

Lighting and Insulation Upgrade

St James's Church

St James's Church was built in 1975. The main building structure is of mass concrete construction with uninsulated external walls with plaster external render. This led to a large electricity and oil demand for heating at their buildings. However, after successfully upgrading their lights and increasing their roof, wall and windows insulation, 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:	Kilbeggan Parish		
Project actions:	Increase roof insulation. Insulate internal and external walls. Replace all exterior and interior dated lamps with CFL or LED equivalents where applicable. Replace high level single glazed windows with double glazing and install laminated glass for doors panes and low levels windows.		
Finance source:	Internal		
Additional funding:	SEAI BEC 2018 programme		
% funding:	50%		
Grant amount:	€ 97,490		
Total project cost:	€ 194,979		
25-year savings:	€ 37,372		
Simple payback time:	65.2 years		
	Annual Energy (kWh)	Annual Value (€)	Annual CO ₂ (tonnes)
Imports Before project	29,529 kWh	€ 3,359.31	7.2 tonnes
Imports After project	18,545 kWh	€ 1,864.43	4.3 tonnes
Savings	10,984 kWh	€ 1,494.88	2.9 tonnes



Benefits

Thanks to the lighting and insulation upgrades, Kilbeggan Parish saved money and reduced its carbon footprint through the BEC 2018 Programme.

The insulation upgrades have 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 and CFL lamps. The decrease in wattage has led to much lower electricity bills.

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