Optimising Power @ Work
Monthly Energy Report

IT Sligo
January 2019

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Sligo

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The Office of Public Works

Optimising Power @ Work

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Annual energy performance overview

Energy consumption in this building has reduced by 12% since joining the Optimising Power @ Work campaign in 2015.

The total annual unit consumption of energy has decreased from 6,970,377 kWh to 6,125,467 kWh.

Electricity consumption on site has reduced by 12%. The number of units of electricity has decreased from 3,323,238 kWh to 2,919,027 kWh.

Oil consumption on site has reduced by 12%. The number of units of Oil has decreased from 3,647,139 kWh to 3,206,440 kWh.
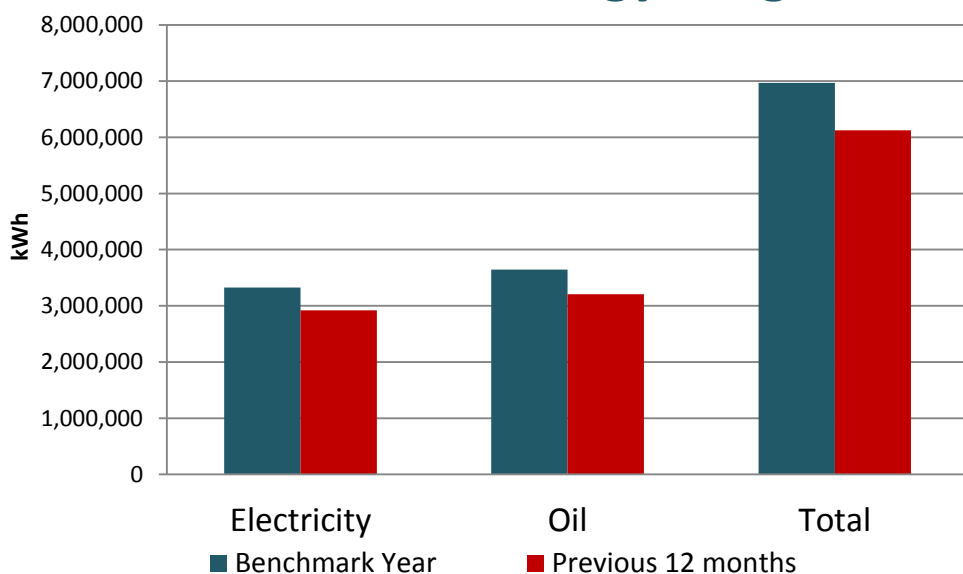
Total energy savings for this building:

12%

Optimising Power @ Work aims to contribute towards the 33% energy reduction target for the public sector in Ireland, reducing carbon emissions and cutting energy bills for each participating organisation.
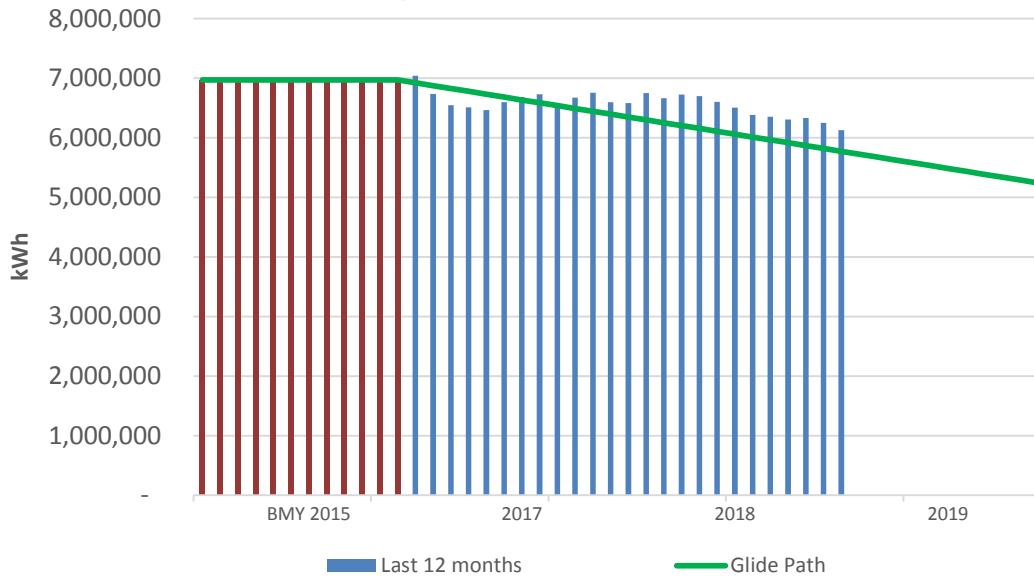
Annualised energy usage

Benchmark Year ■ Previous 12 months ■

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	2,919,027	3,206,440	6,125,467
% Difference	-12.2%	-12.1%	-12.1%

Monthly CuSum Performance

kWh (y-axis): 8,000,000 / 7,000,000 / 6,000,000 / 5,000,000 / 4,000,000 / 3,000,000 / 2,000,000 / 1,000,000 / -

x-axis: BMY 2015 | 2017 | 2018 | 2019

Legend: Last 12 months | Glide Path

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:

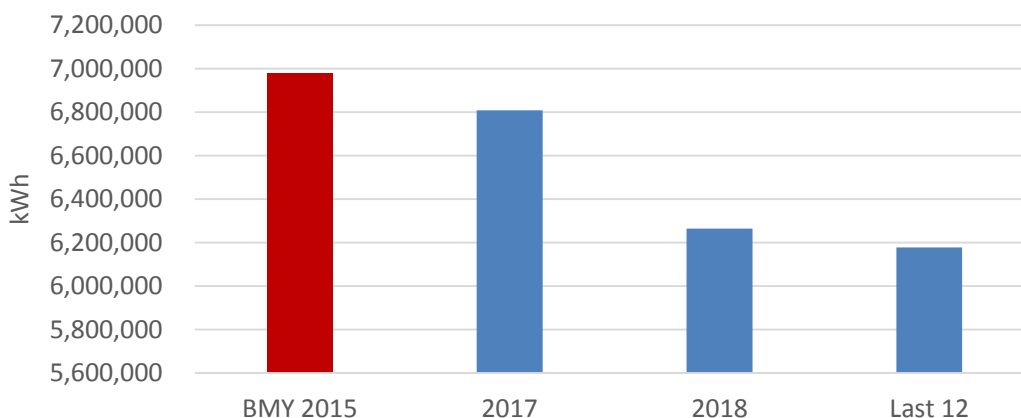| Month	Electricity	Oil	Total	% Change
Jan 2019	2,919,027	3,206,440	6,125,467	-12.1%
Dec 2018	2,923,051	3,329,197	6,252,248	-10.3%
Nov 2018	2,946,617	3,384,880	6,331,497	-9.2%
Oct 2018	2,970,662	3,337,263	6,307,925	-9.5%
Sep 2018	2,973,561	3,379,084	6,352,645	-8.9%
Aug 2018	3,001,323	3,380,812	6,382,135	-8.4%

Since the Benchmark Year a -844,910kWh saving was seen onsite

This saving is enough to power169 Irish homes annually

Holding REGULAR MEETINGS with your Energy Team will keep Optimising Power @ Work firmly on the agenda and progress energy conservation initiatives.

Annual Consumption

kWh (y-axis): 7,200,000 / 7,000,000 / 6,800,000 / 6,600,000 / 6,400,000 / 6,200,000 / 6,000,000 / 5,800,000 / 5,600,000

x-axis: BMY 2015 | 2017 | 2018 | Last 12

Electricity profile

Annual electricity consumption in this building has been reduced by 12% since joining the Optimising Power @ Work campaign in 2015.

The total annual unit consumption of electricity has decreased from 3,323,238,kWh to 2,919,027kWh.
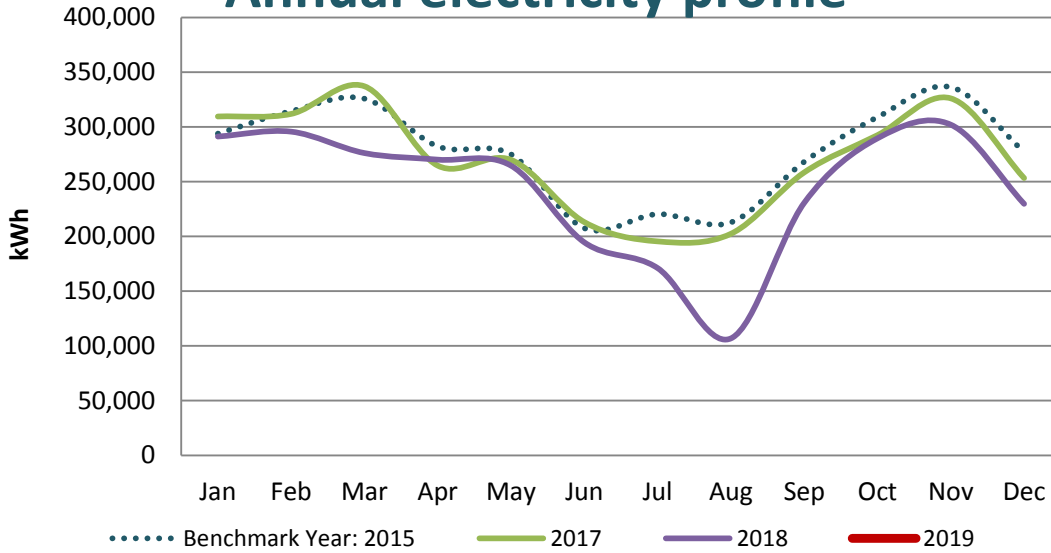
Monthly comparison data shows that January 2019 electricity consumption is 02% lower (6,653 kWh) than January 2015.
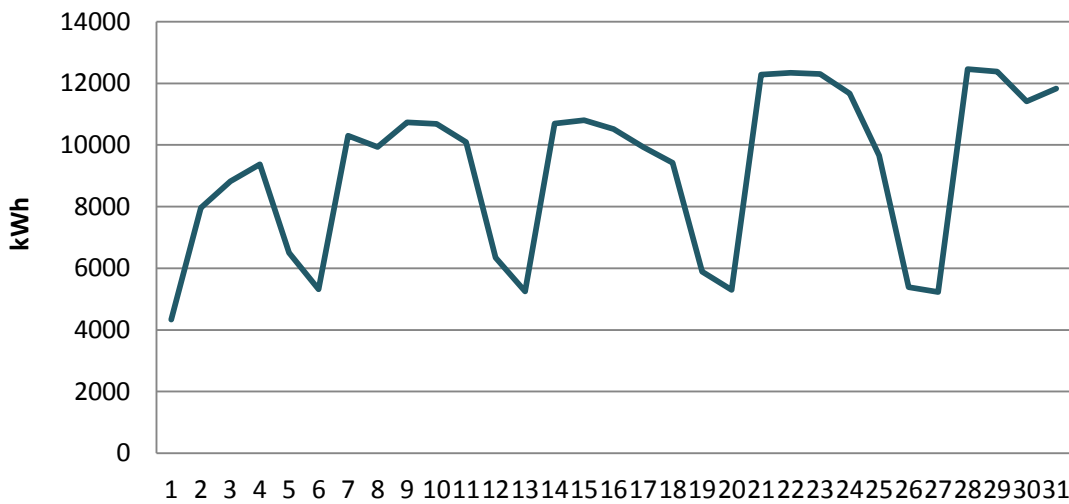
12%

Less electricity used

Annual electricity profile

Benchmark Year: 2015 ...... 2017 —— 2018 —— 2019 ——

Getting staff to switch off lights and other equipment when not in use is a really quick way of making energy savings. Consider hosting a SWITCH OFF DAY, maybe focusing on one type of equipment such as lights.

Monthly electricity report January 2019

CLOSED

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

Fuel profile

Annual Oil consumption in this building has reduced by 12% since joining the Optimising Power @ Work campaign in 2015.

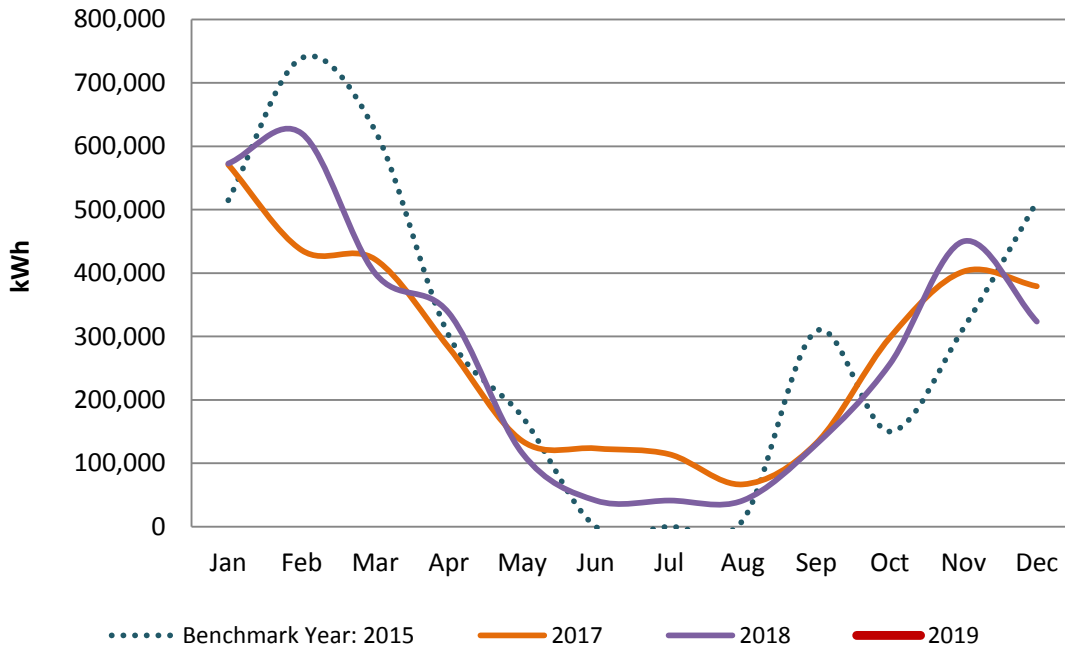The total annual unit consumption of Oil has decreased from 3,647,139kWh to 3,206,440kWh.

Monthly comparison data shows that the January 2019 fuel consumption is 13% lower (64,781 kWh) than January 2015.
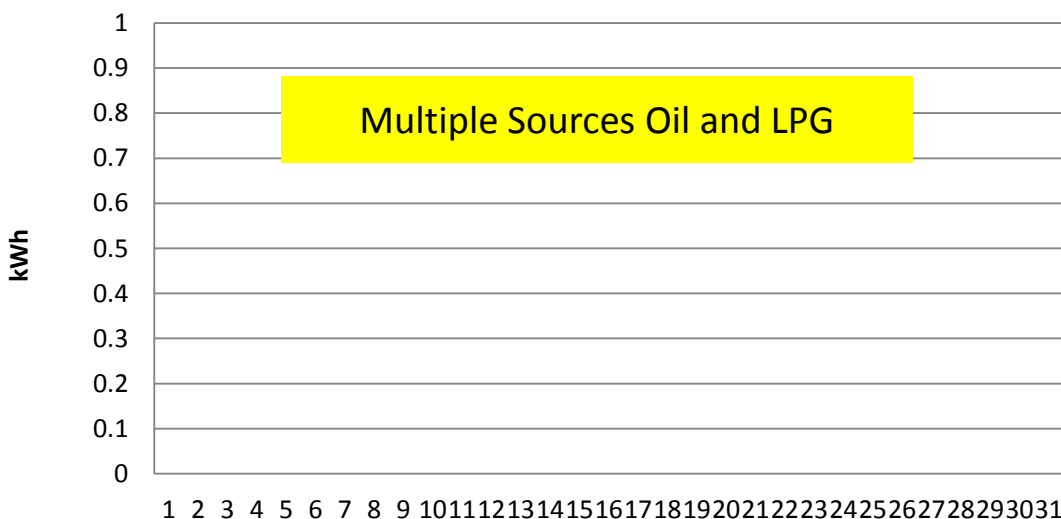
12%

Less fuel used

Annual fuel profile

Legend:
- •••••• Benchmark Year: 2015
- ▬▬ 2017
- ▬▬ 2018
- ▬▬ 2019

Every building in the Optimising Power @ Work campaign will have an ENERGY AUDIT conducted by the service provider. This is an excellent first step to identify opportunities for making energy savings.

Monthly Oil report January 2019

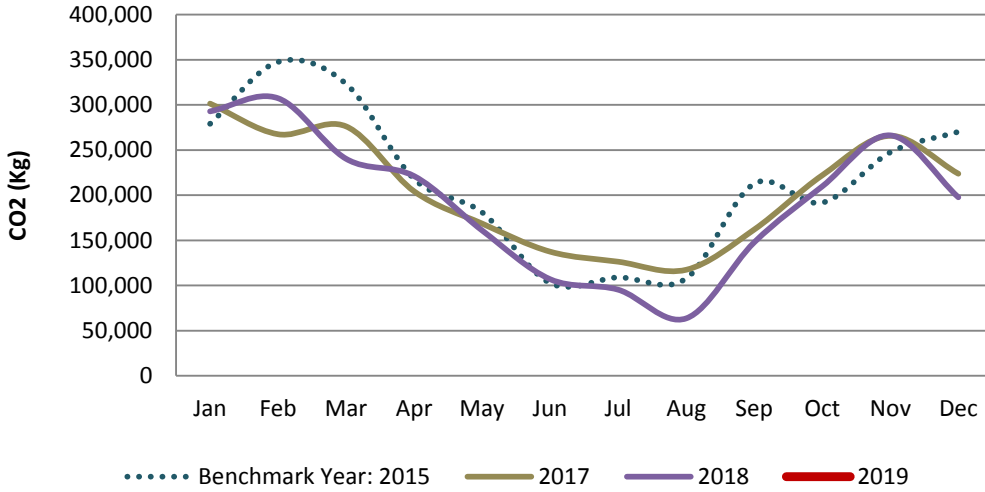Multiple Sources Oil and LPG

Carbon dioxide emissions

Compared to the base year of 2015 the carbon emissions over the last twelve months have reduced by 12%.

Monthly comparison data shows that the January 2019 CO2 Emissions are 07% lower (20 Tonnes) than January 2015.

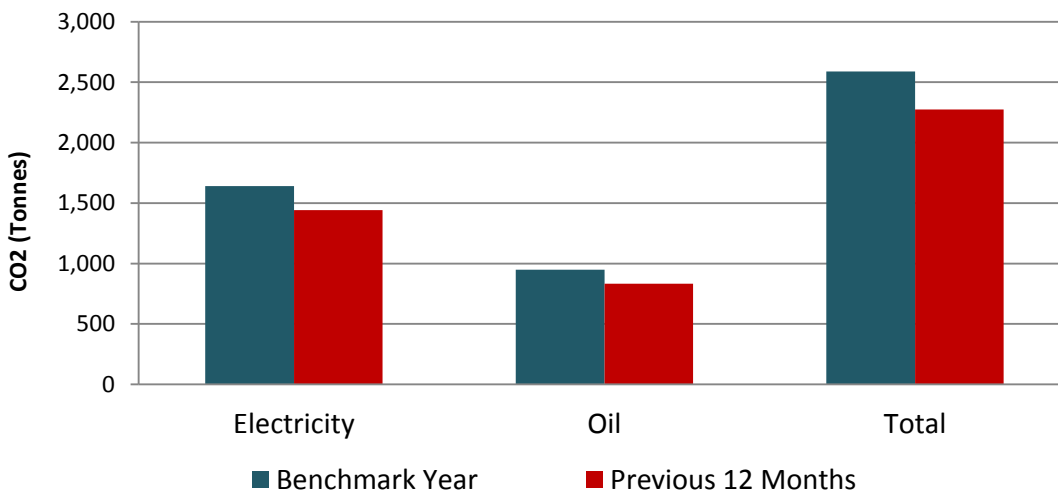## Total annual emissions profile

12%

Less carbon emissions

Compared to Benchmark

Turning off 50 five-foot fluorescent tube lights that are normally left on during the working day saves 3,950kg of CO2 over a year. That's the amount of CO2 produced by driving from DUBLIN TO CORK 57 times.

Annualised tonnes of C02 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	1,442	834	2,276
% Difference	-12.2%	-12.1%	-12.1%

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 highter the HDD value the colder it is.
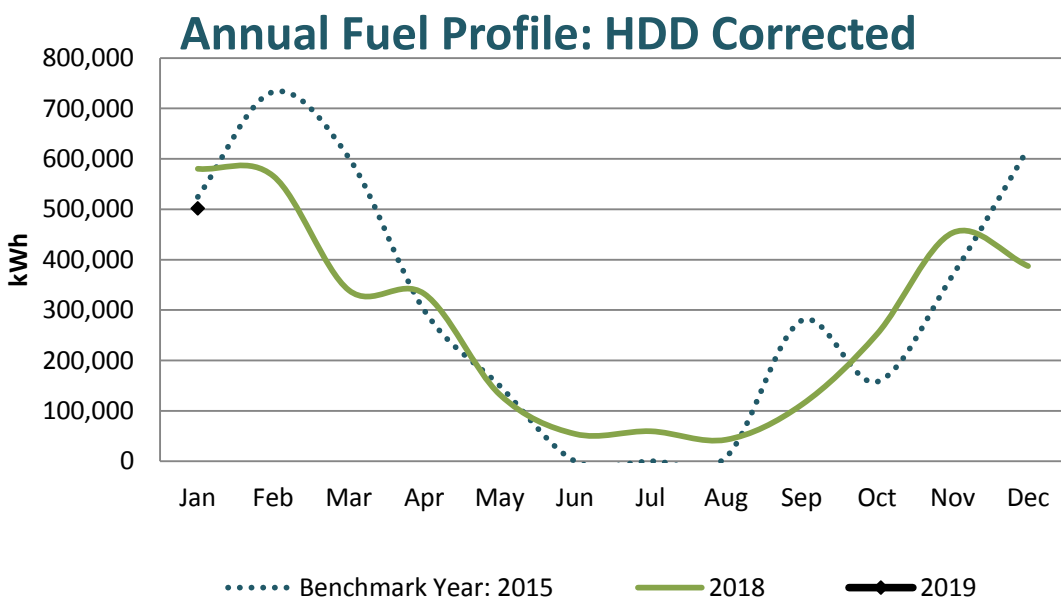
Heating Degree Day Profile Belmullet
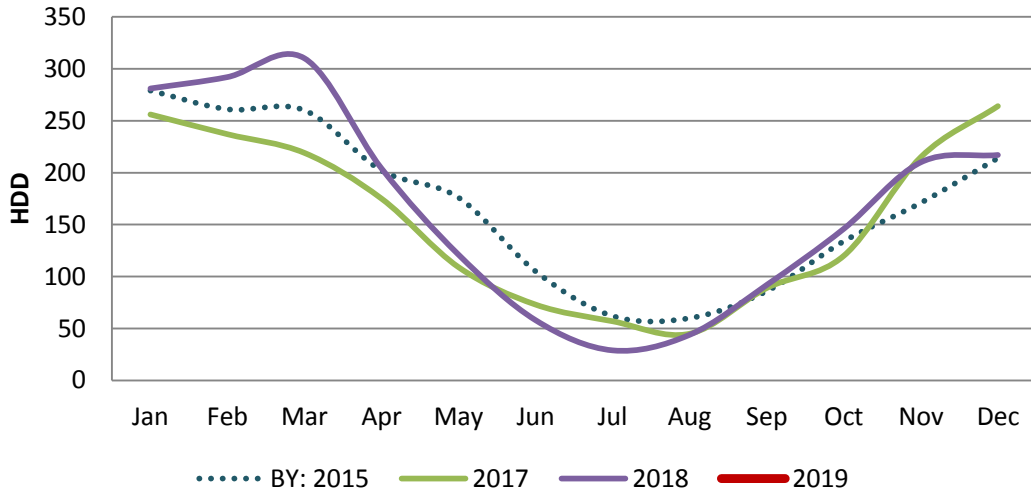
Host a STEP UP DAY. An important part of your energy campaign will be to encourage staff to develop energy-saving habits. A step up day is one way of doing this, with the added benefit of a physical activity that can be good for staff fitness and wellbeing.

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.