# Inspire Education Group STREAMLINED ENERGY AND CARBON REPORT

2019/20



Peterborough and Stamford, Thriving Together

## INTRODUCTION

Inspire Education Group (IEG) has produced this first report, recognising 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 constantly seek out and implement 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.

This report covers 1st August 2019 -31st July 2020; and for this period both colleges were independent entities, merging on 1st August 2020 to become the Inspire Education Group. This report shows each college separately and also combined as one entity, to establish a baseline against which we can report future performance. Subsidiaries due to their size would not itself be obliged to report.

The impact of the COVID pandemic during 2020 and into 2021 has had a significant impact on the College. A number of Covid control measures are inherently less sustainable than normal college operational practices; for example, increased ventilation will inevitably lead to increased gas and electrical consumption during the winter of 2020-21, while the re-introduction of paper towels in college toilet facilities and the requirement of disposable face covering and gloves has increased our overall waste consumption.

The removal of shared cutlery and crockery in canteens inevitably results in an increase of single-use containers and cups, which again, increased our waste consumption.

As a newly formed Group we are committed to creating and delivering against demanding carbon reduction targets, and will work with our Board of Governors to agree these now the baseline has been established.

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 2020 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.

# **GOALS AND PROGRESS**

#### 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 where we can.
- To upgrade systems when projects are implemented
- Reduce electricity consumption through the implementation of energy efficient lighting
- · Review and identify sources of heat loss for each building and improve as funding becomes available

#### Progress

- · LED lighting internal and external replacements – 40% completed
- Inefficient boilers replaced with energy saving boilers – 70% completed
- Insulation added to roofing roofs identified in 19-20 were completed
- · Individual gas heaters being removed -100% 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
- · College cars changed to more efficient models
- · Increased online meetings, reducing business travel
- Water saving management across the estates
- Plant room upgrades across all sites
- · Photovoltaic panels installed various buildings

# **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.

We are also continually looking for ways to improve the efficiency of our buildings. This includes:

- Continue to install energy-efficient lighting across the estate
- Ongoing assessment to reduce heating emissions
- · Regular review of opportunities to reduce heat-loss, water consumption and to improve recycling
- · Offset some of our carbon emissions against initiatives such as tree planting
- · Look at resources and activities that impact our carbon footprint
- Engage with curriculum to embed environmental and sustainability issues in learning

# **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. (Stamford college have not previously recorded this data however moving forward will be calculated). The intensity ratio figure has been calculated using a combined staff total from payroll data for the period in question.

#### Peterborough College - Greenhou energy use data for the period 1 A

Energy consumption used to calculate emiss

Energy consumption break down (kWh) (o

Gas

Electricity

Transport fuel

Scope 1 emissions in metric tonnes CO2e

Gas consumption

Owned transport

Total scope 1

Scope 2 emissions in metric tonnes CO2e

Purchased electricity

Scope 3 emissions in metric tonnes CO2e

Business travel in employee owned vehicles

Total gross emissions in metric tonnes CO2

Intensity ratio

Tonnes CO2e per member of staff

ns and 2020 - UK
4,001,184.96
2,622,265.76
1,318,838
60,081.2
482.156
15.0289
497.1849
307.47
10.73
815.39
1.24

Stamford College - Greenhouse gas emissions and energy use data for the period 1 August - 31 July 2020 - UK	
Energy consumption used to calculate emissions (kWh)	2,329,713.89
Energy consumption break down (kWh) (optional):	
Gas	1,258,720
Electricity	1,017,778
Transport fuel	53,215.89
Scope 1 emissions in metric tonnes CO2e	
Gas consumption	231.441
Owned transport	13.41
Total scope 1	244.851
Scope 2 emissions in metric tonnes CO2e	
Purchased electricity	237.285
Scope 3 emissions in metric tonnes CO2e	
Business travel in employee owned vehicles	0.6559
Total gross emissions in metric tonnes CO2e	727.6429
Intensity ratio	
Tonnes CO2e per member of staff	2.68

Energy consumption used to calculate emissions (kWh)	6,330,898.85
Energy consumption break down (kWh) (optional):	
Gas	3,880,985.76
Electricity	2,336,616
Transport fuel	113,297.09
Scope 1 emissions in metric tonnes CO2e	
Gas consumption	713.597
Owned transport	23.4389
Total scope 1	737.0359
Scope 2 emissions in metric tonnes CO2e	
Purchased electricity	544.755
Scope 3 emissions in metric tonnes CO2e	
Business travel in employee owned vehicles	11.386
Total gross emissions in metric tonnes CO2e	1,543.0329
Intensity ratio	
Tonnes CO2e per member of staff	1.66



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