

# Optimising Power @ Work

## Monthly Energy Report

IT Sligo  
June 2019

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Sligo

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## Annual energy performance overview

Energy consumption in this building has reduced by 24% since joining the Optimising Power @ Work campaign in 2013.

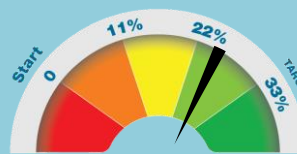
The total annual unit consumption of energy has decreased from 7,816,704 kWh to 5,944,926 kWh.

Electricity consumption on site has reduced by 18%. The number of units of electricity has decreased from 3,466,634 kWh to 2,855,019 kWh.

Oil consumption on site has reduced by 29%. The number of units of Oil has decreased from 4,350,070 kWh to 3,089,907 kWh (HDDC).

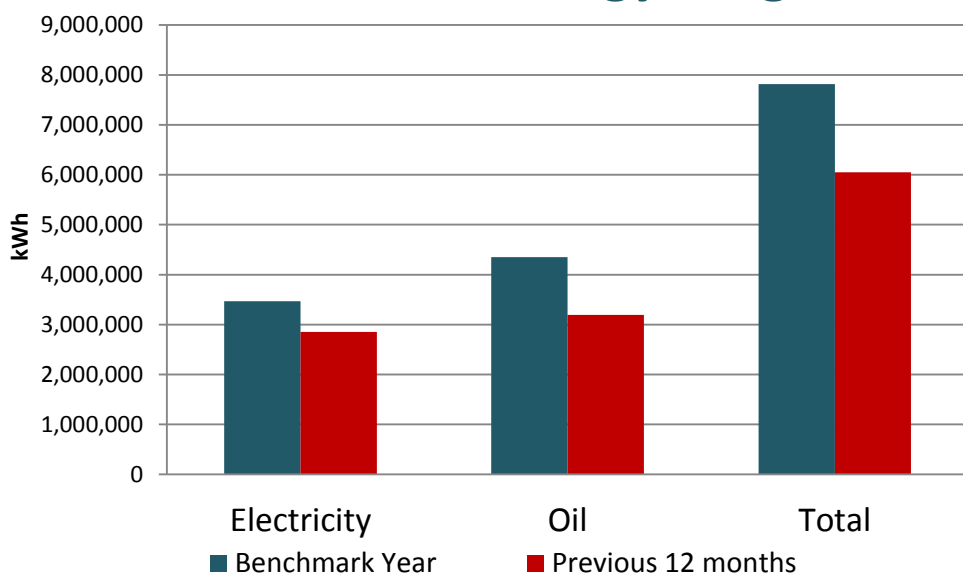
Total energy savings for this building:

# 24%



*Getting management to sign off on an ENERGY POLICY is a great way of getting everyone on board.*

## Annualised energy usage

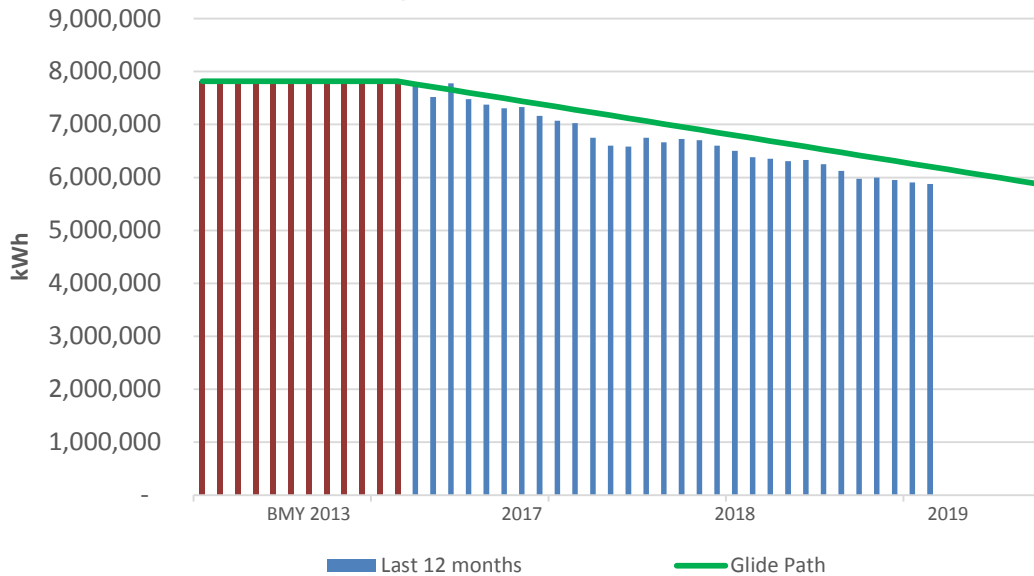


The average energy savings across all buildings in the Optimising Power @ Work campaign is:

# 19%

Description	Electricity	Oil	Total
Benchmark Year	3,466,634	4,350,070	7,816,704
Previous 12 Months	2,855,019	3,089,907	5,944,926
% Difference	-17.6%	-29.0%	<b>-23.9%</b>

# Monthly CuSum Performance



Since the Benchmark Year a -1,871,778kWh saving was seen onsite



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.

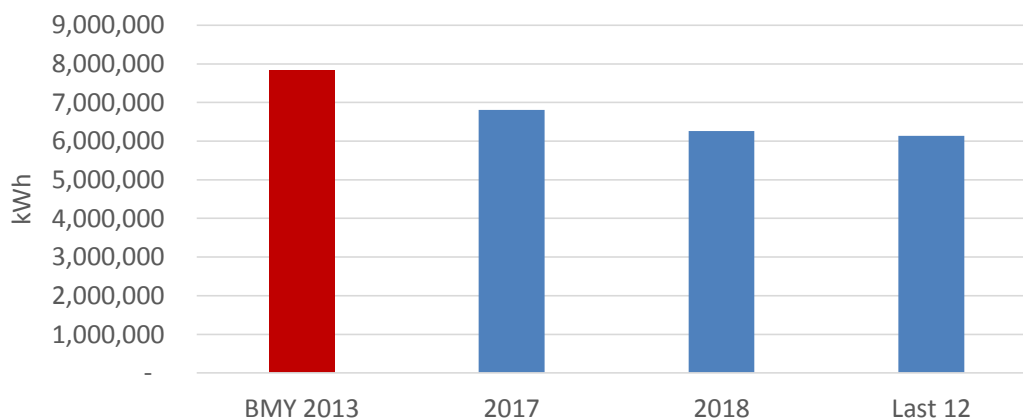
Performance over the last 6 months:

Month	Electricity	Oil	Total	% Change
Jun 2019	2,855,019	3,282,216	6,137,235	-21.5%
May 2019	2,864,329	3,353,918	6,218,247	-20.4%
Apr 2019	2,888,042	3,409,349	6,297,391	-19.4%
Mar 2019	2,906,722	3,385,749	6,292,471	-19.5%
Feb 2019	2,900,911	3,251,433	6,152,344	-21.3%
Jan 2019	2,919,027	3,258,905	6,177,932	-21.0%

This saving is enough to power 374 Irish homes annually

*INTRODUCE THE ENERGY TEAM to the rest of the staff. Your team will work most effectively when staff across your organisation understand who the team members are, what they are trying to achieve and how it will benefit the organisation as a whole.*

# Annual Consumption



# Electricity profile

Annual electricity consumption in this building has been reduced by 18% since joining the Optimising Power @ Work campaign in 2013.

The total annual unit consumption of electricity has decreased from 3,466,634,kWh to 2,855,019kWh.

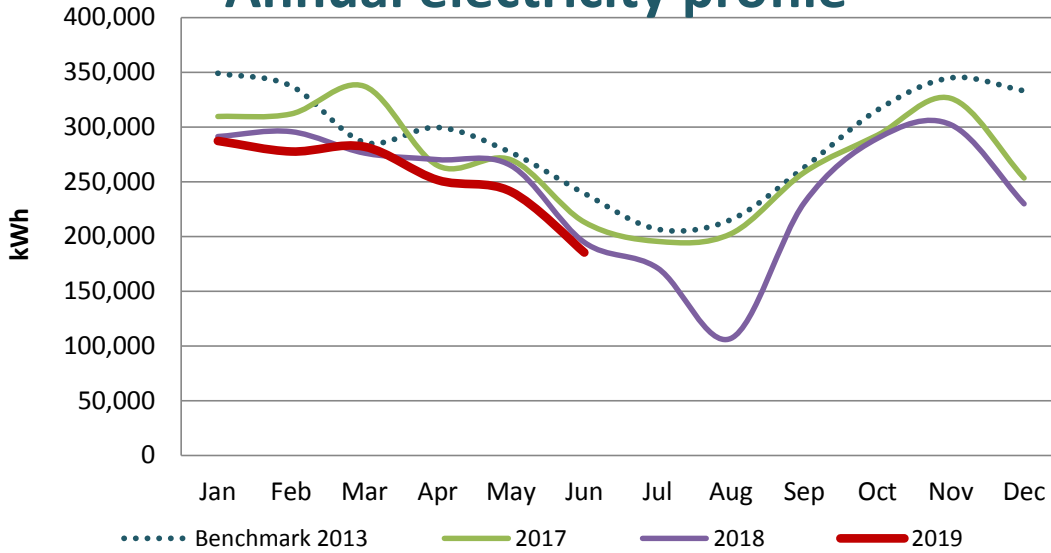
Monthly comparison data shows that June 2019 electricity consumption is 23% lower (54,017 kWh) than June 2013.

# 18%

Less electricity used

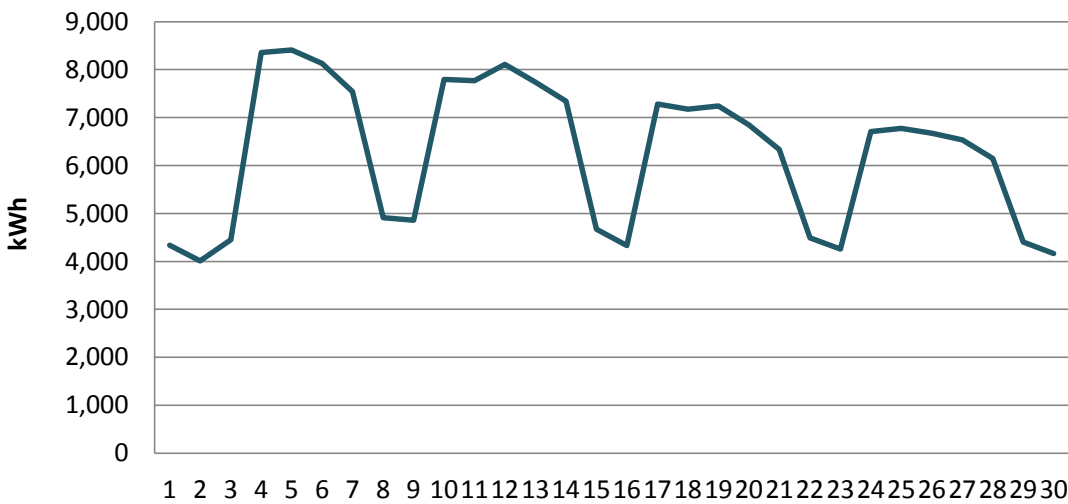


## Annual electricity profile



*Air conditioning works best when the WINDOWS AND DOORS are kept closed. Setting the stat lower will not cool the room quicker but will waste energy as the room cools more than required for comfort.*

## Monthly electricity report June 2019



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

## Fuel profile

Annual Oil consumption in this building has reduced by 29% since joining the Optimising Power @ Work campaign in 2013 (HDDC).

The total annual unit consumption of Oil has decreased from 4,350,070kWh to 3,089,907kWh (HDDC).

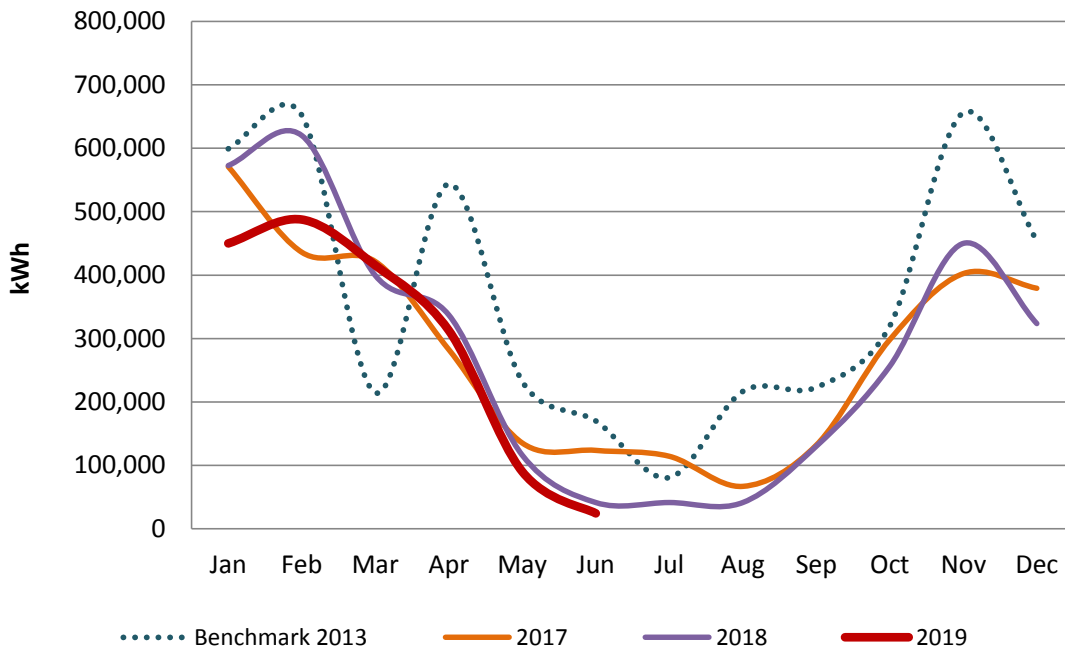
Monthly comparison data shows that the June 2019 fuel consumption is 86% lower (145,813 kWh) than June 2013.

# 29%

Less fuel used

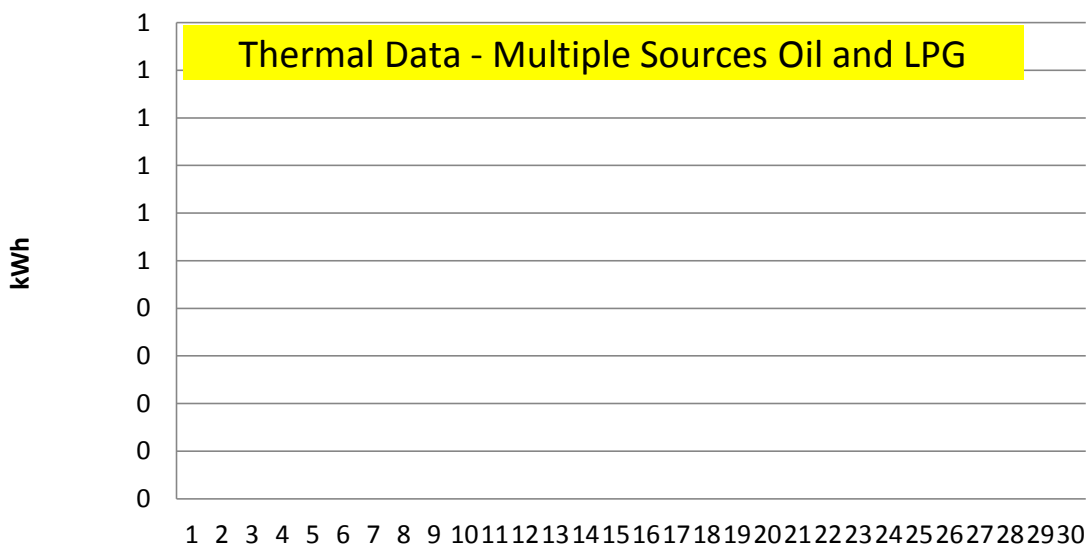


### Annual fuel profile



*A bespoke set of POSTERS have been designed for the Optimising Power @ Work campaign. Each month your Energy Advisor will provide a new poster to display in your building, or they can be downloaded from the Energy Portal.*

### Monthly Oil report June 2019

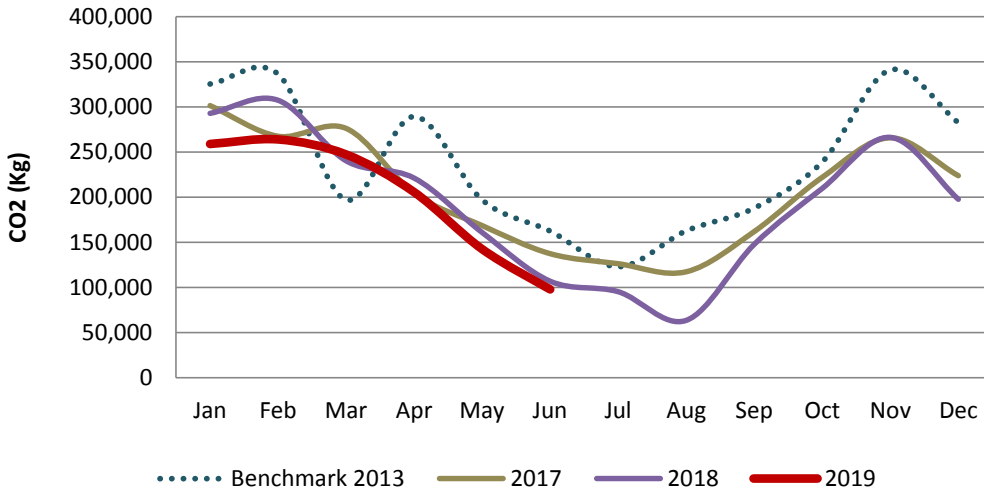


# Carbon dioxide emissions

Compared to the base year of 2013 the carbon emissions over the last twelve months have reduced by 22%.

Monthly comparison data shows that the June 2019 CO2 Emissions are 40% lower (65 Tonnes) than June 2013.

## Total annual emissions profile



# 22%

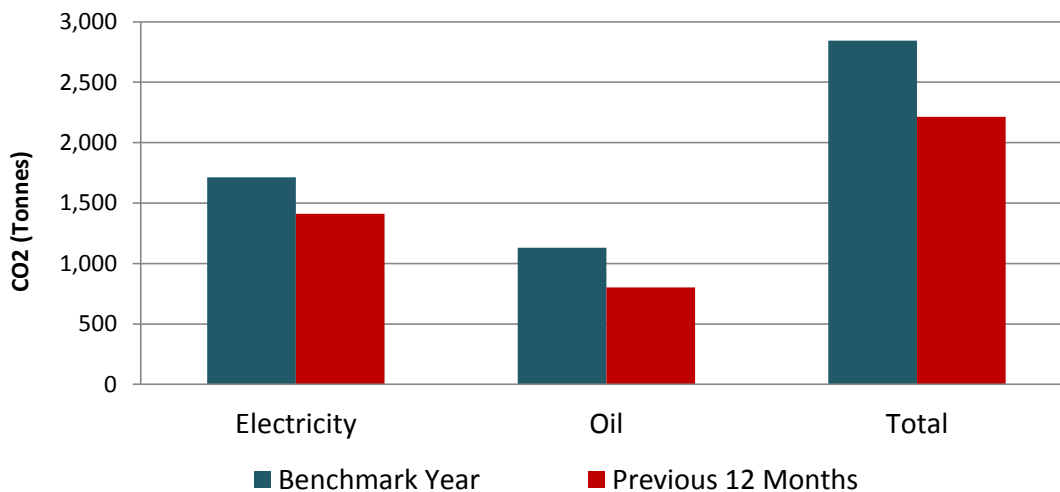
Less carbon emissions

Compared to Benchmark



*Reducing the electricity used by a COOLING SYSTEM by 10,000kWh saves 5,400kg of CO2. That's equivalent to the weight of 11 highland cows.*

## Annualised tonnes of CO2 emitted



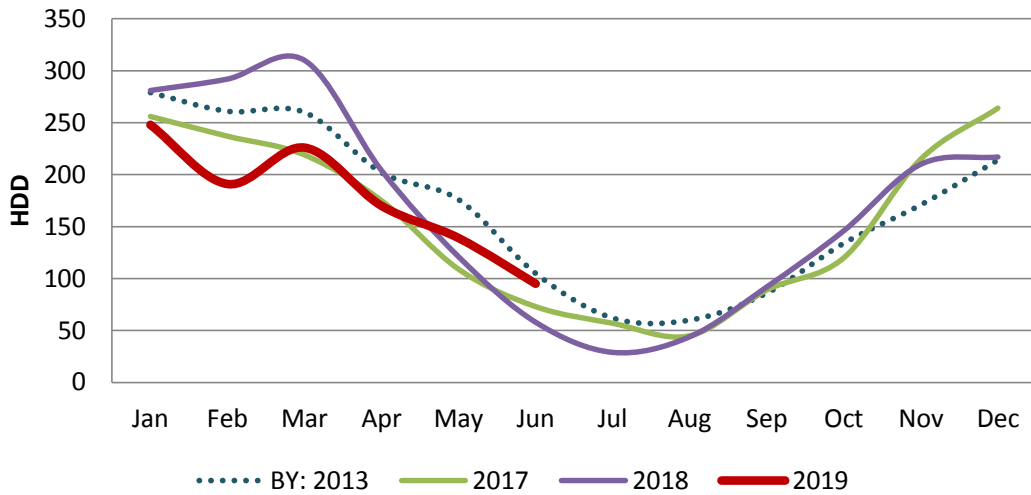
Now 2018 is officially the hottest year on record, some 1.1°C above pre-industrial levels and 0.83°C above the long-term average.

Description	Electricity	Oil	Total
Benchmark Year	1,713	1,131	2,844
Previous 12 Months	1,410	803	2,214
% Difference	-17.6%	-29.0%	-22.1%

## Weather Correction Overview

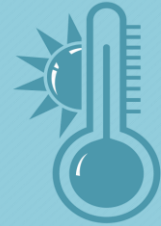
Heating degree day (HDD) is a measurement designed to measure the demand for energy needed to heat a building. HDD is derived from measurements of outside air temperature. The heating requirements for a given building at a specific location are considered to be directly proportional to the number of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

### Heating Degree Day Profile Belmullet



Degree Days June 2019

95

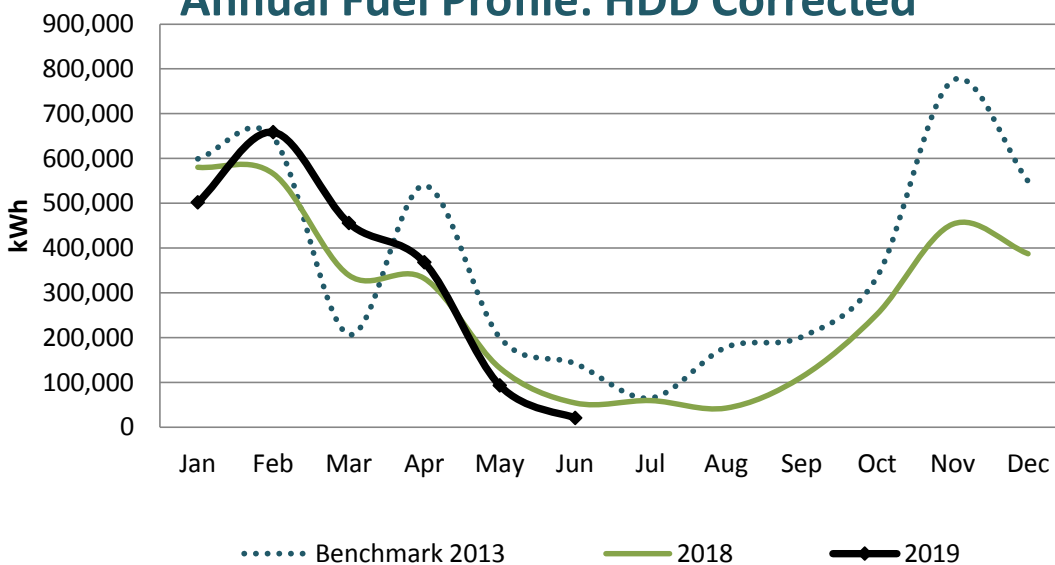


Degree Days June 2013

105

*Staff know how their departments operate better than anyone else and so often have BRIGHT IDEAS for energy saving. Asking people their opinions and listening to them is also a good way to engage them.*

### 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.