

Heating and Lighting Upgrade, PV Installation

Mount Carmel Nursing Home

Mount Carmel Nursing Home is located in Callan, Co. Kilkenny. The building was constructed in 1984 and has had some upgrade works completed over the last several years. The building had a large electricity and oil demand for heating and lighting. However, after successfully upgrading their gas/oil boiler and their lights and installing PV panels, the benefits and cost savings were clear. The 3 Counties Energy Agency (3CEA) through the Sustainable Energy Authority of Ireland's Better Energy Communities programme is helping by administering state-wide funding for energy efficiency and renewable energy projects.

Summary

Company name:	Mount Carmel Community Trust Ltd.
Project actions:	Upgrade heating devices with high-efficiency condensing oil boilers. Replacement of existing light quad with LED equivalent light fittings. Installation of 8.85kWp PV panels.
Finance source:	Internal
Additional funding:	SEAI BEC 2018 programme
% funding:	50%
Grant amount:	€ 23,269
Total project cost:	€ 46,539
25-year savings:	€ 123,165
Simple payback time:	4.7 years



	Annual Energy (kWh)	Annual Value (€)	Annual CO ₂ (tonnes)
Imports Before project	180,970 kWh	€ 16,826.52	47.2 tonnes
Imports After project	120,930 kWh	€ 11,899.89	36.1 tonnes
Savings	60,040 kWh	€ 4,926.63	11.1 tonnes

Benefits

Thanks to the heating and lighting upgrades and the PV installation, Mount Carmel Community Trust saved money and reduced its carbon footprint through the BEC 2018 Programme.

The heating upgrade has helped increase the thermal comfort of the building for its users and reduced the number of hours the heating is required.

The lighting upgrade has resulted in a much better quality of light by using the newest technology LED lamps. The decrease in wattage has led to much lower electricity bills.

The installation of PV panels on the roof of the building has led to a reduction in grid imported electricity on the site.

3CEA is working hard to develop another award-winning project involving SMEs, local community groups, local authorities, and homeowners. For more information on BEC please contact the 3CEA office.