

# EndoTherm®

CASE STUDY: Northern Ireland Advanced Composites and Engineering Centre



EndoTherm has been trialled at The Northern Ireland Advanced Composites and Engineering Centre (NIACE).

The purpose built research facility located in Belfast was born out of collaboration between academia, industry and government. The site is home to personnel from Queens University Belfast, Ulster University, Bombardier and Invest Northern Ireland. Veolia are responsible for the management of the site.

The centre is heated by 6 x 100kW boilers designed with cascade control to react to variances in the load demand.

24L of EndoTherm was installed into the NIACE Centre in Nov 2016.

The energy management team at NIACE provided the gas bills (based on AMR data) for the three month observation period. This usage was compensated using degree day data from the weather station at the adjacent Belfast Airport.

## RESULTS

NIACE	Usage	HDD(15.5°C)	Usage/HDD
Nov 2015 - Jan 2016	5713.43	851.9	6.70
Nov 2016 - Jan 2017	4926.84	857.9	5.74

Compensated Saving 14.37%

By compensating the usage with HDD we can estimate the saving over the three months was £826. Based on 0.184kg CO<sub>2</sub> per kWh the assumed carbon saving is 5 tonnes.



TOTAL SAVINGS

FINANCIAL SAVING

£826

CO<sub>2</sub> SAVING

5071 kg

## KEY INFORMATION

Installed: NOV 2016  
Trial period: 3 Months

Boiler spec  
6 x 100kW

Volume EndoTherm installed  
24 litres