

Inspire Education Group

STREAMLINED ENERGY AND CARBON REPORT

2020-2021



Inspire
Education Group

*Peterborough and Stamford,
Thriving Together*

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INTRODUCTION

The Group recognises the importance of the UK Government's ambitions to streamline and reduce energy emissions. Inspire Education Group (IEG) is committed to making the most efficient and effective use of all energy sources, along with minimising the adverse environmental impacts of its activities through continuous improvement in environmental performance. It is in the interests of both the Group and the environment to look at means of reducing our carbon footprint by close monitoring of all major utility usage and energy efficient replacement to the fabric of the buildings as part of an on-going planned maintenance programme.

The reporting period covers 1 August 2020 – 31 July 2021, this is the first as the merged Inspire Education Group. Due to the differences on merger both colleges are reporting separately and then combined in this report to allow a baseline to be used going forward. The figures for the previous reporting year are also included to show change from the baseline. Subsidiaries, due to their size, are not obliged to report.

2020/21

The impact of the COVID pandemic during 2020 and 2021 has had a significant impact on the Group, and have skewed the energy consumption and travel due to lock downs that affected both 2019/20 and 2020/21. Additionally, when the colleges were open a number of Covid control measures were inherently less sustainable than normal Group operational practices; for example, increased ventilation has inevitably led to increased gas consumption during the colder months, while conversely the closure of campus and reduced numbers on site have seen a reduction in

electricity usage. The Borderville site at Stamford also opened following a 597m² extension to provide additional teaching space and consequently increasing the groups footprint and energy usage.

During 2020/21 IEG was awarded over £1.5M in condition funding by the Department for Education, matched with internal funds the group spent almost £2M on improvements to the condition of the buildings during the year, improving structural integrity and energy efficiency. This covered roof replacement, window replacement, changing lighting to low energy LED, water pipework and boiler replacement. It may take more than one year to assess the impact on overall energy consumption due the ongoing ventilation requirements in 2021/22.



GOALS AND PROGRESS TO DATE

GOALS

- To increase awareness of our energy costs
- Use data to inform adoption of energy efficiency measures to reduce the impact on climate change
- To reduce usage year on year, become more efficient, and reduce associated costs
- Implementation of online technologies for meetings to reduce the requirement for travel between sites or to other organisations
- To upgrade systems when capital projects are implemented
- Reduce electricity consumption through the implementation of energy efficient lighting
- Review and identify sources of heat loss for each building.



PROGRESS IN A YEAR

- LED lighting – internal replacements – 50% completed at Peterborough and 25% at Stamford
- LED lighting – external replacements – 100% completed at Peterborough and 5% at Stamford
- 5 inefficient boilers replaced with energy saving boilers
- Insulation added to roofing – 100% completed where identified. 5 Roofs at Peterborough and 3 roofs at Stamford
- Individual gas heaters being removed – 100% completed
- Inverter pumps (energy efficient pumps) have been installed – where identified
- Thermostatic valves installed and the BMS system has been updated giving more finite control of whole system – where identified
- Windows have been changed in a number of areas of the estates
- College cars at Peterborough have been changed to more efficient models
- Increase in online meetings reducing the need to travel
- Plant room upgrades across all sites
- Photovoltaic panels installed on various buildings
- A new teaching block was designed up to BREEAM very good standard for construction in 2021/22.

ENERGY EFFICIENCY PLAN

The Group is committed to reducing the environmental impact and increase efficiency and this plan covers Electric, Gas and Transport as required in The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018.

The Group is committed to reducing the environmental impact of journeys made by staff and students. This is detailed in the Travel Action Plan and the Green Travel Policy. The Group is continually looking for ways to improve the efficiency of our buildings. This includes:

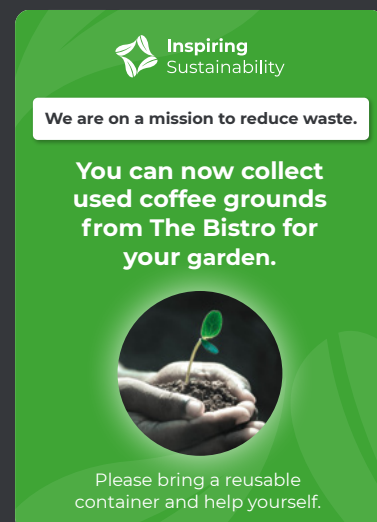
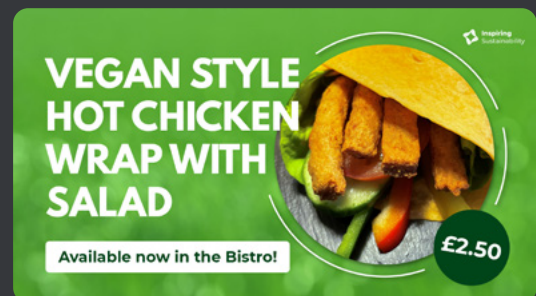
- Inspiring Sustainability group set up involving staff from across the Group looking to develop and implement a green plan
- Energy-efficient lighting to continue across the estate
- Ongoing assessment to reduce heating emissions
- Regular reviews of opportunities to reduce heat-loss, water consumption and to improve recycling
- Offset some of our carbon emissions against things like tree planting
- Looking at resources and activities that impact our carbon footprint
- Engaging with curriculum to embed environmental and sustainability education and qualifications.

Other areas, not included in this report, are also being developed. These are:

- Waste reduction
- Promotion of plant-based food options
- Eco-friendly packaging
- Reduced usage of paper and printing



**Inspiring
Sustainability**



MEASURING OUR PERFORMANCE

Inspire Education Group has produced these reports in line with the Guidance for Streamlined Energy and Carbon reporting, they are calculated on the UK Government GHG factors for company reporting. The Group has used the Corporate Standard and the 2021 UK Government’s Conversion Factors for Company Reporting.

Emissions have been calculated and reported in accordance with their individual scope and classification, which supports the infrastructure of the delivery of the Group’s core activities of teaching and learning. Data has been obtained through invoices and internally kept records of vehicle energy usage.

DEFINITION OF EMISSION SCOPES

Scope 1

Emissions from activities owned or controlled by the corporation that release omissions into the atmosphere. Examples include emissions from combustion in owned or controlled boilers, vehicles, must as minimum cover emissions from gas, and transport fuel combustion.

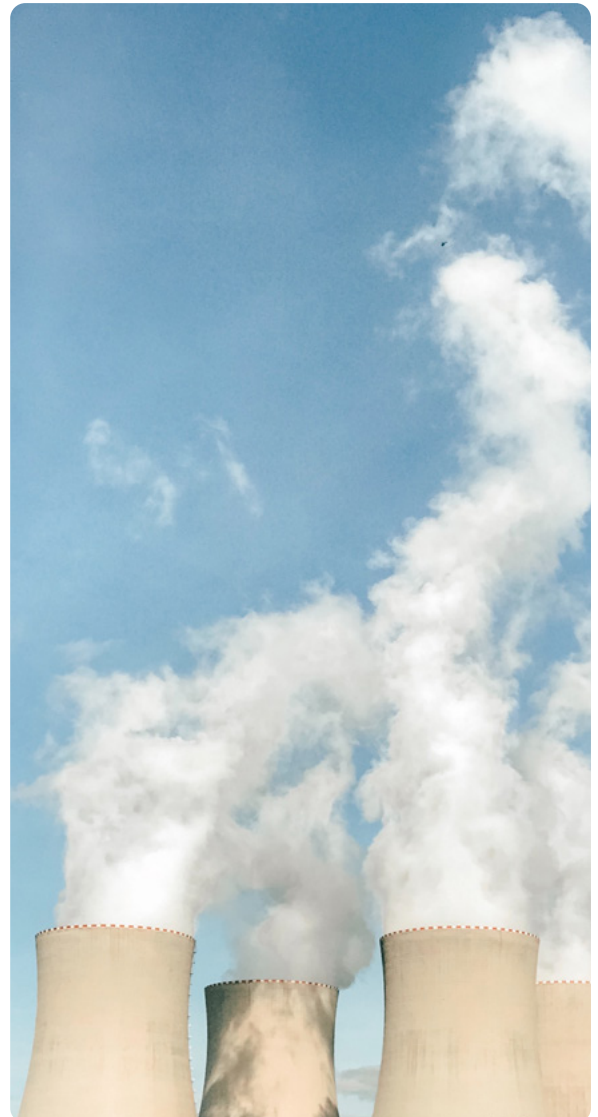
Scope 2

Emissions from own consumption of purchased electricity, heat, steam and cooling. These are a consequence of the corporation’s activities but are from sources not owned/controlled and as minimum cover emissions from purchased electricity.


Scope 3

Emissions because of the corporation’s actions where the source is not owned or controlled. For example, business travel in private cars and as a minimum cover energy use and related emissions from business travel in hire or employee owned vehicles where staff purchase the fuel.

The intensity ratio figure has been calculated using the staff total from payroll data for the period in question.



GREENHOUSE GAS EMISSIONS AND ENERGY USE DATA

Greenhouse Gas Emissions and Energy Use Data 1 August 2020 to 31 July 2021 – UK		 Peterborough College	
Energy Consumption Used to Calculate Emissions (kWh)	2019-20 Figure	2020-21 Figure	
Energy Consumption Break Down (kWh) (Optional):			
Gas	2,622,265.76	2,865,575.78	
Electrical	1,318,838	1,269,366.9	
Transport Fuel	60,081.2	43,378.86	
Scope 1 Emissions in Metric Tonnes CO₂e			
Gas Consumption	482.16	524.86	
Owned Transport	15.02	6.72	
Total Scope 1	497.18	531.58	
Scope 2 Emissions in Metric Tonnes CO₂e			
Purchased electricity	307.47	269.52	
Scope 3 Emissions in Metric Tonnes CO₂e			
Business travel in employee owned vehicles	10.73	4.49	
Total Gross Emissions in Metric Tonnes CO₂e	815.39	805.59	
Intensity Ratio			
Tonnes CO ₂ e per member of staff	1.24	1.32	

Greenhouse Gas Emissions and Energy Use Data

1 August 2020 to 31 July 2021 – UK

Stamford
College

Energy Consumption Used to Calculate Emissions (kWh)	2019-20 Figure	2020-21 Figure
Energy Consumption Break Down (kWh) (Optional):		
Gas	1,258,720	1,400,957.49
Electrical	1,017,778	1,069,468.2
Transport Fuel	53,215.89	66,021.23
Scope 1 Emissions in Metric Tonnes CO₂e		
Gas Consumption	231.44	256.60
Owned Transport	13.41	10.76
Total Scope 1	244.85	267.36
Scope 2 Emissions in Metric Tonnes CO₂e		
Purchased electricity	237.28	227.08
Scope 3 Emissions in Metric Tonnes CO₂e		
Business travel in employee owned vehicles	0.6559	6.31
Total Gross Emissions in Metric Tonnes CO₂e	482.79	500.75
Intensity Ratio		
Tonnes CO ₂ e per member of staff	1.77	1.69

Greenhouse Gas Emissions and Energy Use Data

1 August 2020 to 31 July 2021 – UK



Inspire
Education Group

Energy Consumption Used to Calculate Emissions (kWh)	2019-20 Figure	2020-21 Figure
Energy Consumption Break Down (kWh) (Optional):		
Gas	3,880,985.76	4,266,533.27
Electrical	2,336,616	2,338,835.1
Transport Fuel	113,297.09	109,400.09
Scope 1 Emissions in Metric Tonnes CO₂e		
Gas Consumption	713.60	781.46
Owned Transport	23.44	17.48
Total Scope 1	737.04	798.94
Scope 2 Emissions in Metric Tonnes CO₂e		
Purchased electricity	544.76	496.6
Scope 3 Emissions in Metric Tonnes CO₂e		
Business travel in employee owned vehicles	11.39	10.8
Total Gross Emissions in Metric Tonnes CO₂e	1,298.18	1,306.34
Intensity Ratio		
Tonnes CO ₂ e per member of staff	1.39	1.44

HOW WE CALCULATE OUR ENERGY USE FOR THE GROUP

Energy Source	Consumption (kWh)	Emissions Calculation Conversion factor		tCO2e
Gas – total used for the year, taken from gas bills for each site	4,266,533.27	0.18316	2021 fuels, natural gas conversion factor gross CV to tCo2e	781.46
Electricity – total used for the year, taken from the electricity bills for each site	2,338,835.1	0.21233	2021 UK electricity conversion factor to tCO2e	496.6
Transport (Owned) – Mini-buses and vans: 47,869 miles in the year	57,877.73	Minibuses and vans 0.18315	2021 managed assets vehicles, vans class 2 – used in lieu of passenger vehicles conversion for Minibuses and Vans, Small Car Petrol and Diesel for the cars	17.48
Cars (Petrol): 9,088 miles in the year	9,038.38	Petrol cars 0.24052		
Cars (Diesel): 3,810 miles in the year	3,356.31	Diesel cars 0.22143		
Transport – total mileage for petrol reimbursed from staff claims (34,878.32 Miles)	39,127.68	0.27596	2021 managed assets vehicles, average car conversion factor to tCO2e, unknown fuel	10.8
Total				1,306.34
Intensity ratio - Emissions data (tCO2e) compared with an appropriate business activity (staff numbers)				1.44
Number of staff				904

QUANTIFICATION AND REPORTING METHODOLOGY

We have followed the 2019 HM Government Environmental Reporting Guidelines. We have also used the GHG Reporting Protocol – Corporate Standard and have used the 2021 UK Government’s Conversion Factors for Company Reporting.

INTENSITY MEASUREMENT

The chosen intensity measurement ratio is total gross emissions in metric tonnes CO₂e per staff member, the recommended ratio for the sector.



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