## Lighting and Insulating Upgrade



## McMahon Centre, KARE

KARE's McMahon Centre is located in Kilcullen, Co Kildare and provide support to people who have an intellectual disability and their families. The McMahon Centre was deemed to be KARE's No.1 Natural Gas Consumer and, No.2 Electricity User. However, after successfully upgrading their lights and increasing their attic 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 Local energy efficiency and renewable energy projects.

**Summary** 

Company name:	KARE	
Project actions:	Increase attic insulation from 100 mm to 300 mm. Upgrade of lighting system by replacing the old quad by LED fittings or LED Lamps.	
Finance source:	Internal	
Additional funding:	SEAI BEC 2017 programme	
% funding	50%	
Grant amount:	€ 15,631	
Total project cost:	€ 31,263	
25-year savings:	€ 97,236	
Simple payback time:	4.02 years	
	Annual Energy (kWh)	



time:			
	Annual Energy (kWh)	Annual Value (€)	Annual CO <sub>2</sub> (tonnes)
Imports Before project	217,709 kWh	€ 16,707.55	<b>59.94 tonnes</b>
Imports After project	180,868 kWh	€ 12,818.10	47.01 tonnes
Savings	36,841 kWh	€ 3,889.45	12.94 tonnes

## **Benefits**

Thanks to the lighting and insulation upgrades, KARE saved money and reduced its carbon footprint through the BEC 2017 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 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.