

## Streamlined Energy and Carbon Reporting (SECR) 2019-20

The report below details Energy for the following buildings and car parks, as used by Middlesbrough College. Report period 1st July 2019 to 1st August 2020



Middlesbrough College  
Dock Street  
Middlehaven  
Middlesbrough College  
TS2 1AD

### Electricity

Main Building  
MC6, Sixth Form  
STEM  
TTE (South Bank)  
CadCam  
Vulcan Street Car Park  
Open Space Lighting

### Gas

Main Building  
MC6, Sixth Form  
STEM  
TTE (South Bank)

### Solar PV

MC6, Sixth Form  
STEM

Energy source	Consumption	Scope	Emissions calculation
<b>Gas – total kWh (kilowatt-hours) used for the year, taken from gas bills for each site</b>	3,021,436 kWh (gross CV (calorific value))	Scope 1	3,021,436 kWh * 0.18385 (2019 fuels, natural gas conversion factor gross CV to kg Co2e)  = 555,491 kgCO2e  = 555.49 tCO2e
Electricity – total kWh used for the year, taken from the electricity bills for each site	4,380,909 kWh	Scope 2	4,380,909 kWh * 0.2556 (2019 UK electricity conversion factor to kgCO2e)  = 1,119,760 kgCO2e  = 1,119.76 tCO2e
Transport Car 1: 8,575 miles in the year Car 2: 6,250 miles in the year Car 3: 7,855 miles in the year Car 4: 6,877 miles in the year Car 5: 4,885 miles in the year Car 6: 7,696 miles in the year Car 7: 9,765 miles in the year Car 8: 7,255 miles in the year Mini-bus 1: 5,896 miles in the year Mini-bus 2: 5,232 miles in the year Mini-bus 3: 6,605 miles in the year Mini-bus 4: 6,614 miles in the year Mini-bus 5: 1,050 miles in the year Mini-bus 6: 1,238 miles in the year Van 1: 2,423 miles in the year Van 2: 7,150 miles in the year Van 3: 5,590 miles in the year	65,054 miles * 0.1693 (2019 SECR kg CO2e) Cars (by size) - Small Car  29,058 miles * 0.33713 (2019 SECR kg CO2e) Cars (by size) - Large Car  12,740 miles * 0.23644 (2019 SECR kg CO2e) Cars (by market segment) - Lower Medium	Scope 1	65,054 miles * 0.1693 = 11013.64  29,058 miles * 0.33713 = 9796.32  12,740 miles * 0.23644 = 3012.24  Total 106,852 miles  = 23,822 kgCO2e  = 23.8 tCO2e
Transport – total mileage for petrol reimbursed from staff claims = 162,072 miles	162,072 miles * 0.27901 ("average car: unknown fuel type" factor. )	Scope 3	162,072 miles * 0.27901 (2019 managed assets vehicles, average car conversion factor to kgCO2e)  = 45,219.70 kgCO2e  = 45.22 tCO2e
<b>Summary</b>			
<b>Gas</b>	<b>3,021,436 kWh</b>		<b>= 555.49 tCO2e</b>
<b>Electricity</b>	<b>4,380,909 kWh</b>		<b>= 1,119.76 tCO2e</b>
<b>Travel</b>	<b>268,924 miles</b>		<b>69 tCO2e</b>
<b>Total</b>			<b>1,821 tCO2e</b>

Intensity ratio - Emissions data (tCO2e) compared with a range of appropriate business activity: - Staff numbers (per Head) Student numbers (FTE) Turnover Total GIA (Square Kilometres)	OR	1,821 tCO2e / 1032 members of staff <b>= 1.76 tCO2e per staff member</b>
	OR	1,821 tCO2e / 8,726 FTE Students <b>= 0.21 tCO2e per Student FTE</b>
	OR	1,821 tCO2e / £43.636m Turnover <b>= 4.17 tCO2e per £100k Turnover</b>
	OR	1,821 tCO2e / 48,336 m <sup>2</sup> GIA <b>= 37.6 tCO2e per 1,000m<sup>2</sup> GIA</b>