# Optimising Power @ Work

## Monthly Energy Report

IT Sligo

April 2019

**Address:**

Sligo

**Energy Advisor:**

Norman Sullivan

**Energy officer:**

Jerome McElchar

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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.

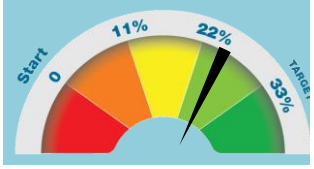
The total annual unit consumption of energy has decreased from 7,816,704 kWh to 5,977,949 kWh.

Electricity consumption on site has reduced by 17%. The number of units of electricity has decreased from 3,466,634 kWh to 2,888,042 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.

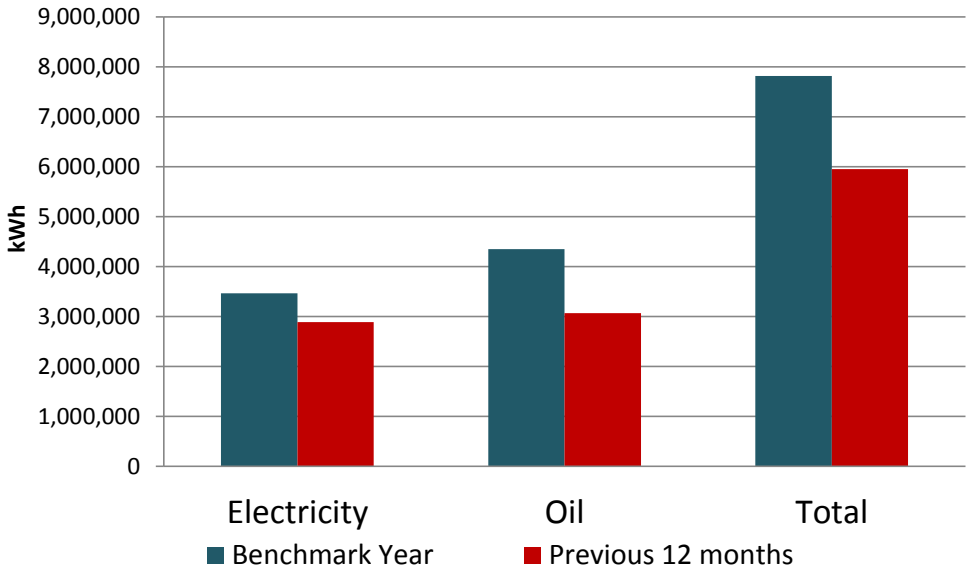
**Total energy savings for this building:**

**24%**




*SENIOR MANAGEMENT COMMITMENT gives credibility to a behavioural change programme. It encourages involvement from staff and helps to break down barriers that may be preventing energy improvements being achieved.*

## Annualised energy usage

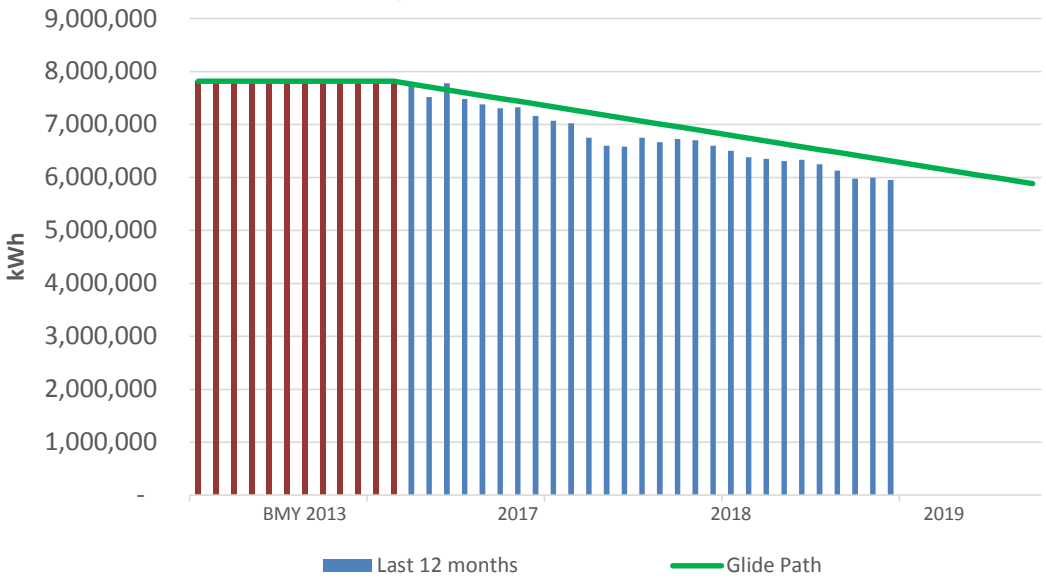



| Description | Electricity | Oil | Total |
|---|---|---|---|
| Benchmark Year | 3,466,634 | 4,350,070 | 7,816,704 |
| Previous 12 Months | 2,888,042 | 3,089,907 | 5,977,949 |
| % Difference | -16.7% | -29.0% | **-23.5%** |

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

**19%**

# Monthly CuSum Performance




Since the Benchmark Year a -1,838,755kWh 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.

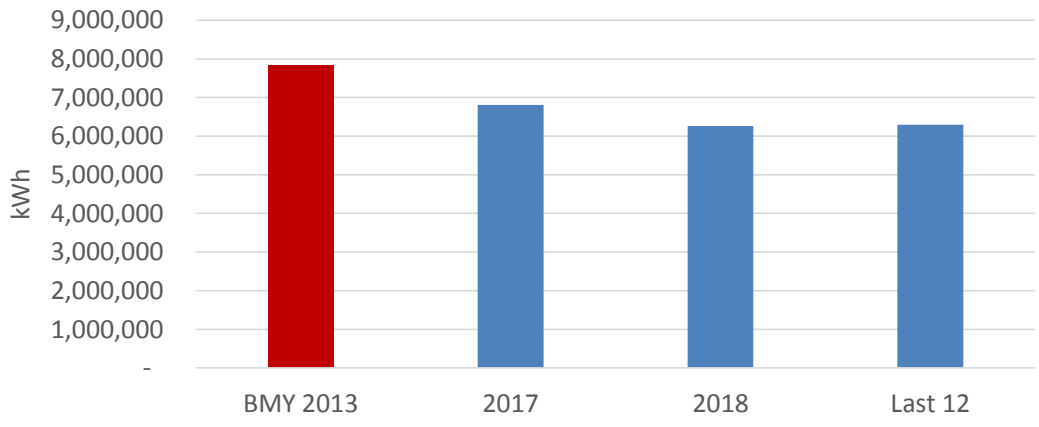
*Performance over the last 6 months:*

| Month | Electricity | Oil | Total | % Change |
|---|---|---|---|---|
| Apr 2019 | 2,905,429 | 3,065,527 | 5,970,956 | -23.6% |
| Mar 2019 | 2,906,722 | 3,089,907 | 5,996,629 | -23.3% |
| Feb 2019 | 2,900,911 | 3,073,903 | 5,974,814 | -23.6% |
| Jan 2019 | 2,919,027 | 3,206,440 | 6,125,467 | -21.6% |
| Dec 2018 | 2,923,051 | 3,329,197 | 6,252,248 | -20.0% |
| Nov 2018 | 2,946,617 | 3,384,880 | 6,331,497 | -19.0% |

This saving is enough to power368 Irish homes annually

*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.*

# Annual Consumption

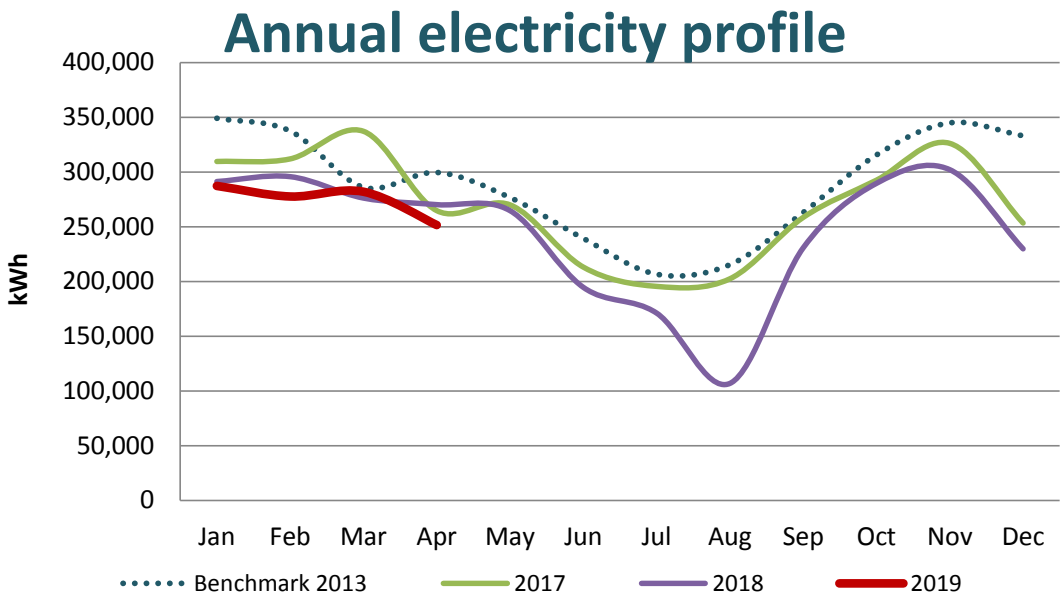


## Electricity profile

Annual electricity consumption in this building has been reduced by 17% since joining the Optimising Power @ Work campaign in 2013.

The total annual unit consumption of electricity has decreased from 3,466,634,kWh to 2,888,042kWh.

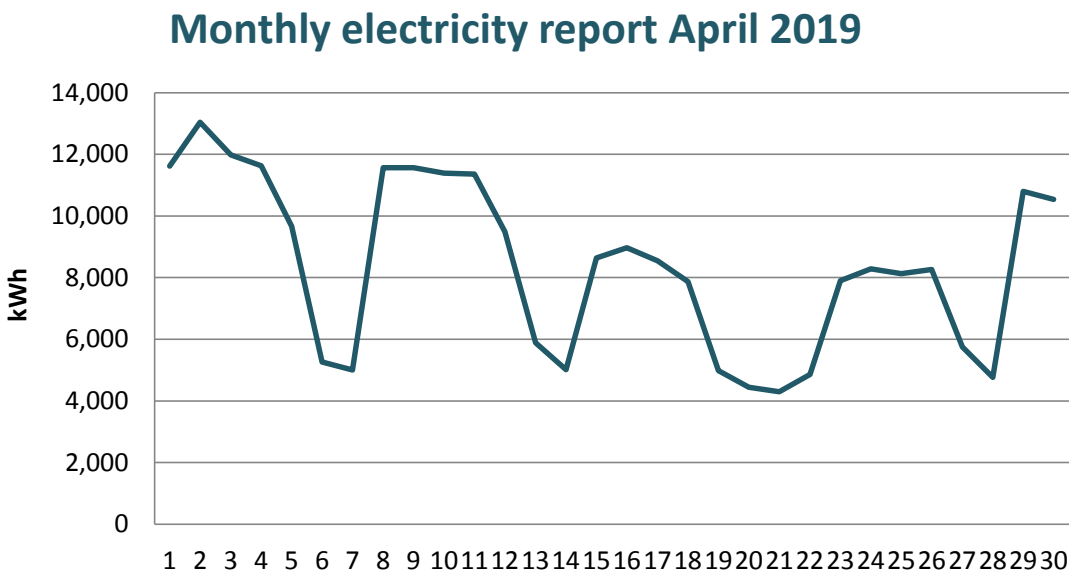
Monthly comparison data shows that April 2019 electricity consumption is 16% lower (48,067 kWh) than April 2013.




**17%**

**Less electricity used**

*Empower staff to switch off lights by LABELLING BANKS OF LIGHT SWITCHES. When they know which switch controls the lights in their area, they will be more likely to switch them off when they are the last to leave or if they are not needed.*





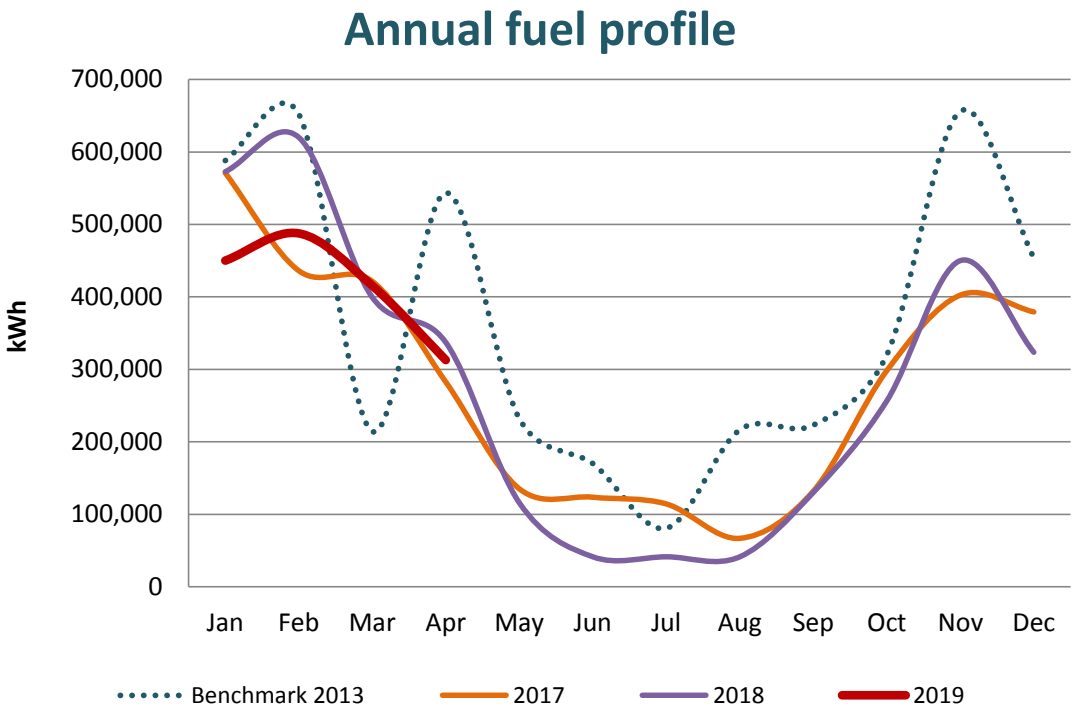
**Out of hours electricity consumption can account for 50% of the total**

## Fuel profile

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

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

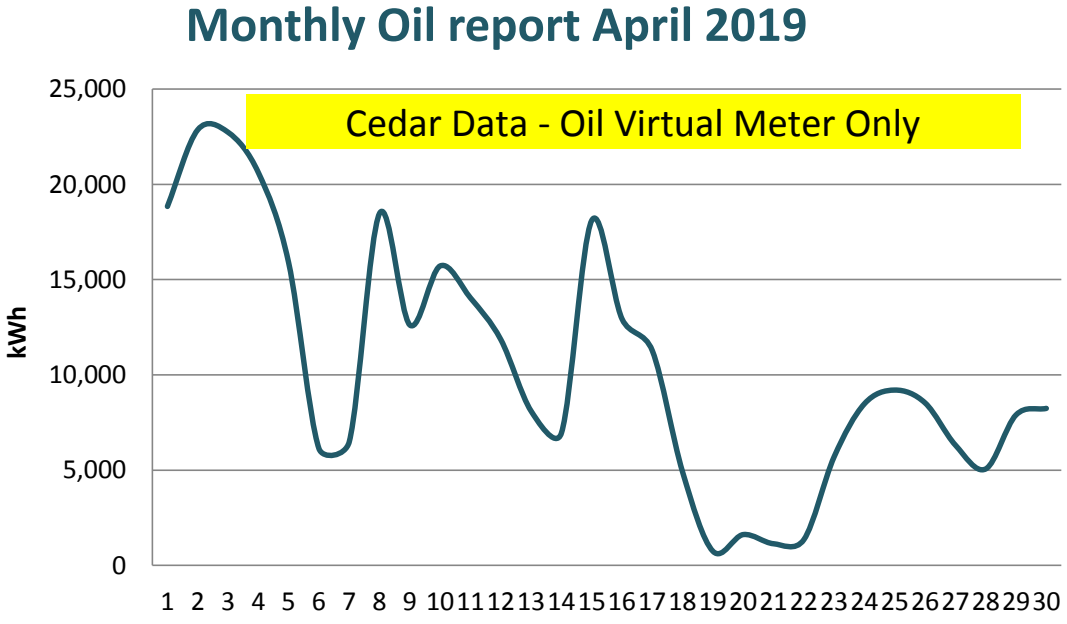
Monthly comparison data shows that the April 2019 fuel consumption is 42% lower (230,879 kWh) than April 2013.




**29%**

**Less fuel used**

*The heating works best when windows and doors are closed. If it is too hot, encourage staff to TURN DOWN room thermostats and thermostatic radiator valves before opening the windows.*

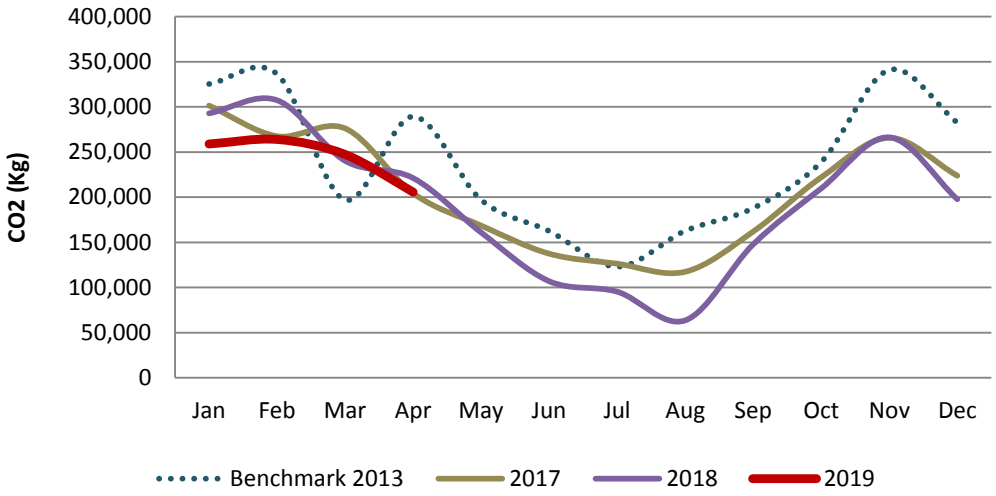


# Carbon dioxide emissions

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 April 2019 CO2 Emissions are 29% lower (84 Tonnes) than April 2013.

## Total annual emissions profile



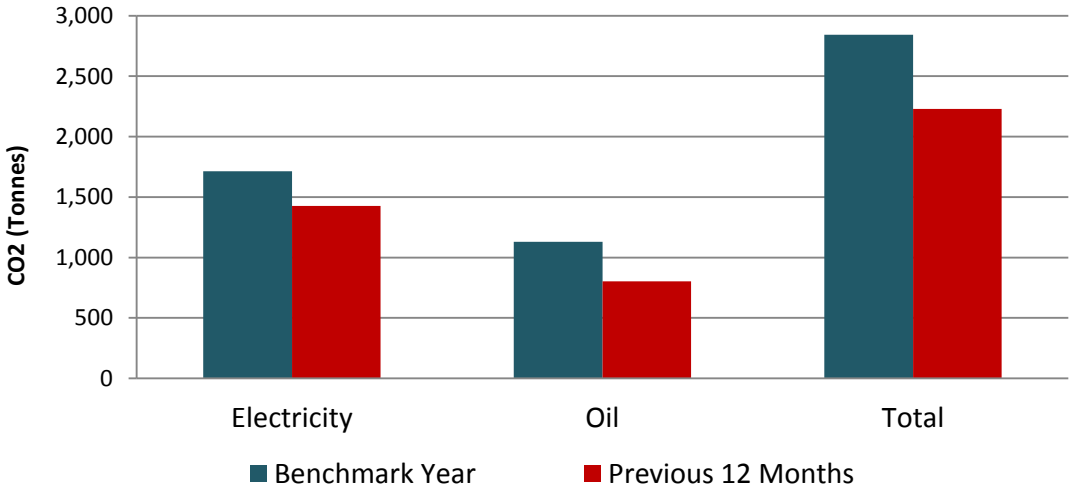

**22%**

**Less carbon emissions**

**Compared to Benchmark**


*The monthly EMAIL ENERGY MESSAGES are intended to be an easy way for you to start communicating with the staff in your building about energy efficiency. Simply forward the email on to all relevant staff.*

## Annualised tonnes of C02 emitted



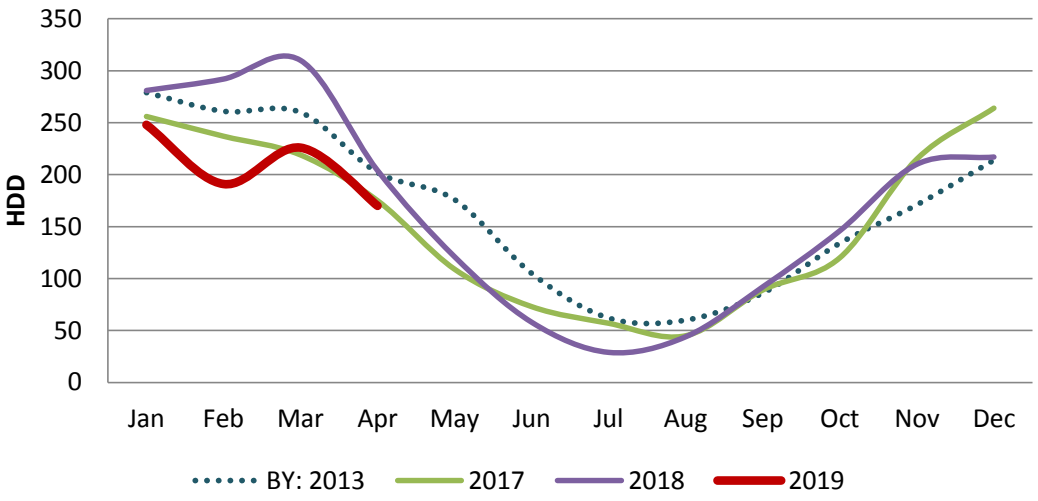

**Now 2018 is officially the hottest year on record, some 1.1°C above pre-industrial levels and 0.83°C above the long-term average.**

| Description | Electricity | Oil | Total |
|---|---|---|---|
| Benchmark Year | 1,713 | 1,131 | 2,844 |
| Previous 12 Months | 1,427 | 803 | 2,230 |
| % Difference | -16.7% | -29.0% | -21.6% |

## 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




Degree Days April 2019

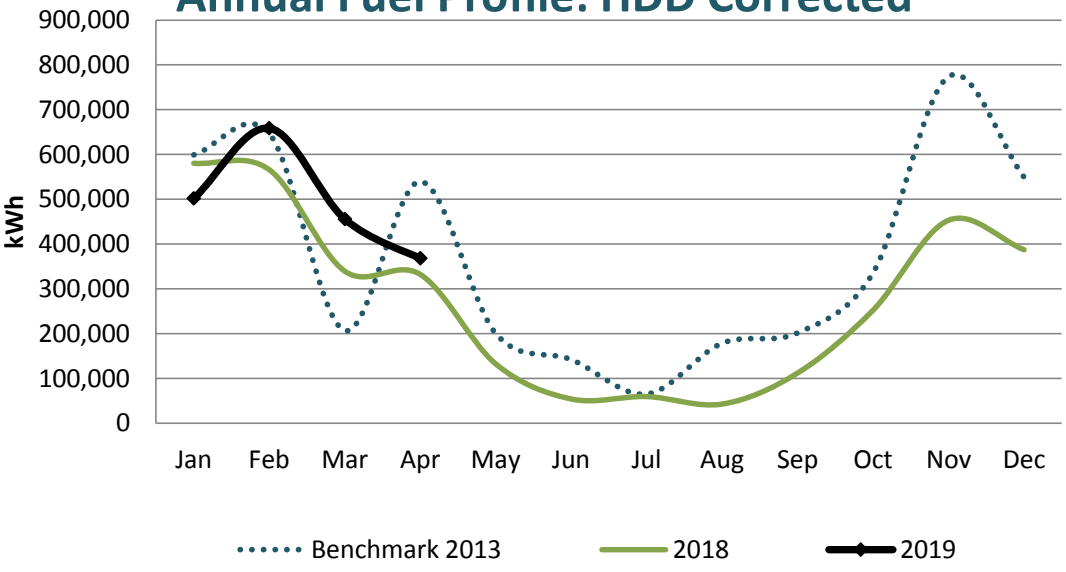
170

Degree Days April 2013

202

*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.*

### Annual Fuel Profile: HDD Corrected

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