

Heating, Insulating and Lighting Upgrade

Loughboy Library

Loughboy Library was built in 1980's and had a large electricity and oil demand for heating and lighting at their buildings. However, after successfully upgrading their heating devices and lights and increasing their ceiling 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:	Kilkenny County Council
Project actions:	Install 4 new unit heaters supplied from the boiler additional time and temperature control. Install new false ceiling and insulate it using insulated ceiling bag. Retrofit of lighting system by LED equivalent lighting.
Finance source:	Internal
Additional funding:	SEAI BEC 2017 programme
% funding:	30%
Grant amount:	€ 6,627
Total project cost:	€ 22,091
25-year savings:	€ 35,546
Simple payback time:	10.88 years



	Annual Energy (kWh)	Annual Value (€)	Annual CO ₂ (tonnes)
Imports Before project	74,402 kWh	€ 5,949.75	19.6 tonnes
Imports After project	64,239 kWh	€ 4,527.93	15.1 tonnes
Savings	10,163 kWh	€ 1,421.82	4.5 tonnes

Benefits

Thanks to the heating, lighting and insulation upgrades, Kilkenny County Council saved money and reduced its carbon footprint in the Loughboy Library through the BEC 2017 Programme.

The insulation and heating 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 lamps. The decrease in wattage has led to much lower electricity bills.