

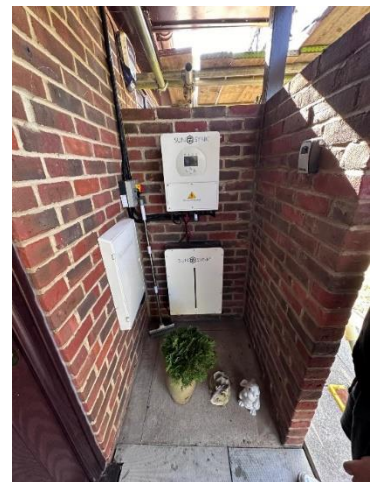


Mayor's Climate Change Fund Case Study

Renhold Charity Cottages

Renhold Charity Cottages operates as a low-cost housing provider for residents of Renhold who find themselves in need or hardship. The Charity manages four 22 years-old almshouses, with an EPC rating of D, which are occupied 365 days a year. The cottages have electric storage heaters and a dual rate electricity tariff, with no gas connection to the properties.

The Trustees of the Charity had been looking at ways to reduce the day-to-day costs for their residents. The Charity had already undertaken measures such as installing double-glazed windows and loft insulation. Upon investigation, it soon became evident that a solar PV installation would be a very good solution. After seeking advice from expert installers, the Charity was able to install **10 solar panels per property which totalled 4.4kW**, together with **battery storage of 5.12kWh** for each property, and an **immersion tank connector** per cottage to divert excess solar to heat the water – all secured thanks to the **Mayor's Climate Change Fund**.



“It is still too early to see exactly much this has affected the electricity cost for our residents, but we already know it is going to be significant.”

The project is predicted to save a total of **£5,534** per year off the combined site's electricity bills, and it will bring the emissions down by an astonishing amount of **4041 kg of CO₂e** annually. Besides the environmental contribution to sustainable futures, the new measures installed will ensure that vulnerable residents in Renhold are climate resilient, ensuring a lasting positive contribution towards addressing fuel poverty in the cold season. As the Clerk to the Trustees of Renhold Charity Cottages states: ***“For the winter months where the sun may not be strong enough to fully charge the battery of each property, the system can be set to charge the battery overnight using the cheaper rate electricity, meaning that most of the electricity used by the residents will be at the lower night rate.”***

These works were completed in **September 2024** with the Mayor's Climate Change Fund providing 50% match funding for the cost of fitting the improved light system and renewable energy source, in the sum of **£13,745**.