LANIER SOUTH WEST GREENHOUSE GAS ASSESSMENT – 2024

JANUARY 2024 – DECEMBER 2024

PRODUCED BY CO2BALANCE UK LTD

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Greenhouse Gas Assessment – 2024

Produced by

CO2balance UK Limited

Produced during February 2025

Version 1

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BACKGROUND & METHODOLOGY

This document provides the carbon emissions of Lanier South West for the assessment calendar year 2024 and is based on data collated and provided by Lanier South West to CO2balance.

The assessment methodology for the Greenhouse Gas Assessment follows the reporting principles and guidelines provided by the Greenhouse Gas Protocol published by the World Business Council for Sustainable Development and the World Resources Institute (WBCSD/WRI Protocol). In line with the WBCSD/WRI Protocol, CO2balance uses these procedures to undertake Greenhouse Gas Emissions Assessments.

SCOPING THE GREENHOUSE GAS ASSESSMENT

When accounting for Greenhouse Gas Assessment emissions it is important to draw clear organisational boundaries. The WBCSD/WRI Greenhouse Gas Protocol sets boundaries that are consistent with the organisational boundaries used for financial reporting purposes. For the purpose of this report CO2balance defined the scopes of direct and indirect emissions based on Lanier South West's operational boundary.

SCOPES

The Greenhouse Gas Protocol and the ISO 14064_1 standard define three protocols that must be used when determining emissions. These are divided into scopes.

- Scope 1 – Direct Emissions (fuel combustion, company owned vehicles)
- Scope 2 – Indirect Emissions (such as purchased electricity for own use)
- Scope 3 – Indirect Emissions (outsourced operations, business travel in vehicles not owned by the company, embodied energy in products purchased, waste disposal)

This assessment covers emissions from Lanier South West's office in Cheddar and includes business travel from staff based in this office.

REPORTING APPROACH

CO2balance's Greenhouse Gas Emissions Assessment is based on the application of relevant conversion factors (i.e. amount of CO2 produced per unit of fuel consumed). The approach is considered the most pragmatic, since the quantity of key greenhouse gases produced in most combustion and manufacturing processes is well understood.

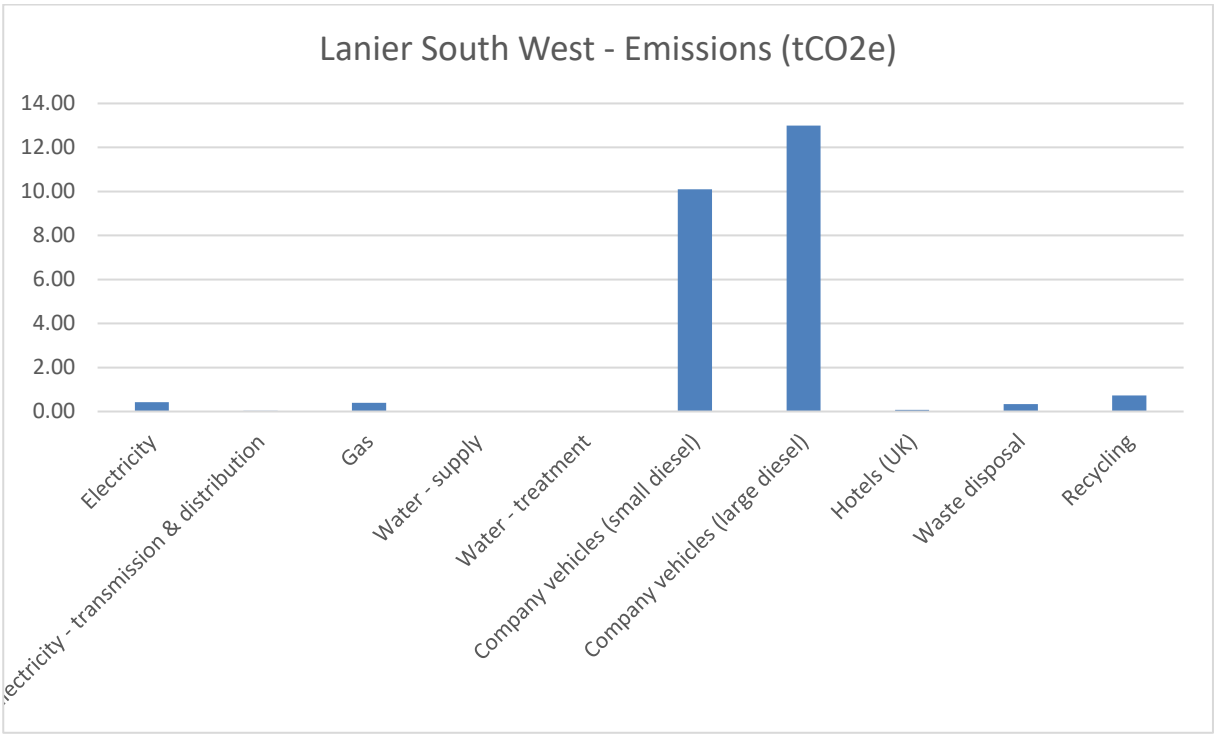
CO2balance is guided by the precautionary principle. Where there is any doubt over activities undertaken, or where there is a choice of published figures available for calculating greenhouse gas emissions, a conservative "worst case" scenario is assumed, unless otherwise specified.

HEADLINE FIGURES

Carbon Footprint for January 2024 to December 2024 **25.11 tCO_2e**

Emissions per FTE Employee[1] 2.79

Activity	kg CO_2	tCO_2e
Electricity	425.49	0.43
Electricity - transmission & distribution[2]	37.61	0.04
Gas	392.14	0.39
Water - supply	9.19	0.01
Water - treatment	11.14	0.01
Company vehicles (small diesel)	10,096.39	10.10
Company vehicles (large diesel)	12,998.50	13.00
Hotels (UK)	72.80	0.07
Waste disposal	333.35	0.33
Recycling	733.37	0.73
Totals	**25,109.98**	**25.11**

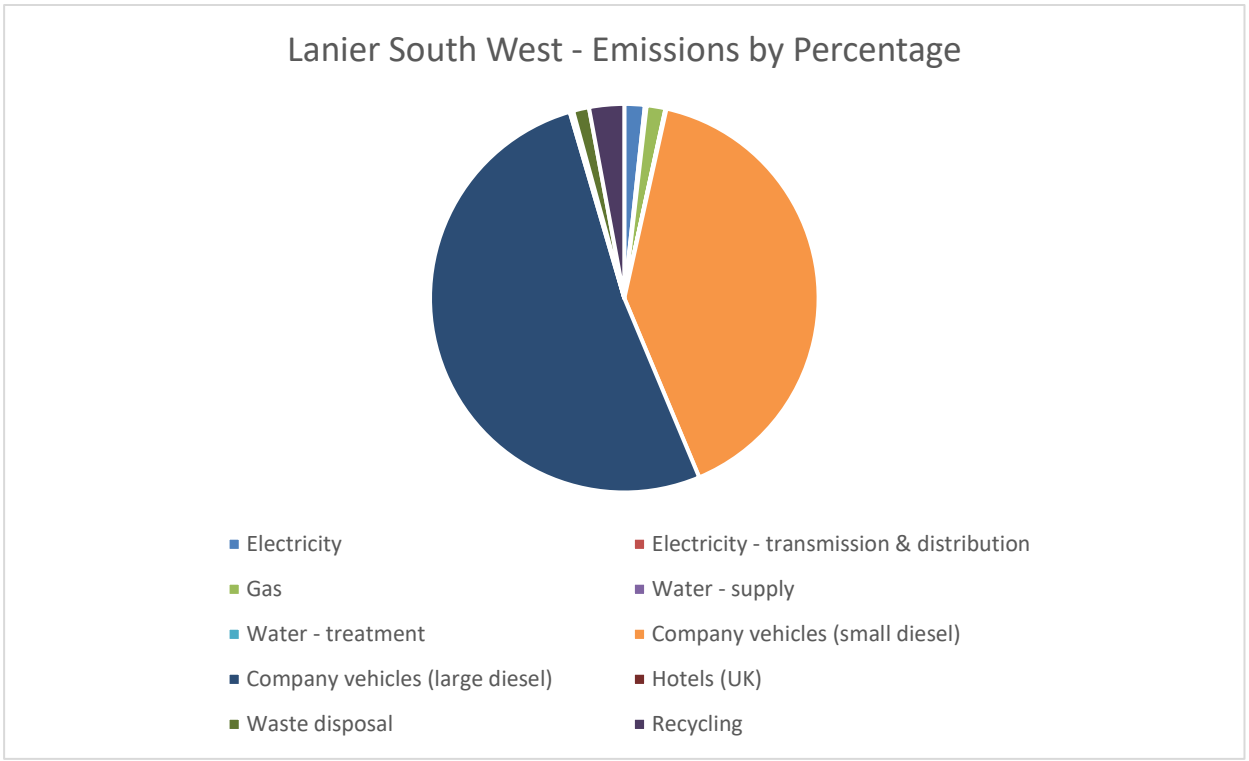


[1] **FTE** figure given was 9.

[2] Refers to the emissions in transmitting and distributing electricity from the power station to the end user

CARBON EMISSIONS BY PERCENTAGE

Activity	Percentage
Electricity	1.69%
Electricity - transmission & distribution	0.15%
Gas	1.56%
Water - supply	0.04%
Water - treatment	0.04%
Company vehicles (small diesel)	40.21%
Company vehicles (large diesel)	51.77%
Hotels (UK)	0.29%
Waste disposal	1.33%
Recycling	2.92%
Total	**100%**



CARBON EMISSIONS BY SCOPE

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Scope	Carbon Activity	Emissions (tCO_{2e})
1	Gas	0.39
1	Company vehicles	23.09
2	Electricity	0.43
3	Water supply	0.01
3	Water treatment	0.01
3	Hotels	0.07
3	Waste disposal	0.33
3	Recycling	0.73
3	Electricity - transmission & distribution	0.04
	Total	**25.11**

Lanier's Footprint by Scope January 2024 – December 2024

Scope 1	23.49	93.54%
Scope 2	0.43	1.69%
Scope 3	1.20	4.77%
	25.11	**100%**

BASELINE YEAR COMPARISON

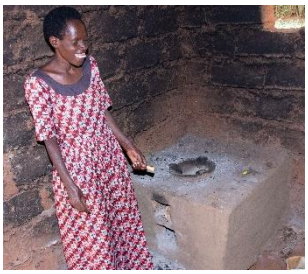
This is Lanier South West's first greenhouse gas assessment and therefore represents its baseline year from which any carbon reduction activities can be measured against.

NET EMISSIONS

Gross Carbon Emissions for reporting period	25.11 tCO_2e
Carbon Offset Credits	26
Total Net Emissions	0

Carbon offset projects:

Rwanda Energy Efficient Stove Project:



The Energy Efficient Stove Project builds energy saving cooking stoves for villages in Rwanda. These brick stoves result in a 50% reduction in the need for firewood and thereby prevent carbon from being emitted. In addition to carbon prevention, it also provides families with a cost and time effective method to cook with. The reduced need for firewood helps to prevent deforestation, creating knock on benefits to the wildlife in terms of habitat and flood prevention. It is also a healthier method of cooking as it reduces in-door smoke by half. In-door smoke is a serious problem in Africa and the World Health Organisation dubbed it the "kitchen killer", as it is responsible for 1.9 million deaths in Africa every year.

Uganda Community Borehole Project:

The project is based around the rehabilitation of boreholes in Uganda, supplying families with fresh clean water. As well as the natural health benefits, it means that families no longer have to boil the water, saving firewood and thereby preventing carbon emissions from being released. The project creates a funding mechanism for the community that ensures the long-term maintenance of the boreholes.

ASSUMPTIONS

- All data used to calculate emissions was provided by the client and was accurate. Information provided by the client was for a 12-month period 01/01/24 to 31/12/24.
- Emissions factors are taken from DEFRA's "UK Government conversion factors for Company Reporting" (2024 version).

CONTACT DETAILS

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APPENDIX ONE – REFERENCES

DEFRA (2024). Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting.

DEFRA (2024). Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting: Methodology Paper for Emission Factors.

IPCC (2006) Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.

World Resources Institute (2011). GHG Protocol tool for stationary combustion. Version 4.3.