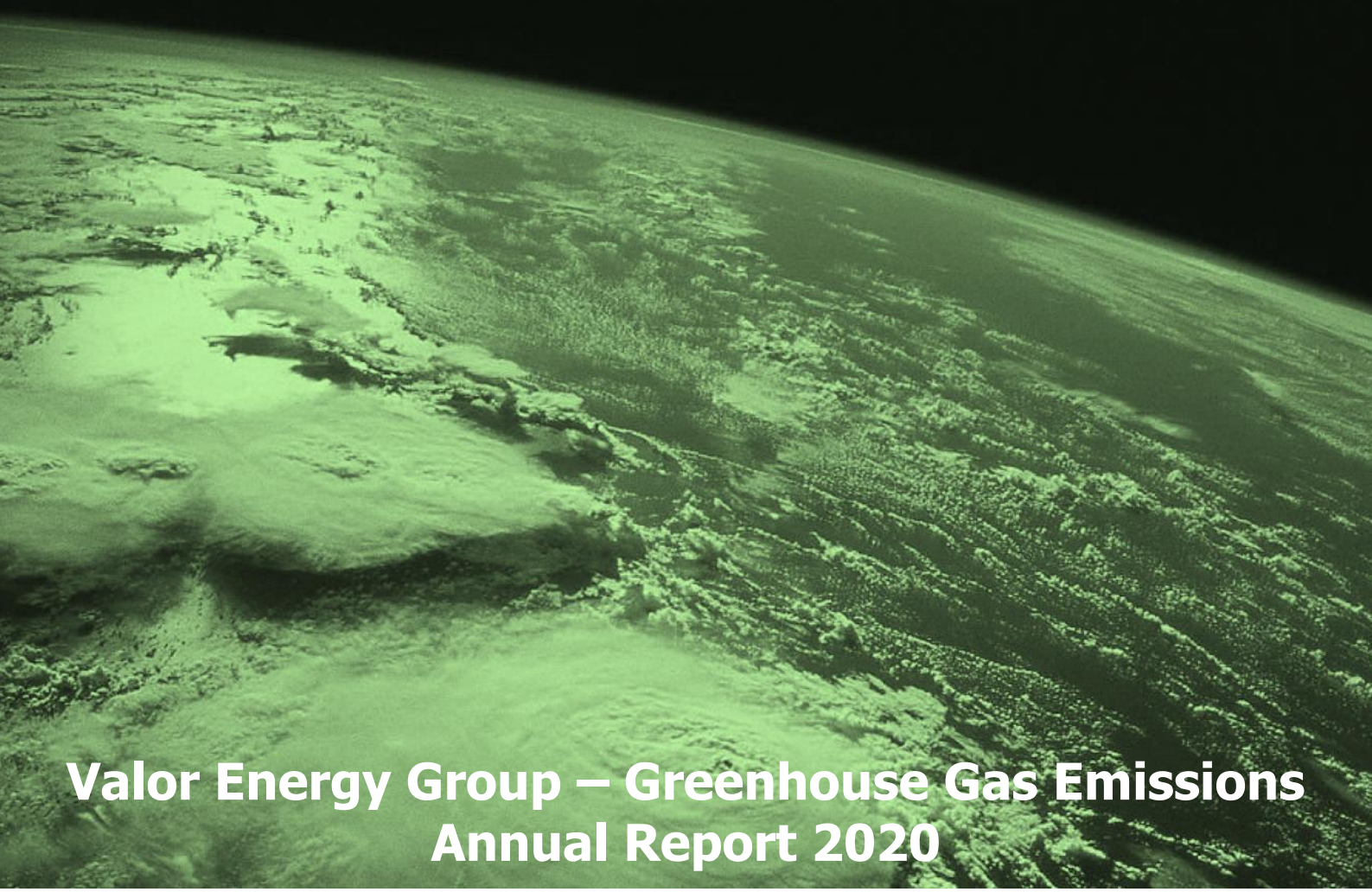

Valor Energy Group – Greenhouse Gas Emissions Annual Report 2020

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Greenhouse Gas Emissions Annual Report 2020

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Approver	CEO

Rev.	Date	Nature of Changes
1	7th April 2021	-
2	30th April 2021	GHG changed from kg CO_2e to tonnes CO_2e, and intensity ratio per employee added
3	7th June 2021	Corrected error in dates

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1 Introduction and Background

Valor Energy Group set out a plan in February 2020 to be carbon neutral across the entire Group by the end of March 2022. This plan was driven by the desire to respond to increasing environmental concerns both in the oil and gas industry and in wider society, and a desire to play our part in the UK oil and gas industry's energy transition to clean, green energy, and net zero carbon emissions.

1.1 Government and Industry Targets

The UK Government passed laws in June 2019 to end its contribution to global warming by 2050, and requires that greenhouse gas emissions are net zero by 2050. Similarly, the Scottish Government set out a similar target to end Scotland's contribution to climate change by 2045.

In September 2019, the UK's offshore oil and gas industry set out one of the first major industrial responses to the UK Government's plans, outlining its ambition to be the world's first net zero carbon offshore oil and gas sector. The 'Roadmap to 2035: A Blueprint for net zero' sets out five key themes requiring industry, government and regulator action to ensure the sector can continue to provide secure energy supply, support net-zero and remain a vital contributor to the UK economy. The

1.2 Valor Energy Group – Our Commitment

Valor Energy Group are committed to:

- Calculating and monitoring our carbon footprint on an annual basis
- Reducing our emissions wherever possible
- Offsetting our remaining emissions by removing as much carbon from the atmosphere as we emit each year

2 Greenhouse Gases – Categories and What We Measure

2.1 Categories of Greenhouse Gas Emissions

The Greenhouse Gas (GHG) Protocol is the internationally recognised standard for the corporate accounting and reporting of greenhouse gas emissions Corporate standard.

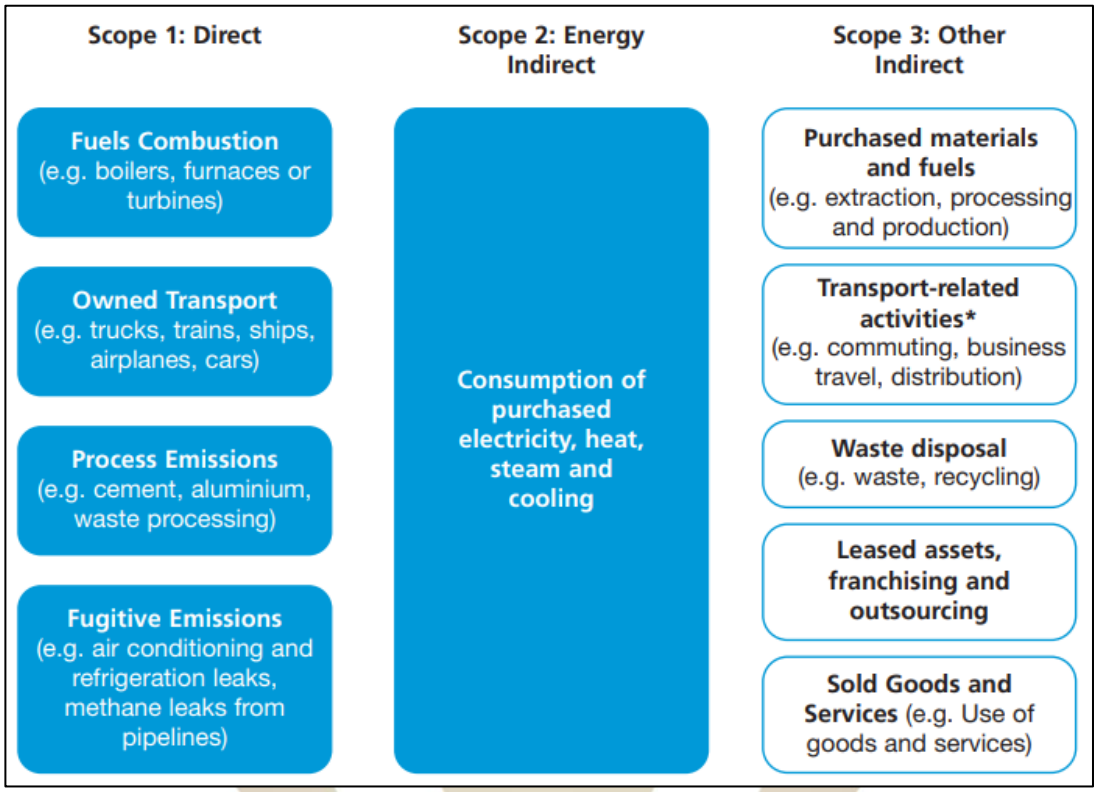
The GHG Protocol Corporate Standard classifies a company's greenhouse gas emissions into the following three scopes:

- **Scope 1 (Direct Emissions)** - Activities owned or controlled by an organisation that release emissions straight into the atmosphere. They are direct emissions. Examples of scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces, vehicles; emissions from chemical production in owned or controlled process equipment.

- **Scope 2 (Indirect Emissions – Owned)** – Emissions being released into the atmosphere associated with the consumption of purchased electricity, heat, steam and cooling. These are indirect emissions that are a consequence of an organisation's activities but which occur at sources you do not own or control.

- **Scope 3 (Indirect Emissions – Not Owned) -** Emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classed as scope 2 emissions. Examples of scope 3 emissions are business travel by means not owned or controlled by your organisation, waste disposal, or purchased materials or fuels.

The following diagram identifies the main types of emissions sources under each scope:



2.2 Greenhouse Gases included in our Measurements

Valor Energy Group measure the following Greenhouse Gases:

All SCOPE 1 EMISSIONS	All emissions associated with our company facilities and company vehicles
All SCOPE 2 EMISSIONS	All emissions associated with the purchase of electricity
Significant SCOPE 3 EMISSIONS	- Purchased fuels, e.g., diesel, heating oil - Business travel (typically business mileage and air travel) - Movement of equipment for operations (sea and air freight) - Waste generated on our facilities (waste sent to landfill or recycled)

2.3 Greenhouse Gases excluded from our Measurements

Scope 3 emissions which are not measured by Valor Energy Group are as follows:

- Purchased goods and services (with the exception of fuels used in our facilities and vehicles)
- Transportation of purchased goods and services from suppliers
- Fuel and energy directly used in our operations (with the exception of any operations conducted on our own facilities)
- Production of capital goods (buildings and vehicles acquired)
- Use of leased or sold goods
- Waste generated as a result of 'end of life treatment' for sold goods
- Employee commuting

These categories are excluded from our measurements as they are difficult to measure or estimate accurately, and we have focused instead on Scope 1 and Scope 2 emissions, and our significant Scope 3 emissions.

2.4 Information We Collect to Calculate our Emissions

Valor Energy Group collect the following information on an annual basis to calculate the greenhouse gas emissions as a result of our activities:

Emission Releasing Activity	**Source of Information**
Electricity use	Total kilowatt hours (kWh) used from electricity bills
Heating oil use (kerosene)	Litres of fuel purchased from invoices and receipts
Water supply	Total water treated in cubic metres (m3) from water bills
Fuel used in company owned vehicles	Litres of fuel purchased from invoices and receipts
Employee travel (land, and air by helicopter or aeroplane)	Receipts for details of travel, and distance calculation websites to obtain and road distances
Waste disposal / recycling	Tonnes of waste-treated by waste type (e.g., paper, glass, waste to landfill) from waste collection provider
Movement of goods (air freight, sea freight, and land freight)	Weight from invoices, and distance calculation websites to obtain distance

2.5 Period and Premises for which Data is Collected

Valor Energy Group report on greenhouse gas emissions annually. This report is for the period 1st January – 31st December.

The data is for Valor Energy Group's premises at Unit 23 Denmore Road, Bridge of Don, AB23 8JW where the Group consolidated to during the COVID-19 pandemic.

Prior to the premises consolidation, the Group also had the following premises and data is collated for those facilities up to the date that the lease agreements were terminated:

Valor Energy Group	Skene Business Centre, 7 Queens Gardens, Aberdeen
Cavitas Energy	Skene Business Centre, 23 Rubislaw Den North, Aberdeen
V-TES	Units 3 and 10, Clinterty Business Park, Kinellar

2.6 Calculation of Greenhouse Gas Emissions

Valor Energy Group use the Greenhouse Gas Conversion Factors provided by the UK Government Department for Business, Energy and Industrial Strategy. The Conversion Factors are annually updated excel spreadsheets with emissions factors that converts the data listed in section 2.4 above to greenhouse gas emissions.

The 2020 greenhouse gas conversion factors were used for all calculations in this report:
https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

Emissions are reported as a gross figure in tonnes of CO_2 equivalents (CO_2e). The Government Conversion Factors express emissions in kg CO_2e, so for the purpose of reporting, kg have been divided by 1000 to allow greenhouse gas emissions to be reported in tonnes CO_2e.

Gross emissions are the total greenhouse gas emissions before accounting for any emission reductions which have been purchased and is the headline reported figure.

CO_2e is a universal unit of measurement used to indicate the global warming potential of a greenhouse gas, expressed in terms of the global warming potential of one unit of carbon dioxide.

A short-written explanation is provided wherever possible to explain how the figures have been calculated and provide context for stakeholders.

3 Valor Energy Group – Greenhouse Gas Emissions – Period 1st January 2020 to 31st December 2020

The greenhouse gas emissions for Valor Energy Group for the period 1st January 2020 – to 31st December 2020 were:

55.645 tonnes CO_2e

This equates to:

1.918 tonnes CO_2e per employee

The table below, summarises the greenhouse gas emissions for each individual business per activity, and sections 3.1 to 3.8 detail the methodology and calculations used.

	carbon dioxide equivalent (tonnes CO2e)				
	AISUS	Cavitas	NSPS	Valor	TOTAL
Diesel	0.000	0.000	0.000	0.000	0.000
Heating Oil - Kerosene	11.141	0.000	0.000	0.000	11.141
Electricity	7.407	0.367	1.302	0.367	9.444
Business travel - land	0.227	0.111	0.360	0.000	0.699
Business travel - air	12.945	1.380	3.182	4.915	22.422
Business travel - helicopter	5.216	0.000	4.905	0.000	10.121
Freighting goods - sea	1.190	0.000	0.007	0.000	1.197
Freighting goods - air	0.139	0.000	0.102	0.000	0.241
Freighting goods - land	0.000	0.000	0.000	0.000	0.000
Waste - landfill	0.220	0.012	0.073	0.012	0.316
Waste - recyclable	0.022	0.001	0.007	0.001	0.031
Water supply	0.025	0.001	0.006	0.001	0.034
				TOTAL	**55.645**

3.1 Heating Oil - Kerosene

For the period 1st January 2020 – to 31st December 2020, heating oil used was 3500 litres.

This information was collated from invoices provided by Scottish Fuels.

The conversion factor used from UK Government GHG Conversion Factors for Company Reporting is 3.18317
The calculation is as follows:

3500 x 3.18317 / 1000 = **11.141 tonnes CO_2e**

3.2 Electricity

For the period 1st January 2020 to 31st December 2020, electricity used was as follows:

Unit 23 Denmore Road	31770.9 kwH
7 Queens Gardens	1575 kwH (Note, electricity used was unavailable as premises were in a serviced office. Figure is an estimate based on average consumption of a micro business from businessenegy.com)
23 Rubislaw Den North	1575 kwH (Note, electricity used was unavailable as premises were in a serviced office. Figure is an estimate based on average consumption of a micro business from businessenegy.com)
Units 3 and 10, Clinterty Business Park	5586 kwH

This information was collated from electricy bills with the exception of the estimates noted above.

The conversion factor used from UK Government GHG Conversion Factors for Company Reporting is 0.23314
The calculation is as follows:

40506.9 x 0.23314 / 1000 = **9.444 tonnes CO_2e**

3.3 Business Travel - Land

For the period 1st January 2020 to 31st December 2020, travel by car on land on business (excluding employee commuting) was as follows:

AISUS Offshore	508.1 miles
V-TES	805 miles
Cavitas	248 miles
Valor Energy Group	0 miles

This information was collated using employee expense claims.

The conversion factor used from UK Government GHG Conversion Factors for Company Reporting is 0.44752
The calculation is as follows:

1561.1 x 0.44752 / 1000 = **0.699 tonnes CO_2e**

3.4 Business Travel – Air

For the period 1st January 2020 to 31st December 2020, travel by aeroplane on business was as follows:

AISUS Offshore	88574.26km
V-TES	21770km
Cavitas	9442.84km
Valor Energy Group	33628km

This information was collated using invoices for flights, and distances from https://www.distance.to/

The conversion factor used from UK Government GHG Conversion Factors for Company Reporting is 0.14615
The calculation is as follows:

153415.1 x 0.14615 / 1000 = **22.422 tonnes CO_2e**

3.5 Business Travel – Helicopter

For the period 1st January 2020 to 31st December 2020, travel by helicopter for offshore operations was as follows:

AISUS Offshore	30150km (estimated based on actual number of return helicopter journeys (67) with an estimated return distance of 450km for typical travel to a North Sea asset)
V-TES	28350km (estimated based on actual number of return helicopter journeys (63) with an estimated return distance of 450km for typical travel to a North Sea asset

The UK Government GHG Conversion Factors do not provide a factor for helicopter travel, so the conversion factor used is 1/19th (based on 19 passengers per aircraft) of emissions from the Guidance on the Determination of Helicopter Emissions published in December 2015: https://www.bazl.admin.ch/bazl/en/home/specialists/regulations-and-guidelines/environment/pollutant-emissions/aircraft-engine-emissions/guidance-on-the-determination-of-helicopter-emissions.html

The factor per passenger is 0.173

The calculation is as follows:

58500 x 0.173 / 1000 = **10.121 tonnes CO_2e**

3.6 Freighting Goods – Sea and Air

For the period 1st January 2020 to 31st December 2020, freighting of goods was as follows:

AISUS Offshore	Sea	199.91 tonnes	450km (estimated based on return distance of 450km for typical travel to North Sea asset)
	Air	0.272 tonnes	450km by helicopter (estimated based on return distance of 450km for typical travel to North Sea asset)
V-TES	Sea	1.2 tonnes	450km (estimated based on return distance of 450km for typical travel to North Sea asset)
	Air	0.2 tonnes	450km by helicopter (estimated based on return distance of 450km for typical travel to North Sea asset)

This information was collated using freight invoices.

Land freight is excluded as this information is not readily available, and the km travelled would be minimal to local port and/or airport.

The conversion factor used from UK Government GHG Conversion Factors for Company Reporting is 0.01323 for sea, and 1.13382 for air.
The calculation is as follows:

Sea – 201.11 x 450 x 0.01323 / 1000 = **1.197 tonnes CO_2e**

Air – 0.472 x 450 x 1.13382 / 1000 = **0.241 tonnes CO_2e**

3.7 Waste – Landfill and Recyclable

For the period 1st January 2020 to 31st December 2020, electricity used was as follows:

	Landfill	**Recyclable**
Unit 23 Denmore Road	0.48 tonnes	1.02 tonnes
7 Queens Gardens (estimate based on headcount versus waste generated by AISUS Offshore. Information unavailable as premises were in a serviced office – ¼ of headcount for 0.21 of year)	0.0252 tonnes	0.05355 tonnes
23 Rubislaw Den North (estimate based on headcount versus waste generated by AISUS Offshore. Information unavailable as premises were in a serviced office - ¼ of headcount for 0.21 of year)	0.0252 tonnes	0.05355 tonnes
Units 3 and 10, Clinterty Business Park (estimate based on headcount versus waste generated by AISUS Offshore – 1/3 based on headcount and period of time spent at Clintery premises prior to COVID-19 lockdown)	0.16 tonnes	0.34 tonnes

This information was collated using the Annual Waste Report provided by EIS Waste.

The conversion factor used from UK Government GHG Conversion Factors for Company Reporting is 458.176 for landfill, and 21.317 for recyclables.
The calculation is as follows:

Landfill 0.6904 x 458.176 / 1000 = **0.316 tonnes CO_2e**

Recyclables 1.4671 x 21.317 / 1000 = **0.031 tonnes CO_2e**

3.8 Water Supply

For the period 1st January 2020 to 31st December 2020, electricity used was as follows:

Unit 23 Denmore Road	73 cubic metres
7 Queens Gardens	3.8325 cubic metres (estimate based on headcount versus water used by AISUS Offshore. Information unavailable as premises were in a serviced office – ¼ of headcount for 0.21 of year)
23 Rubislaw Den North	3.8325 cubic metres (estimate based on headcount versus water used by AISUS Offshore. Information unavailable as premises were in a serviced office – ¼ of headcount for 0.21 of year)
Units 3 and 10, Clinterty Business Park	18.25 cubic metres (estimate based on headcount versus water used by AISUS Offshore – 1/3 based on headcount and period of time spent at Clintery premises prior to COVID-19 lockdown)

This information was collated from water bills with the exception of the estimates noted above.

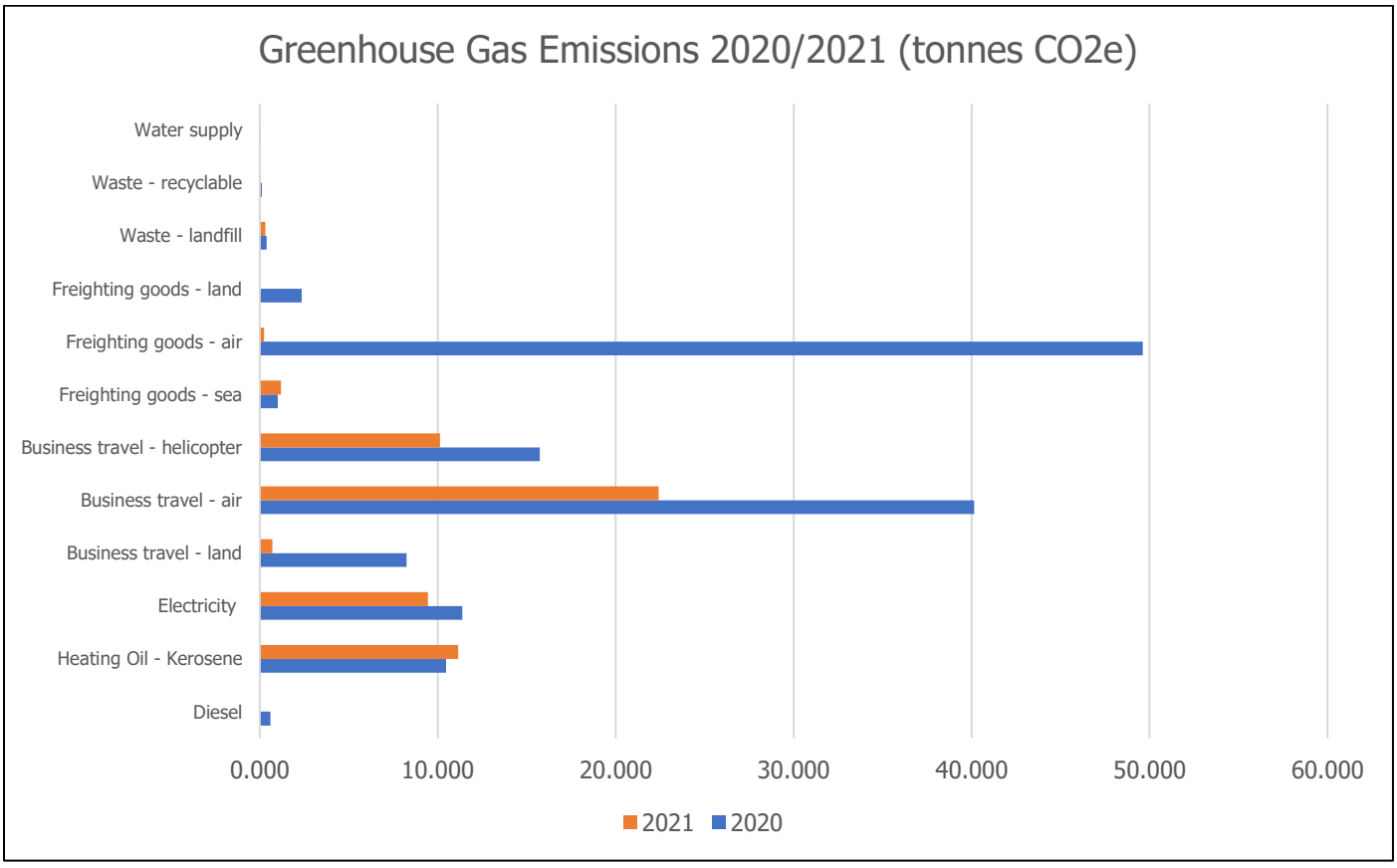
The conversion factor used from UK Government GHG Conversion Factors for Company Reporting is 0.344
The calculation is as follows:

98.915 x 0.344 = **0.034 tonnes CO_2e**

4 Greenhouse Gas Emissions Trends

Valor Energy Group commenced measurement of greenhouse gas emissions for the period 1st January 2019 to 31st December 2019, allowing the emissions for 2020 to be compared to the previous year:

- Total greenhouse gas emissions decreased from 140.096 tonnes CO_2e in 2019 to 55.645 tonnes CO_2e in 2020. A comparison of emissions year on year per category is shown below:



- Per employee, the greenhouse gas emissions have reduced from 4.831 tonnes CO_2e in 2019 to 1.918 tonnes CO_2e in 2020.
- The reason for the decrease is the economic downturn due to the COVID-19 pandemic, which resulted in a decrease in operational activity across the Group from approximately mid-March 2020 for the remainder of the year. As illustrated above, the decrease in operational activity led to a significant decrease in the freighting of goods by air to long haul destinations, and to business travel by aeroplane and helicopter.
- The consolidation of premises to Unit 23 Denmore Road was due to the COVID-19 lockdown which resulted in many employees working from home. It is likely that emissions related to the facility in 2021 will give a clearer picture of any reduction once a full year of data in the consolidated premises is available.
- The exterior lighting on the Unit 23 Denmore Road building was changed to energy efficient LED style in 2020, however it is still too early to assess any benefits in terms of emission reduction as a result of reduced electricity usage.

5 Carbon Offsetting

Valor Energy Group are committed to removing as much carbon from the air each year as we emit.

To achieve this goal, we have partnered with Forest Carbon who lead the way in UK woodland creation for carbon capture. Forest Carbon's partner projects have planted over 9.5 million new trees since 2006, removing nearly 2.5 million tonnes of CO_2 from the atmosphere, as well as providing a host of other benefits to society, including flood mitigation, enhanced biodiversity and increased public access. In addition to UK forest creation, Forest Carbon work with global partners to protect established forests and peatland.

5.1 Purchased Carbon Credits – UK Projects

Valor Energy Group have helped fund the following carbon removal projects in the UK:

Partner	Assignment Date	Project	Standard	Assignment Quantity
Forest Carbon	29th March 2021	Forest Carbon Group Scheme 8 (Balmedie Farm)	Woodland Carbon CO_2de	30 credits (equivalent to 30 tonnes of CO2e)

Assignment of the above credits can be viewed on the IHS Markit Public Registry here:

Valor's support of the Balmedie Farm project will offset 30 tonnes of CO2 emissions over the 70 year duration of the project.

5.2 Purchased Carbon Credits – International Projects

Valor Energy Group have helped fund the following international carbon removal projects:

Partner	Assignment Date	Project	Standard	Assignment Quantity
Forest Carbon	29th March 2021	Katingan Peatland and Forest Conservation, Indonesia This project protects and restores over 140000 hectares of peatland ecosystems.	VERRA CCBA	35 credits (equivalent to 35 tonnes of CO2e)
Forest Carbon	29th March 2021	Jurua Amazonian Rainforest Conservation, Brazil This project prevents deforestation in 28000 hectares of pristine rainforest.	VERRA CCBA	35 credits (equivalent to 35 tonnes of CO2e)

Valor's support of these two projects have immediately offsetted 70 tonnes of CO2 emissions, allowing Valor to be carbon neutral for the period 1st January to 31st December 2020.