



New College Swindon

Energy and Carbon Footprint Report 2019-2020

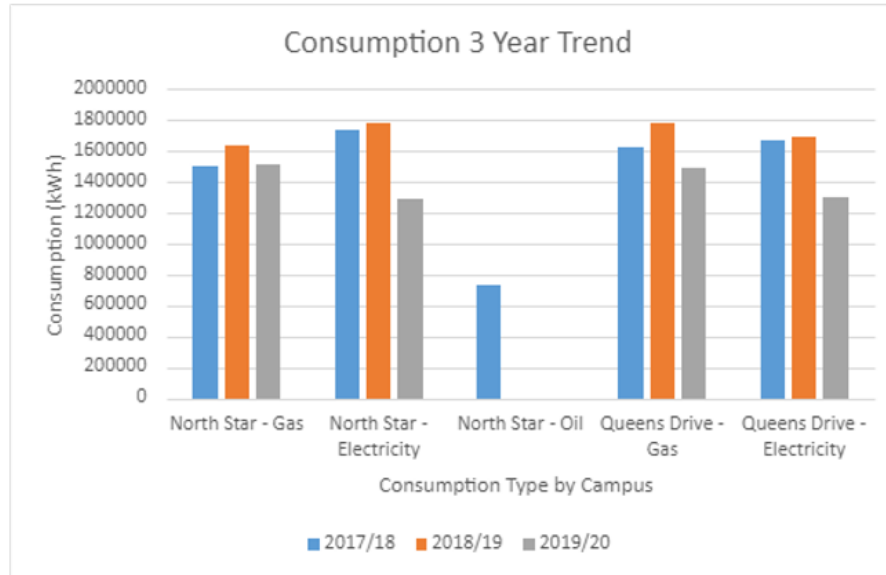
This report outlines the gas and electricity consumption, with associated carbon footprint, of both our North Star and Queens Drive Campus covering the period 1st August 2019 – 31st July 2020. The report also outlines our energy reduction strategies in place.



Queens Drive Campus	
Greenhouse gas emissions and energy use data for the period 1 August 2019 - 31 July 2020 – UK	
Energy consumption break down (kWh):	
Gas	1,493,177
Electricity	1,296,997
Scope 1 emissions (metric tonnes CO ₂ e)	
Gas	275
Scope 2 emissions (metric tonnes CO ₂ e)	
Electricity (Location-Based Reporting)	302
Scope 3 emissions (metric tonnes CO ₂ e)	
Scope 3 emissions not calculated	
Total gross emissions (metric tonnes CO ₂ e)	577
Intensity Ratio	
Staff Numbers	440
Total Emissions (tonnes CO ₂ e)	577
Intensity Ratio (tonnes CO ₂ e / staff number)	1.31

North Star Campus**Greenhouse gas emissions and energy use data for the period 1 August 2019 - 31 July 2020**

Energy consumption break down (kWh):	
Gas	1,514,287
Electricity	1,290,597
Scope 1 emissions (metric tonnes CO2e)	
Gas	278
Scope 2 emissions (metric tonnes CO2e)	
Electricity (Location-Based Reporting)	301
Scope 3 emissions (metric tonnes CO2e)	
Scope 3 emissions not calculated	
Total gross emissions (metric tonnes CO2e)	579
Intensity Ratio	
Staff numbers	320
Total emissions (tonnes CO2e)	579
Intensity Ratio (tonnes CO2e / staff number)	1.80



Measures taken to improve energy efficiency

- LED lighting – internal and external replacements – **95% completed**
- Decarbonisation of heating survey in place to be completed March 2022
- Inefficient boilers replaced with energy saving boilers – **70% completed**
- Insulation added to roofing – roofs identified in 19-20 were completed
- Sensors added to rooms to reduce lighting costs - **30% completed**
- Inverter pumps (energy efficient pumps) have been installed – where identified
- Thermostatic valves and the BMS system updated; giving more finite control of whole system – where identified
- Windows replacement project in place to improve insulation
- College cars changed to more efficient models
- Increased online meetings, reducing need for business travel
- management across both campuses
- Plant room upgrades across all sites
- Photovoltaic panels installed at Queens Drive Campus

Quantification and Reporting Methodologies

We have used the guidance included in the [Streamlined Energy and Carbon Reporting for College Corporations](#). We have also used the GHG Reporting Protocol – Corporate Standard and have used the 2020 UK Government's Conversion Factors for Company Reporting. For Scope 2 emissions, emissions from location based reporting were used rather than the emissions provided from our current energy supplier. Scope 3 emissions, including staff and student transport, waste, water, and financial investments, were not calculated in this report but the intention is to calculate these emissions over time.

Also omitted are Scope 1 emissions from owned vehicles but we seek to collect and report this data over time.