

Heating System Upgrade

Kilkenny College Residential Buildings

With a large gas and oil demand for heating residential buildings, Kilkenny College Ltd. is concerned about promoting a sustainable energy practice while meeting its daily business objectives. However, after successfully upgrading their gas/oil boilers and installing their new heating control system, 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 College Ltd.
Project actions:	Installation of three high efficiency condensing boilers. Installation of a high efficiency factory insulated cylinder and a high efficiency water heater and new buffer tank. Installation of a BMS heating control system.
Finance source:	Internal
Additional funding:	SEAI BEC 2016 programme
Grant amount:	€ 170,917
% funding	45%
Total project cost:	€ 310,758
25-year savings:	€ 228,069
Simple payback time:	15.5 years



Kilkenny College Ltd.

	Annual Energy (kWh)	Annual Value (€)	Annual CO ₂ (tonnes)
Imports Before project	2,247,699kWh	€ 112,384.95	593 tonnes
Imports After project	2,065,244 kWh	€ 103,262.2	545 tonnes
Savings	182,455 kWh	€ 9,122.75	48 tonnes

Benefits

Since carrying out the Celbridge House, Ossory House, Wolfe House heating system upgrades and installing a new BMS heating control system through the Bec 2016 programme, Kilkenny College Ltd. has saved money and reduced their carbon footprint.

By upgraded each building to high efficiency condensing boilers, installing a high efficiency water heater and buffer tank in Wolfe house and installing a factory insulated cylinder in Celbridge House, the residential buildings are now more efficient.

By increasing efficiency, less energy is lost reducing the heating demand for the buildings. This reduction in heating demand results in a lower heating load, Reducing their carbon footprint and making the buildings more eco-friendly.