

Optimising Power @ Work

Monthly Energy Report

IT Sligo
March 2019

Address:

Sligo

Energy Advisor:

Norman Sullivan

Energy officer:

Jerome McElchar

Page Table of contents

- 2 - Table of Contents
- 3 - Annual energy performance overview
- 4 - CuSum and Annual Comparison
- 5 - Electricity Profile
- 6 - Fuel profile
- 7 - Carbon dioxide emission
- 8 - Weather correction overview

Contents

Annual energy performance overview

Energy consumption in this building has reduced by 14% since joining the Optimising Power @ Work campaign in 2015.

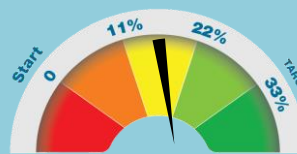
The total annual unit consumption of energy has decreased from 6,970,377 kWh to 5,996,629 kWh.

Electricity consumption on site has reduced by 13%. The number of units of electricity has decreased from 3,323,238 kWh to 2,906,722 kWh.

Oil consumption on site has reduced by 15%. The number of units of Oil has decreased from 3,647,139 kWh to 3,089,907 kWh.

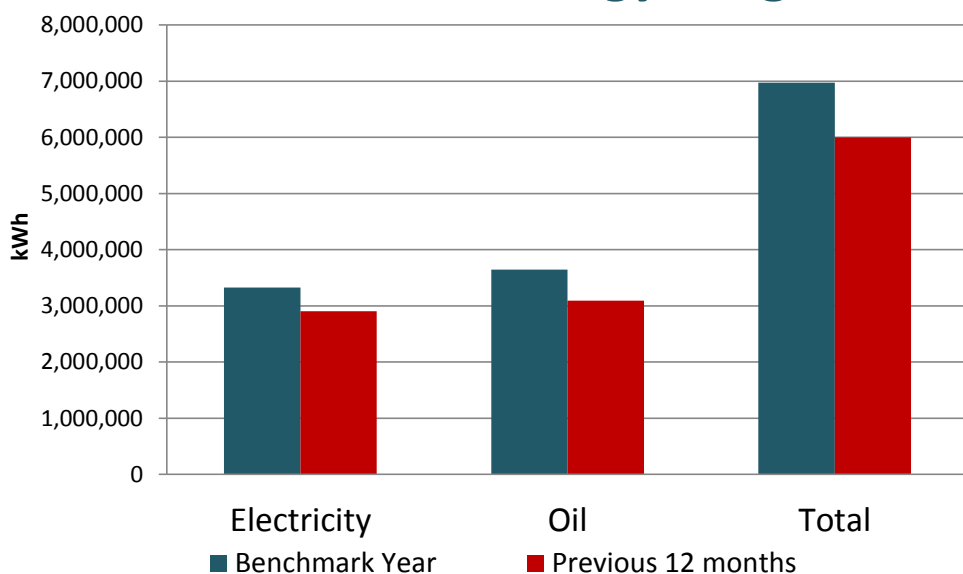
Total energy savings for this building:

14%



Setting up an ENERGY TEAM is one of the best ways to get a building's energy campaign off the ground. You can't expect to achieve organisation-wide behaviour change on your own. You need a team of 'comrades' around you.

Annualised energy usage

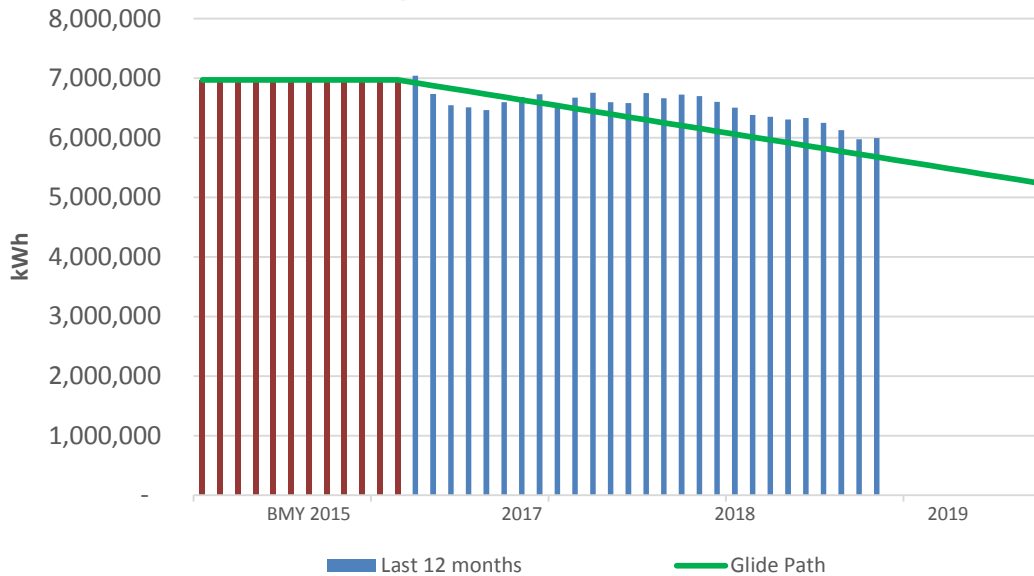


The average energy savings across all buildings in the Optimising Power @ Work campaign is:

19%

Description	Electricity	Oil	Total
Benchmark Year	3,323,238	3,647,139	6,970,377
Previous 12 Months	2,906,722	3,089,907	5,996,629
% Difference	-12.5%	-15.3%	-14.0%

Monthly CuSum Performance



CuSum is a sequential analysis technique used for monitoring change detection. As its name implies, CuSum involves calculation of a cumulative sum of consumption. By using this, any change over the last 12 months can be seen every month and will help identify any issues on site.

Performance over the last 6 months:

Month	Electricity	Oil	Total	% Change
Mar 2019	2,905,429	3,089,907	5,995,336	-14.0%
Feb 2019	2,900,911	3,073,903	5,974,814	-14.3%
Jan 2019	2,919,027	3,206,440	6,125,467	-12.1%
Dec 2018	2,923,051	3,329,197	6,252,248	-10.3%
Nov 2018	2,946,617	3,384,880	6,331,497	-9.2%
Oct 2018	2,970,662	3,337,263	6,307,925	-9.5%

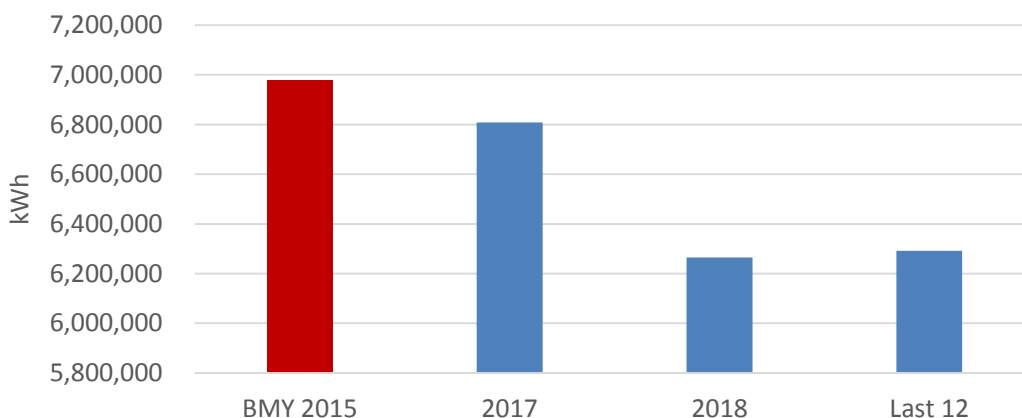
Since the Benchmark Year a -973,748kWh saving was seen onsite



This saving is enough to power 195 Irish homes annually

The Optimising Power @ Work campaign in the Central Government buildings has achieved average ANNUAL SAVINGS of 21% across 300 participating buildings, making it the largest and most successful campaign of its kind in Ireland.

Annual Consumption



Electricity profile

Annual electricity consumption in this building has been reduced by 13% since joining the Optimising Power @ Work campaign in 2015.

The total annual unit consumption of electricity has decreased from 3,323,238,kWh to 2,906,722kWh.

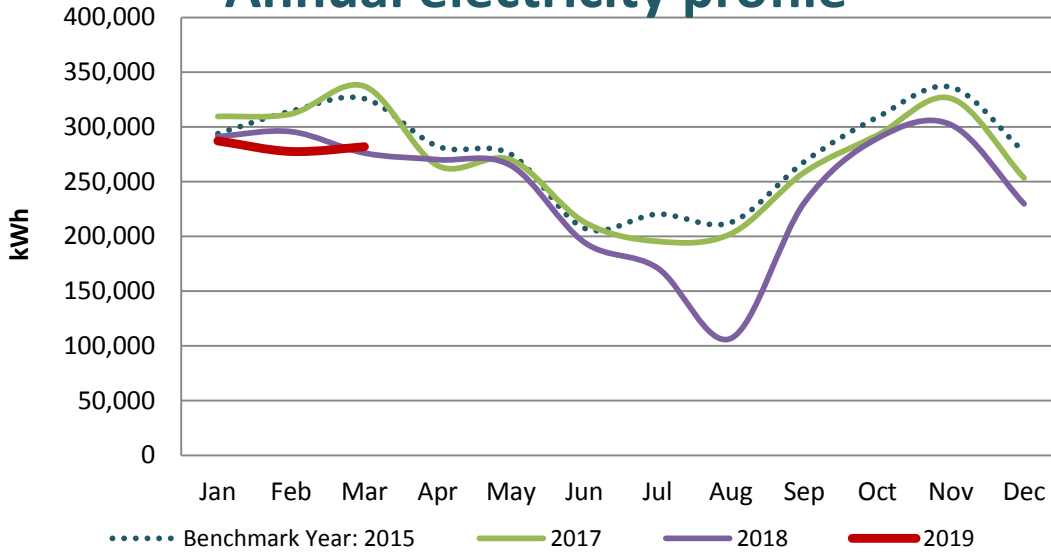
Monthly comparison data shows that March 2019 electricity consumption is 13% lower (43,859 kWh) than March 2015.

13%

Less electricity used

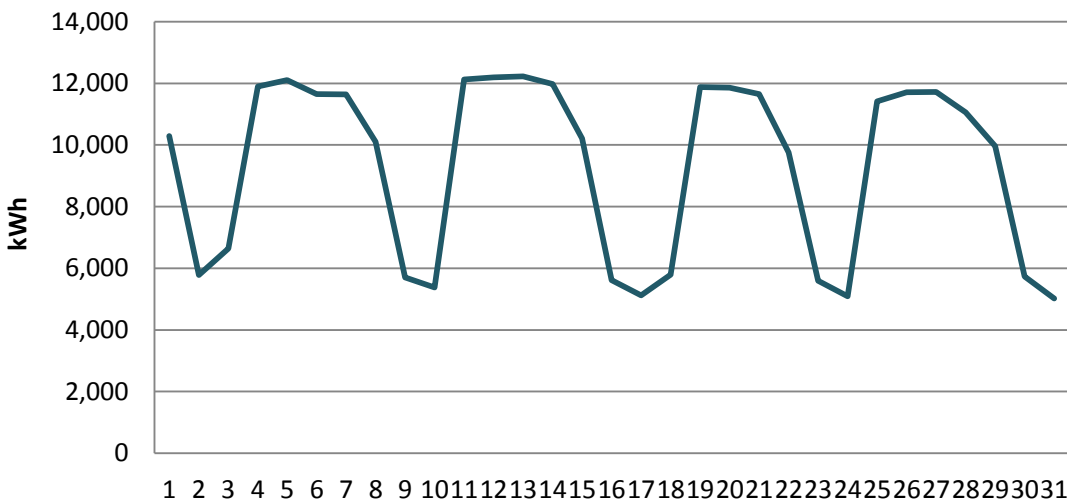


Annual electricity profile



Switching MONITORS OFF at night is a very visible and simple change to make that will help staff collectively take their first steps to being energy efficient.

Monthly electricity report March 2019



Out of hours electricity consumption can account for 50% of the total

Fuel profile

Annual Oil consumption in this building has reduced by 15% since joining the Optimising Power @ Work campaign in 2015.

The total annual unit consumption of Oil has decreased from 3,647,139kWh to 3,089,907kWh.

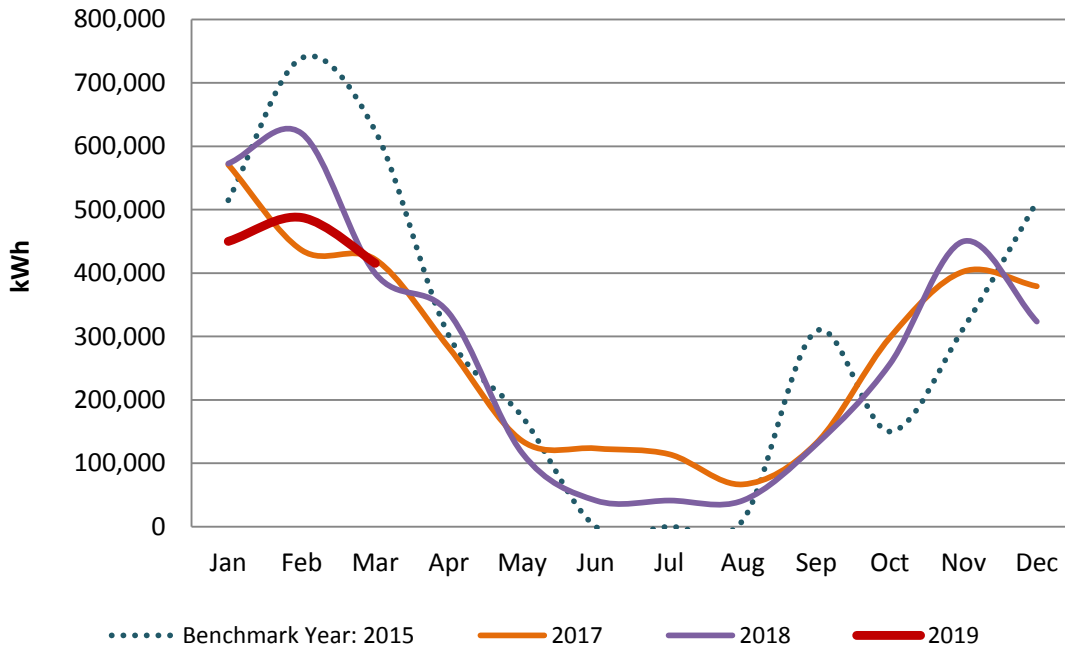
Monthly comparison data shows that the March 2019 fuel consumption is 33% lower (208,749 kWh) than March 2015.

15%

Less fuel used

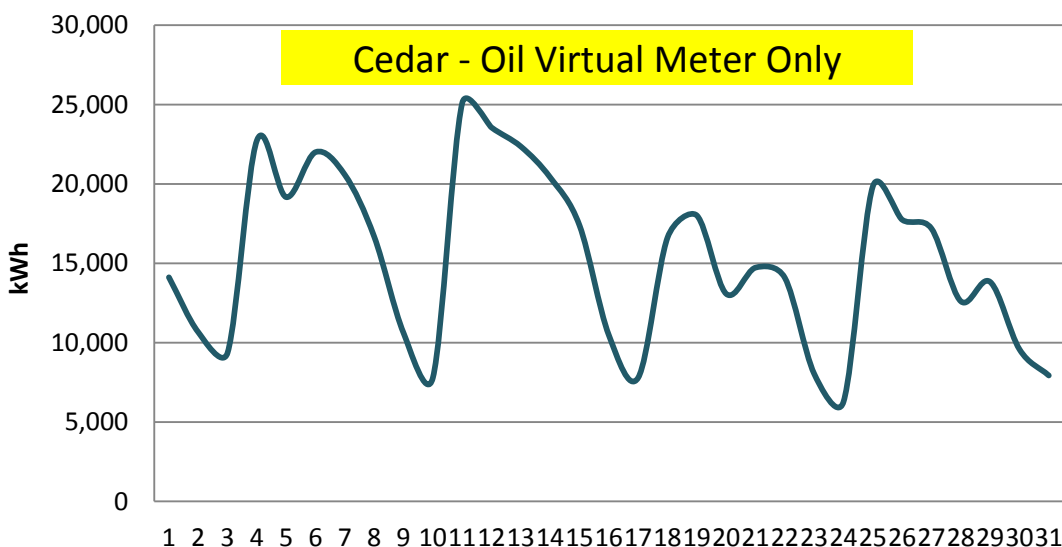


Annual fuel profile



Ensure that HOLIDAYS have been scheduled on your Building Management System (BMS) so that the heating, hot water and air-handling systems are switched off when the building is closed.

Monthly Oil report March 2019

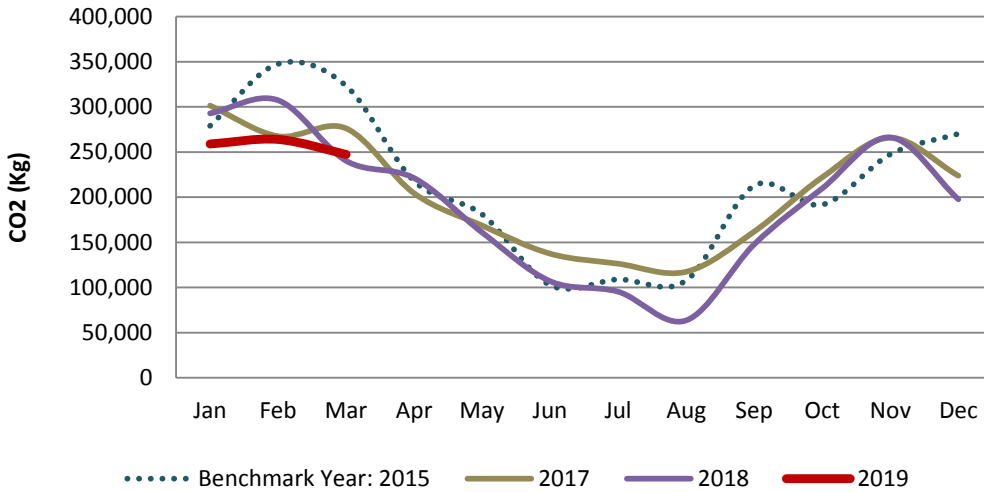


Carbon dioxide emissions

Compared to the base year of 2015 the carbon emissions over the last twelve months have reduced by 14%.

Monthly comparison data shows that the March 2019 CO2 Emissions are 23% lower (76 Tonnes) than March 2015.

Total annual emissions profile



14%

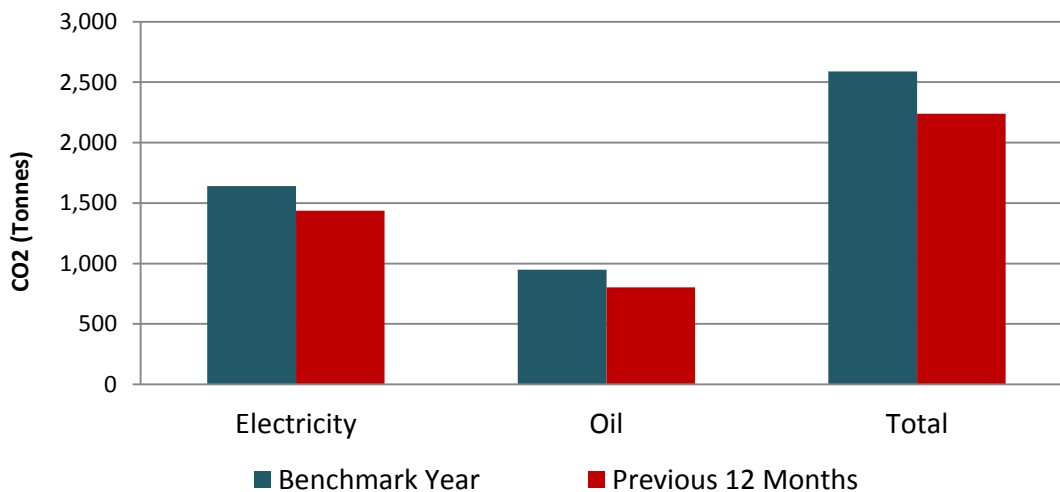
Less carbon emissions

Compared to Benchmark



Sharing success can help to gain the support of staff who have been resistant to change, by demonstrating the results people around them are achieving already. An ENERGY NOTICE BOARD can be one way of doing this.

Annualised tonnes of CO2 emitted



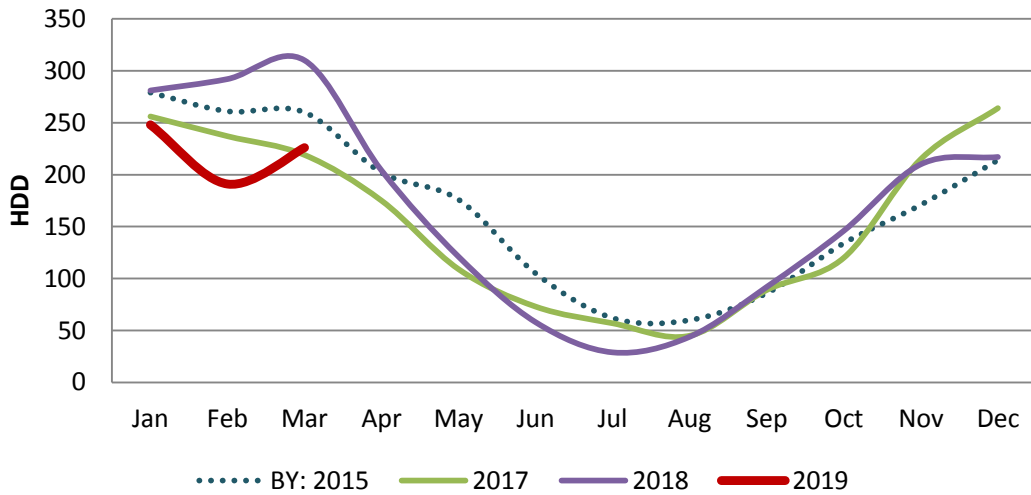
Now 2018 is officially the hottest year on record, some 1.1°C above pre-industrial levels and 0.83°C above the long-term average.

Description	Electricity	Oil	Total
Benchmark Year	1,642	948	2,590
Previous 12 Months	1,436	803	2,239
% Difference	-12.5%	-15.3%	-13.5%

Weather Correction Overview

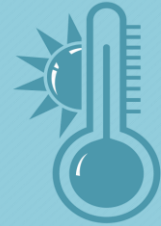
Heating degree day (HDD) is a measurement designed to measure the demand for energy needed to heat a building. HDD is derived from measurements of outside air temperature. The heating requirements for a given building at a specific location are considered to be directly proportional to the number of HDD at that location. The higher the HDD value the colder it is.

Heating Degree Day Profile Belmullet



Degree Days March 2019

226

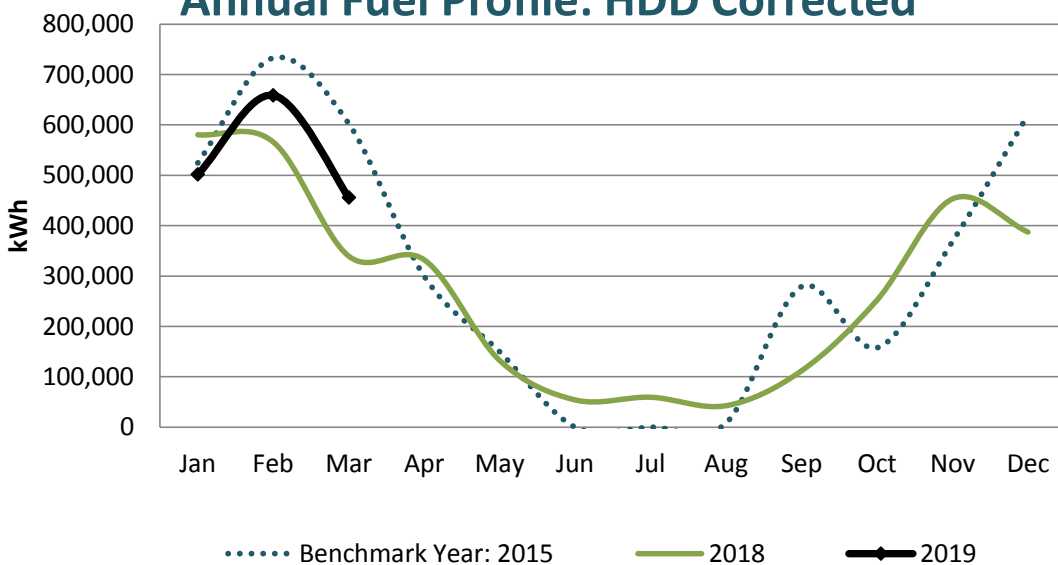


Degree Days March 2015

260

People tend to keep their promises, whether it is to switch off lights, monitors and appliances, print less, recycle or stop using paper cups. A PLEDGE SCHEME can be a useful way to raise awareness of the behaviours expected from staff.

Annual Fuel Profile: HDD Corrected



Your Optimising Power @ Work ENERGY ADVISOR is here to provide you with support. So if you need any help using the campaign materials or with staff engagement in general, please contact them.