



**Inspire**  
Education Group

# STREAMLINED ENERGY AND CARBON REPORT

*Peterborough and Stamford,  
Thriving Together*

# CONTENTS

2022/23 Overall Performance .....	4
Goals and Progress To Date .....	5
Energy Efficiency Plan .....	6
Greenhouse Gas Emissions and Energy Use Data .....	7
How We Calculate Our Energy Use for the Group.....	8
Measuring Our Performance .....	10

# INTRODUCTION

Inspire Education Group (IEG) recognises the importance of the UK Government’s ambitions to streamline and reduce energy emissions. 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, we will continuously 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 estates replacement and planned maintenance programme.

During 2021/22 IEG was awarded over £0.9M in condition funding by the Department for Education, matched with internal funds the group plan to spend £3M on improvements to the condition of the buildings over two years, improving structural integrity and energy efficiency. The award in June 2022 should start to impact energy use in 2022/23 onwards, being focused on roof replacements, window replacements, changing lighting to low energy LED, water pipework and boiler replacements. It may take more than one year to assess the impact on overall energy consumption, due the ventilation requirements in 2021/22 and the expanding of the Group Estate.

The reporting period covers 1 August 2022 – 31 July 2023, this is the third as the merged Inspire Education Group. Subsidiaries, due to their size, are not obliged to report separately.

## 2022/23 DEVELOPMENTS

During 2022/23 the Group returned to normal operations, with no restrictions to student numbers on sites or any extra ventilation requirements.

A new 901 sqm, £3.3m construction teaching block at Stamford was opened in July 2022. This was designed to BREEAM very good standard and will be used for teaching students’ modern methods of construction. The heating and hot water are provided through air source heat pumps. There are 56 photovoltaic panels installed on this building to offset the energy usage.



# 2022/23 OVERALL PERFORMANCE

The impact of the COVID pandemic during the 2019/20 baseline year had a significant effect on the Group's energy usage. This skewed energy consumption and travel due to lockdowns that affected both 2019/20 and 2020/21 reports. This makes the comparison between the baseline year (which had a twelve-week lockdown) and performance in 2022/23 difficult to compare. As a result, we have included the 2021/22 figures for comparison as a new baseline when operations returned to near normal.

This report covers scopes 1, 2 and 3 emissions, with overall performance summarised as follows:

**Total gross emissions for 2022/23 are 1,274.86 (decrease of 1.82% from 2021/22)**

This is a good overall performance and it is clear to see that funds that have been invested to improve the IEG estate have had a positive impact.

**Scope 1 734.59 Tonnes CO2e (decrease of 2.99% from 2021/22)**

Scope 1 emissions for gas consumption has decreased across the Group. This shows that the replacement of inefficient boilers, replacement of convection radiators with radiant panels and localised thermostatic control, replacing windows in over 53 teaching rooms/staff offices alongside flat roof replacements have all had a positive in year impact.

**Scope 2 520 Tonnes CO2e (decrease of 0.74% from 2021/22)**

Scope 2 emissions for electricity consumption have slightly decreased, this is possibly due to improvement measures to the buildings such as new windows, LED lighting and scheduling computer shut downs.

In future years this could possibly increase due to the switch to electric based heating systems, following the £422K conversion to as close to net zero as possible of the Red Zone at Stamford.

Solar generation for the Group was 21.723 MWh which has either offset the electricity consumption or generated an income for the Group.

**Scope 3 20.27 Tonnes CO2e (increase of 16.76% from 2021/22)**

Business travel in employee owned vehicles has increase from 17.36 the previous year. This could be a result of more marketing travel and also to external organisations in the development of new curriculum for T-Levels and great work placement opportunities.

**Intensity Ratio 1.41 (decrease of 10.75%)**

The decrease in this metric is directly due to the increase in staff numbers in 2022/23 compared to 2021/22, rather than the very marginal increase in overall emissions.

# GOALS AND PROGRESS TO DATE

## GOALS

- To increase awareness of our energy usage and 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, systems and equipment.
- Review and identify sources of heat loss for each building to inform future refurbishment projects.

## PROGRESS IN A YEAR

- LED lighting – 292 light fittings were replaced with energy efficient LEDs.
- LED lighting – 171 light fittings were replaced at UCP over summer 2023.
- Overall 80% of Peterborough College main building windows have now been replaced.
- 710 M<sup>2</sup> of flat roofing replacement was completed, overall approximately 80% of flat roofing on the main building has been replaced.
- Replacement of convection radiators with radiant panels and localised thermostatic control.
- Converted one teaching block to get the space to be as close to net zero as possible at a cost of £422K.

## The works included:

- Replacing the roof system.
- Installed solar PV panels.
- Replacing all doors and windows, including integral window blinds to help with solar glare and temperature control.
- Installation of air source heat pump system to provide heating and cooling to all classrooms and office spaces.
- The gas boiler de-commissioned and ready for removal.
- Installed Electric Vehicle charging points at Peterborough and Stamford College sites.
- Continued our IT replacement programme with more energy efficient models, replacing desktop computers for chrome books.
- Implemented flexible working to reduce staff journeys.
- Implemented meat free days in main catering outlets.
- Replaced multi-function devices across the group.
- Introduced printer software to reduce electricity paper and toner waste.
- Engaged with curriculum to embed environmental and sustainability qualifications on all courses.
- Planted 420 trees across our campuses.
- Revised signage and bins across all sites to reduce waste and promote recycling.
- Implemented 'No-mow May' for the second time.
- Introduced crisp packet recycling points.

# ENERGY EFFICIENCY PLAN

## The group is committed to:

- Reducing the environmental impact and increase efficiency and this plan covers Electric, Gas and Transport.
- 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 operations and buildings, this includes:

- Inspiring sustainability group set up involving staff from across the group looking to develop and implement IEG's green plan, 'Inspiring Sustainability'.
- Working with an external company to undertake a decarbonisation plan for the estate.
- Energy-efficient replacement lighting to continue across the estate.
- Ongoing assessment to reduce heating emissions.
- Investigating installing more photovoltaic panels across the group.
- Regular reviews of opportunities to reduce heat-loss, water consumption and to improve recycling.
- Offset some of our carbon emissions and increasing bio-diversity by tree planting, limited grass mowing, and installing bird and insect homes.
- Monitoring our operational hours to condense and reduce late openings and early starts.

- Development of a new 2,330 sqm net zero building at Peterborough to deliver Green Technologies curriculum, with a planned opening date of November 2024.

## Other areas IEG has invested in are:

- Increased recycling and waste reduction – progressed made in 2022/23 but further progress to be made in 2023/24.
- Promotion of plant-based food options – more vegan meals are on offer and meat free Monday is in place.
- Eco-friendly packaging in food outlets – phasing out of plastic single use containers.
- Further reduce usage of paper and printing.
- Facilitating a car share programme.
- Encouraging re-usable water bottles for staff and students.
- Switching to more sustainable cleaning products.
- Reducing the use of weed killers.
- Continuing to improve the IEG estate.



# GREENHOUSE GAS EMISSIONS AND ENERGY USE DATA

Greenhouse Gas Emissions and Energy Use Data 1 August 2022 to 31 July 2023 – UK			
			Inspire Education Group
Energy Consumption Used to Calculate Emissions (kWh)	2019-20 Baseline	2021-22 Figure	2022-23 Figure
<b>Energy Consumption Break Down (kWh) (Optional):</b>			
Gas	3,880,985.76	4,073,880.50	3,944,802.42
Electrical	2,336,616	2,886,249.5	2,857,139.10
Transport Fuel	113,297.09	99,714.29	112,943.50
<b>Scope 1 Emissions in Metric Tonnes CO2e</b>			
Gas Consumption	713.60	733.30	710.06
Owned Transport	23.44	23.97	24.53
<b>Total Scope 1</b>	<b>737.04</b>	<b>757.27</b>	<b>734.59</b>
<b>Scope 2 Emissions in Metric Tonnes CO2e</b>			
Purchased electricity	544.76	523.92*	520
<b>Scope 3 Emissions in Metric Tonnes CO2e</b>			
Business travel in employee owned vehicles	11.39	17.36	20.27
<b>Total Gross Emissions in Metric Tonnes CO2e</b>	<b>1,298.18</b>	<b>1,298.55</b>	<b>1,274.86</b>
<b>Intensity Ratio</b>			
Tonnes CO2e per member of staff	1.39	1.58	1.41

\*Electrical usage has increased, emissions decreased as UCP building is on a zero emissions tariff



# 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.	3,944,802.42	0.18	2021 fuels, natural gas conversion factor gross CV to tCo2e.	<b>710.06</b>
Electricity – total used for the year, taken from the electricity bills for each site. UCP is zero carbon.	2,857,139.10	0.19338	2021 UK electricity conversion factor to tCO2e.	<b>520</b>
Transport (Owned) – Mini-buses and vans: 53,552.5 miles in the year.	71,685.34	Minibuses and vans 0.17513	2022 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.	<b>24.53</b>
Cars (Petrol): 28,424.3 miles in the year.	34,285.63	Petrol cars 0.14652		
Cars (Diesel): 10,056 miles in the year.	6,973.25	Diesel cars 0.13989		
Transport – total mileage for petrol reimbursed from staff claims (56,984.91 miles).	73,786.24	0.17067	2022 managed assets vehicles, average car conversion factor to tCO2e, unknown fuel.	<b>20.27</b>
<b>Total</b>				<b>1,274.86</b>
Intensity ratio - Emissions data (tCO2e) compared with an appropriate business activity (staff numbers)				<b>1.41</b>
Number of staff				<b>903</b>

## 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 2022 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.



# 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 2022 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 emissions 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.



Tree planting at Peterborough College

### 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.



EV charging stations installed

### 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.



Centre for Green Technology building currently under construction

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

# Inspiring the next generation





**Peterborough College**  
[www.peterborough.ac.uk](http://www.peterborough.ac.uk)  
0345 872 8722



**Stamford College**  
[www.stamford.ac.uk](http://www.stamford.ac.uk)  
01780 484300



**University Centre Peterborough**  
[www.ucp.ac.uk](http://www.ucp.ac.uk)  
01733 214466

*This document can be  
made available in large  
print, audio, and Braille.  
Translation can also be  
available upon request.*