm loft insulation installed and a further 690 square metres of cavity wall filled. The main building boiler was more than 29 years old and had an expected efficiency rating of around 65%, this was replaced with a brand new unit delivering efficiencies of 90-95%.

The impact on the home has been three-fold. Firstly, the financial savings on heating fuel have been significant. There are differences from year to year - as can be seen in the graph - but the expected weather adjusted saving has been modelled as £8,350. Secondly, from an environmental perspective the significant reduction in oil has cut the home's carbon footprint by 37 tonnes of CO₂ per year. Finally, and perhaps most importantly, the communal spaces within

the home are now a warmer and more consistent temperature year around, providing immense benefit to the residents.

Heating oil deliveries to Jersey Cheshire Home



Cheshire Home's view

David Lord, General Manager

The Jersey Cheshire Home has greatly benefitted from the support and advice provided by the Energy Efficiency Service - not only has their involvement allowed us to save fuel and reduce our carbon emissions but perhaps most importantly has increased our awareness on energy saving initiatives; we now take every step we can to reduce our consumption and expenditure.

Eric Young House was designed for purpose and has always been well maintained, when being updated the latest technology is used, particularly the use of Electricity and heating oil. The home's kitchens are all "electric", using "induction technology" for cooking, the premises are lit using low energy lighting which is being updated to LED whenever possible, heating and hot water is supplied by modern highly efficient boilers; all this work has been undertaken with assistance from the Energy Efficiency Service.