

Heating and Lighting Upgrade

Freshford Fire Station

Freshford Fire Station is located in a 10 years old building with a large electricity demand. All energy efficiency upgrades were grant aided under a SEAI's BEC programme coordinated by 3cea. A smart storage heating system was installed and the lighting system was upgraded to LED lighting. The motivation behind these improvement works and other changes was the desire to improve the stations both as a place to work but also to conserve energy and reduce emissions. Kilkenny Fire and Rescue Service has a responsibility to help meet the national target of 33% energy reduction for all local authorities to be achieved by 2020.

Summary

Company name:	Kilkenny County Council
Project actions:	Upgrade of the heater storage. Retrofit of lighting system by LED equivalent lighting.
Finance source:	Internal
Additional funding:	SEAI BEC 2017 programme
% funding:	30%
Grant amount:	€ 3,866
Total project cost:	€ 12,886
25-year savings:	€ 42,116
Simple payback time:	8.38 years



	Annual Energy (kWh)	Annual Value (€)	Annual CO ₂ (tonnes)
Imports Before project	37,700 kWh	€ 5,655.00	17.6 tonnes
Imports After project	26,469 kWh	€ 3,970.38	12.4 tonnes
Savings	11,231 kWh	€ 1,684.62	5.2 tonnes

Benefits

Thanks to the heating and lighting upgrades, Kilkenny County Council saved money and reduced its carbon footprint in Freshford Fire Station through the BEC 2017 Programme.

The heating upgrade have helped increase the thermal comfort of the buildings for its users and optimize the period of electricity consumption.

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.

3CEA 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.