

Headline Figures

To the right are our two headline figures for understanding total emissions and emissions scaled to the number of students at College.

Emissions (kg CO₂e) per Student

232.49

What does "kg CO₂e" mean?

There are many greenhouse gases and different activities can create different gas products. To keep things simple, we measure our emissions by their equivalent weight in carbon dioxide (or kilograms CO₂e). For a full explanation, [click here](#).

Total Emissions (kg CO₂e)

389,844.3

What is included in our emissions?

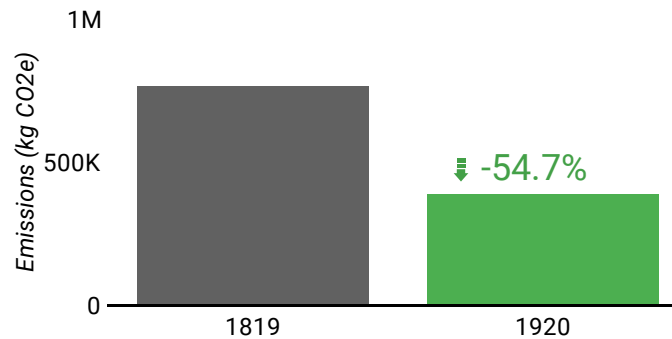
We keep a record of our significant emissions, categorised by the UK Government's [Greenhouse Gas Emission Factors](#). Our most significant emissions are produced by energy required to run and heat the site, followed by resources we use. Detailed emissions are provided on the next page.

2019 - '20 in 5 Pictures

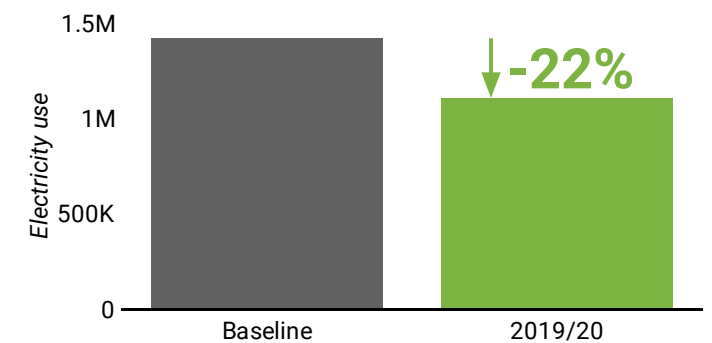
We set five targets for the academic year '19 - '20. The following 5 charts illustrate how we shot past these targets.

Naturally, the lockdown contributed to reduced energy usage and resultant energy emissions. However, large scale lighting improvements and the Facility Team's work to improve our biomass boiler efficiency has allowed us to phase out a lot of electricity and fossil fuel use on site throughout the entire academic year.

Achieve a 10% reduction in Scope 1 & 2 emissions (versus baseline year)



Achieve 20% reduction in electricity consumption (versus baseline year)



Achieve a 10% reduction in Emissions per student (versus previous year)

Emissions /Student (kg CO₂e)

2019 / 20

232.49

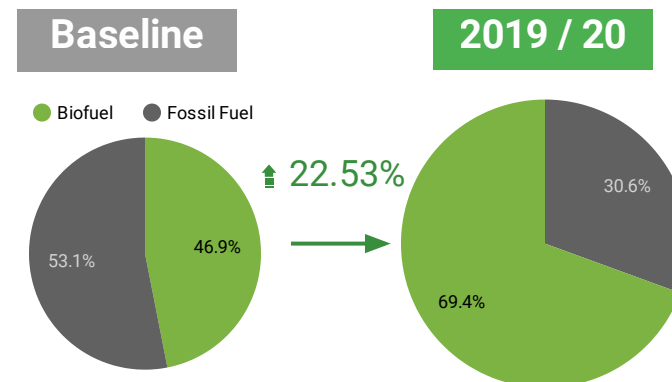
↓ -49.2%

2018 / 19

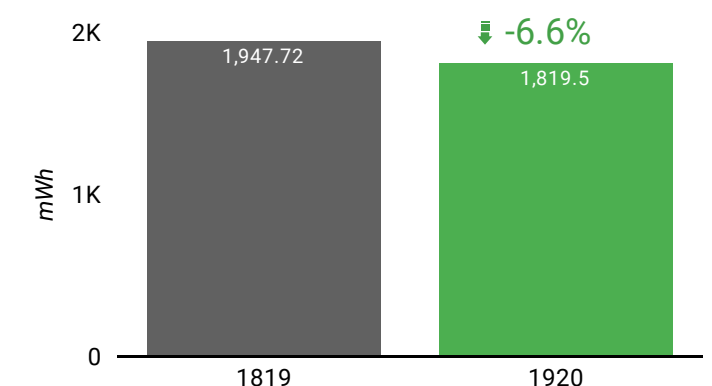
Emissions /Student (kg CO₂e)

457.26

Achieve 10% shift towards using renewable fuels for heat (versus baseline year)



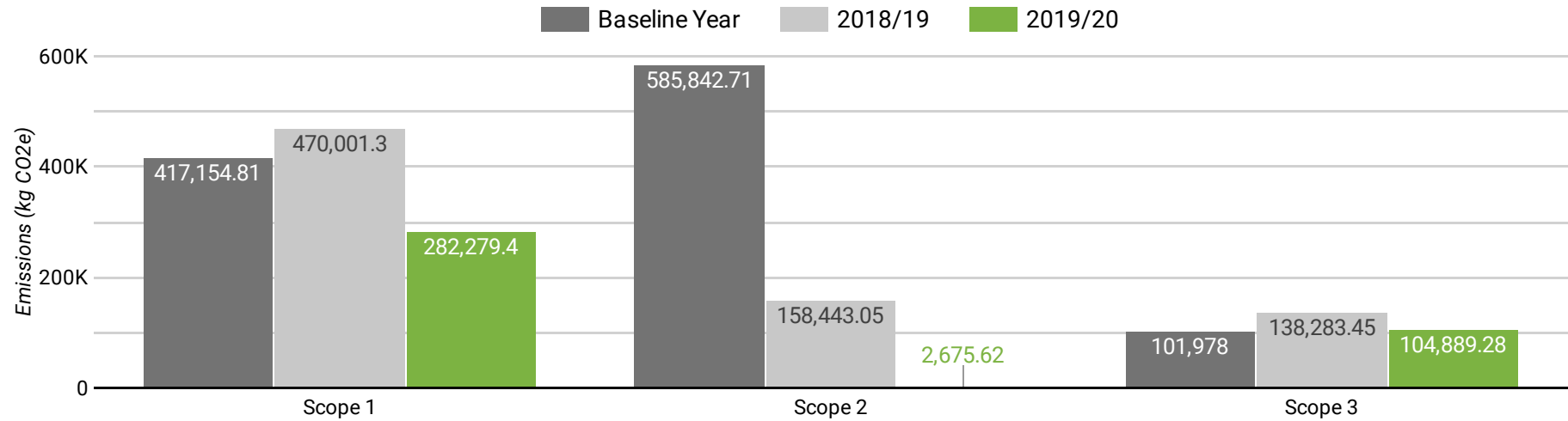
Reduce Heat used by 5% (versus previous year)





What are "Scopes"?

Pictured to the right are the College's emissions broken down by scope. "Scopes" are used to help sort the emissions of the College into useful categories:



Scope 1 is the sum of emissions resulting from our own production of energy - i.e. our conversion of various fuels to energy such as heat for our buildings and use of fuels in vehicles and grounds maintenance equipment.

Scope 2 refers to the sum of emissions resulting from the off-site generation of energy we use, but do not generate, on site (e.g. the electricity we purchase from the grid).

Scope 3 refers to the various emissions resulting from our waste products and material usage, as well as those emissions produced during the extraction and transportation of fuels we use (such as kerosene or biomass that is extracted and transported to us from off-site).

vs. last year

Resource / Activity	Emissions (kg CO2e)	% Δ
Burning oil	162,261.71	-52.4% ↓
Diesel (average biofuel blend)	33,644.44	-39.6% ↓
Gas oil	33,280.56	-3.2% ↓
LPG	19,987.27	338.7% ↑
Petrol (average biofuel blend)	9,191.84	-46.4% ↓
Wood chips	23,862.65	41.5% ↑
Wood pellets	50.94	-67.2% ↓
Grand total	282,279.4	-39.9% ↓

vs. last year

Resource / Activity	Emissions (kg CO2e)	% Δ
Electricity: UK	2,675.62	-98.3% ↓
Grand total	2,675.62	-98.3% ↓

vs. last year

Resource / Activity	Emissions (kg CO2e)	% Δ
Burning Oil	33,734.64	-52.5% ↓
Diesel (average biofuel blend)	8,003.38	-39.0% ↓
Electricity: UK	3,496.59	-32.2% ↓
LPG	3,070.09	435.9% ↑
Municipal Waste	5,030.69	-23.3% ↓
Organic: food and drink waste	null	-
Paper and board: paper	5,488.74	-27.1% ↓
Petrol (average biofuel blend)	2,490.45	-46.4% ↓
Water supply	12,178.76	53.6% ↑
Water treatment	25,405.87	55.7% ↑
Wood chips	5,868.05	14.7% ↑
Wood pellets	122.02	-68.4% ↓
Grand total	104,889.28	-24.1% ↓



Greenhouse Gas Emissions Report 2019/20

Reporting Principle		BCA Methodology
Relevance	Ensure the GHG inventory appropriately reflects the GHG emissions of the company and serves the decision-making needs of users – both internal and external to the company.	Annually, the College's activities will be reviewed to ensure any changes in business capture appropriate changes in inventory. Furthermore, intensity ratios, recording methodologies and efficiency activities will be reviewed for relevancy to the most recent complete year of data, to ensure the information provided and actions taken are relevant to the current business practices of the organisation.
Completeness	Account for and report on all GHG emission sources and activities within the chosen inventory boundary. Disclose and justify any specific exclusions.	This environmental report is appended with a "Disclosure List" (Appendix 2), within which all known exclusions are included, accompanied by justifications for the exclusions.
Consistency	Use consistent methodologies to allow for meaningful comparisons of emissions over time. Transparently document any changes to the data, inventory boundary, methods, or any other relevant factors in the time series.	This environmental report is appended with a "Disclosure List" (Appendix 2), within which all known exclusions are included, accompanied by justifications for the exclusions.
Transparency	Address all relevant issues in a factual and coherent manner, based on a clear audit trail. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.	All calculation methodologies are made available within the aforementioned "Reporting Methodology" appendix.
Accuracy	Ensure that the quantification of GHG emissions is systematically neither over nor under actual emissions, as far as can be judged, and that uncertainties are reduced as far as practicable. Achieve sufficient accuracy to enable users to make decisions with reasonable assurance as to the integrity of the reported information.	First and foremost, conversion factors from the "UK Government GHG Conversion Factors for Company Reporting" are used to calculate the emissions of the College's activities. Where extrapolation or further assumptions are necessary, best practice will be used and all such assumptions will be made clear within the "Reporting Methodology" Appendix.



Greenhouse Gas Emissions Report 2019/20

[Live Report](#)

[Annual Summary](#) / [Scope 1 - 3 Emissions](#) / [Reporting Method](#) / [Appendices](#)

[\(Experimental\)
Emissions Mapper](#)

Appendices are disclosed separately in the linked document below.

Click here for "[Appendices 2019/20](#)"