

## Luminate Education Group Streamlined Energy and Carbon Report 2020-2021

### Introduction

Climate change and ecological destruction are some of the biggest challenges of our time. Schools colleges and universities, like all institutions, have a responsibility to address them, and to meet the UK government's target to reach net-zero emissions by 2050.

The Luminate Education Group (LEG) is committed to outstanding Education and Training. Responsible for the provision of a broad spectrum of education from Primary & Secondary Schooling through to Further, Higher and Adult Education with campuses across Leeds, Keighley and Harrogate our Group members work together in partnership and support each other to grow. As a responsible Educational Group, we intend to grow and develop our environmental and sustainability credentials. We are aware that our growth has the potential to impact directly and indirectly on the environment, locally, nationally and globally.

**This first Streamlined Energy and Carbon Report (SECR)** is the Luminate Education Group's response to The Companies (Directors Report) and Limited Liability Partnership (Energy and Carbon Report Regulations 2018) that encompass March 2019 Environmental Reporting Guidelines

Whilst Corporations are outside the scope of the 2018 Regulations and do not have to comply with the legislation the Education and Skills Funding Agency (ESFA) is encouraging all Corporations to report and make the information available to stakeholders. The Luminate Education Group is voluntarily preparing a SECR and supports the ESFA and UK Government desire for carbon reduction.

There are direct benefits in the measuring and reporting of environmental performance gaining a better understanding of exposure to risks of climate change and demonstrating leadership, which will help strengthen our Green Credentials in the marketplace. Organisations of all sizes are increasingly expected to measure and report on their environmental performance.

In line with the SECR guidance for colleges, the information contained in this report is calculated in accordance with UK Government Green House Gas GHG factors for company reporting. The data will provide key performance indicators (KPI) for reporting internally. These KPI's will increase awareness of energy costs and going forward how the adoption of energy reduction measures can improve efficiency and reduce Luminate Group impact on the environment whilst also saving on cost for re-investment into education or other environmental initiatives.

### Methodology

This first report will use data for the year 01 August 2020 – 31 July 2021 and in order to compare, data from year 01 August 2019 – 31 July 2020 has been compiled and will be shown for comparison as a baseline year.

COVID-19 restrictions and lockdowns for the two reporting years will have affected the energy use and distorted data compared to earlier years. The increased use of video-conferencing through M Teams, Google and Zoom as a result of health precautions will have reduced business travel and travel between campuses for business meetings. The emissions savings from these activities have not been quantified, but this practice has resulted in behavior changes that are expected to continue for the foreseeable future.

There are several widely recognised independent standards available. This report uses the GHG Reporting Protocol-Corporate Standard. Emissions are defined under three different Scopes by the GHG Protocol as shown in the table below:

Scope	Definitions	Report as Minimum
<b>Scope 1 – direct GHG emissions</b>	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	Emissions from gas and transport fuel consumption.
<b>Scope 2- energy indirect emissions</b>	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.	Emissions from purchased electricity
<b>Scope 3 – other indirect emissions</b>	Emissions because of the corporation`s actions where the source is not owned or controlled. For example, business travel in private cars.	Energy use and related emissions from business travel in hire or employees own vehicles where staff purchase the fuel

### Reporting Methodology:

We have followed the 2020 HM Government Environmental Reporting Guidelines and the Greenhouse Gas Reporting Protocol – Corporate Standard using the 2020 UK Government conversion factors for reporting. CO2 emissions are calculated as shown in the table below:

Scope	Energy Source	Emissions Calculation
<b>1</b>	Gas – Total KWh (kilowatt-hours) used for year, taken from gas bills for each site.	KWH x 0.18387 (2020 fuels, natural gas conversion factor gross CV to kg CO2e)
<b>2</b>	Electricity – Total KWh used for year taken from electricity bills for each site.	KWh x 0.23314 (2020 UK electricity conversion factor to kgCO2e)
<b>1</b>	Transport - Minibuses	Mileage x 1.19466 (2020 SECR KWh passenger & delivery vehicles, vans class 2 – used in lieu of passenger vehicles conversion)

3	Transport (Grey Fleet) Total mileage for petrol reimbursed from staff claims)	Mileage x 0.28052 (2020 managed assets vehicles, average car conversion factor to kg CO2e)
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## Intensity Measurement:

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

## Measures to Improve Energy Efficiency and our Environmental Performance

The Luminate Education Group strategic priority 2 for sustainability is to contribute to the Climate Emergency declaration with pioneering initiatives that:

- Significantly reduce each Luminate Group member`s carbon emissions
- Increase provision in the skills required for a low carbon economy
- Raise awareness and ways of tackling climate change amongst students and other stakeholders

The above strategic priorities have ben progressed in 2020/21 by:

- Ensuring all new builds maximise the opportunity to create a building and facilities that promote environmental sustainable development including BREEAM certification.
- Developing an integrated environmental strategy for capital build programs that endeavour to maximise environmental gain on replacement of older outdated facilities.
- Working to modernise the estate transferring activities out of older less efficient buildings
- Ensuring that appropriate environmental content is present within existing academic courses to raise awareness and provide a more informed understanding of climate change and impact.
- Continually adapting our curriculum for a sustainable future and society.
- Promoting our environmental aspirations and encouraging stakeholders to adopt sound sustainable management practices.
- Complying with all applicable legal requirements and other requirements to which the Luminate Education Group subscribes and relate to the environment.
- Maximising the efficient use of energy (gas and electricity) and water to buildings.
- Preventing and minimising pollution.
- Demonstrating sustainable approaches to the built environment in any construction, refurbishment and maintenance project.
- Considering sustainability in the procurement of all goods and services
- Managing activities in a way which prevents pollution to air, land and water.
- Applying the waste hierarchy to waste materials generated (reduce, reuse, recycle).
- Using renewable energy sources where possible.
- Encouraging staff and students to use sustainable travel options e.g. vehicle sharing, public transport, cycling.

Some recent environmental projects to improve energy efficiency include:

- Electric Vehicles purchased to replace existing Diesel/Petrol vehicle fleet in estates directorate
- Installation of EV chargers at Park Lane, Mabgate and Printworks.
- Installation of photovoltaic panels at Quarry Hill
- Installation of non-concussive (self-closing) taps to regulate flow of water at Park Lane.
- Program of LED lighting replacements at Park Lane and Printworks
- Cavity wall insulation at Park Lane
- Separation of waste for recycling at all sites
- Replacement of boilers at University Centre

## CO2 Emissions Report:

The report identifies total CO2 emissions for the Luminate Education Group (LEG) for 2020/21 and for comparison LEG CO2 emissions are shown for 2019/20.

The attached appendix identifies CO2 emissions and breaks down data into the following five individual reports:

- Leeds City College
- Keighley College
- Harrogate College
- Leeds Conservatoire
- Luminate Education Group

## Notes:

- COVID-19 restrictions through the two reported years are likely to distort some comparisons within the report.
- Where it has not been possible to separate out Scope 3 CO2 emissions into individual campuses, emissions have been calculated based on staff FTE numbers.
- Utilities CO2 emissions estimated for leased sites where consumption is shared and forms part of service charge.

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## Luminate Education Group CO2 Emissions

The Luminate Education Group will produce a SECR report that details our annual scope 1, 2 and 3 emissions.

The table below shows the Luminate Education Group's CO2 emissions as a whole for the academic year 2020/21 and compares it with emissions for the academic year 2019/20.

Scope 1	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Gas	None	0	2,168.60	1,632.50
Fleet Vehicles	None	0	5.46	8.02
Fugitive	None	0	4,108.29	4,107.71
<b>Total</b>			<b>6,282.35</b>	<b>5,748.23</b>

Scope 2	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Electricity	None	1.2	2,131.56	2,051.37

Scope 3	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Grey Fleet	None	0	10,830.45	26,781.24

Emissions	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Total CO2e	None	0	18,830.45	34,580.84
Up/Down Tonne			-15,750.39	
Up/Down %			-46%	

Intensity Ratio	%	2020/21	2019/20
Staff (All)		2,402	2,432
Tonnes CO2e per member of staff (All)	-44.96	7.82	14.21
Staff (FTE)		1,517	1,468
Tonnes CO2e per member of staff (FTE)	-47.36	12.40	23.56

**Total CO2e for Luminate Education Group  
18,830.45 Tonnes. Down by 15,750.39 Tonnes. 46% Saving.**

## Leeds City College CO2 Emissions

The Luminate Education Group will produce a SECR report that details our annual scope 1, 2 and 3 emissions.

The table below shows the Leeds City College CO2 emissions as a whole for the academic year 2020/21 and compares it with emissions for the academic year 2019/20

Scope 1	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Gas	None	0	1,269.01	1,098.71
Fleet Vehicles	None	0	2.90	5.43
Fugitive	None	0	3,527.00	3,527.00
<b>Total</b>			<b>4,798.91</b>	<b>4,632.03</b>

Scope 2	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Electricity	None	1.2	1,485.27	1,404.43

Scope 3	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Grey Fleet	None	100	8,501.98	21,108.97

Emissions	Specific Exclusions	% of activity data estimated	2020/21	2019/20
<b>Total CO2e</b>	None	0	<b>14,786.16</b>	<b>27,145.43</b>
Up/Down Tonne			-12,359.27	
Up/Down %			-46%	

Intensity Ratio	%	2020/21	2019/20
<b>Staff (All)</b>		<b>1,649</b>	<b>1,544</b>
Tonnes CO2e per member of staff (All)	-49.03	8.96	17.58
<b>Staff (FTE)</b>		<b>1,239</b>	<b>1,157</b>
Tonnes CO2e per member of staff (FTE)	-49.14	11.93	23.46

## Total CO2e for Leeds City College

**14,786.16 Tonnes. Down by 12,359.27 Tonnes. 46% Saving.**

## Keighley College CO2 Emissions

The Luminate Education Group will produce a SECR report that details our annual scope 1, 2 and 3 emissions.

The table below shows Keighley College's CO2 emissions as a whole for the academic year 2020/21 and compares it with emissions for the academic year 2019/20.

Scope 1	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Gas	None	0	301.30	185.08
Fleet Vehicles	None	0		
Fugitive	None	0	218.82	219.24
<b>Total</b>			<b>520.12</b>	<b>404.32</b>

Scope 2	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Electricity	None	0	292.78	298.29

Scope 3	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Grey Fleet	None	100	788.53	1,981.81

Emissions	Specific Exclusions	% of activity data estimated	2020/21	2019/20
<b>Total CO2e</b>	None	0	<b>1,601.44</b>	<b>2,684.42</b>
Up/Down Tonne			-1,082.98	
Up/Down %			-40.34%	

Intensity Ratio	%	2020/21	2019/20
<b>Staff (All)</b>		167	165
Tonnes CO2e per member of staff (All)	-41.08	9.58	16.26
<b>Staff (FTE)</b>		115	109
Tonnes CO2e per member of staff (FTE)	-43.46	13.92	24.62

## Total CO2e for Keighley College

**1,601.44 Tonnes. Down by 1,082.98 Tonnes. 40.34% Saving.**

## Harrogate College CO2 Emissions

The Luminate Education Group will produce a SECR report that details our annual scope 1, 2 and 3 emissions.

The table below shows Harrogate College's CO2 emissions as a whole for the academic year 2020/21 and compares it with emissions for the academic year 2019/20.

Scope 1	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Gas	None	0	271.73	179.74
Fleet Vehicles	None	0		
Fugitive	None	0	111.46	111.46
<b>Total</b>			<b>383.19</b>	<b>291.20</b>

Scope 2	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Electricity	None	0	117.82	121.45

Scope 3	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Grey Fleet	None	100	329.16	1,116.78

Emissions	Specific Exclusions	% of activity data estimated	2020/21	2019/20
<b>Total CO2e</b>	None	0	<b>830.17</b>	<b>1,529.43</b>
<b>Up/Down Tone</b>			<b>-699.26</b>	
<b>Up/Down %</b>			<b>-45.72%</b>	

Intensity Ratio	%	2020/21	2019/20
<b>Staff (All)</b>		<b>92</b>	<b>109</b>
Tones CO2e per member of staff (All)	-35.71	9.02	14.03
<b>Staff (FTE)</b>		<b>48</b>	<b>61</b>
Tones CO2e per member of staff (FTE)	-31.03	17.29	25.07

### Total CO2e for Harrogate College

**830.17 Tones. Down by 699.26 Tones. 35.71% Saving.**



## Leeds Conservatoire CO2 Emissions

The Luminate Education Group will produce a SECR report that details our annual scope 1, 2 and 3 emissions.

The table below shows the Leeds Conservatoire CO2 emissions as a whole for the academic year 2020/21 and compares it with emissions for the academic year 2019/20.

Scope 1	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Gas	None	0	326.56	219.96
Fleet Vehicles	None	0		
Fugitive	None	0	248.18	247.90
<b>Total</b>			235.69	467.86

Scope 2	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Electricity	None	0	235.69	227.20

Scope 3	Specific Exclusions	% of activity data estimated	2020/21	2019/20
Grey Fleet	None	100	796.87	2,573.68

Emissions	Specific Exclusions	% of activity data estimated	2020/21	2019/20
<b>Total CO2e</b>	None	0	1,607.30	3,268.74
<b>Up/Down Tone</b>			-1,661.44	
<b>Up/Down %</b>			-50.82%	

Intensity Ratio	%	2020/21	2019/20
<b>Staff (All)</b>		499	614
Tonnes CO2e per member of staff (All)	-39.47	3.22	5.32
<b>Staff (FTE)</b>		116	141
Tonnes CO2e per member of staff (FTE)	-40.25	13.85	23.18

**Total CO2e for Leeds Conservatoire  
1,607.30 Tonnes. Down by 1,661.44 Tonnes. 39.47% Saving.**