Greenhouse Gas Inventory Report

January 2023 to December 2023

Context

Climate change has been identified as one of the greatest challenges facing the world today and could lead to significant changes in resource use, production, economic activity and life on our planet. There is increasing pressure on business from consumers, B2B clients and governments for businesses to be seen to be behaving responsibly.

The UK Government continues to strengthen its resolve to tackle climate change. The UK has amended its Climate Change legislation, most recently in 2019, (the Climate Change Act) and enshrined a new Carbon Net Zero target of 2050 with a 78% reduction in emissions compared to 1990 levels by 2035. This is a radical change from the 80% reduction by 2050 compared to 1990 levels of greenhouse gas emissions. In October 2021 it also published its Net Zero Strategy: Build Back Greener.

This Carbon Footprint report covers the period January 2023 to December 2023. A carbon footprint is a measure of the impact that human activities have on the environment in terms of the amount of greenhouse gases produced, measured in tonnes of carbon dioxide equivalents.

The business landscape appears to be taking an ever-increasing interest in carbon emissions, especially in relation to supply chains. It would be interesting to have further discussions with Vizst around their bids and tenders process to better understand the level of scrutiny being attached to carbon performance, and the role of carbon and the wider sustainability agenda in winning work.

The production of a carbon footprint provides Vizst with the opportunity to prioritize key impacts areas, set carbon reduction targets, and if felt commercially attractive to consider offset opportunities. Additionally, Vizst is a relatively low emitter of carbon, and this also allows for positive positioning in a customer's supply chain.

Carbon Footprint Summary

The greenhouse gas inventory or carbon footprint for Vizst Technology Ltd operations for the period January to December 2023, is estimated to be 154.87 tonnes CO2e.

This is based on operational and contractual control and includes

- Energy Consumption
- Water supply and disposal
- Waste Generation and Disposal
- Business Travel
- Downstream Logistics
- Staff Commute
- Homeworking

The report for this period does not include the greenhouse gas emissions associated with:

1. Fugitive emissions from air conditioning/cooling systems from all sites.
2. Upstream Logistics
3. Hazardous Waste Streams

However, it is planned to take the emissions above into account if and when appropriate. The report includes Scope 1, 2, 3 greenhouse gas emissions and is reported in carbon dioxide equivalents.

In line with the Greenhouse Gas Protocol and UK Government Environmental Reporting Guidelines the scopes are defined as:

Scope 1 – Direct emissions from the combustion of fossil fuels or process emissions.
Scope 2 – Indirect emissions from the consumption of purchased electricity, heat, or steam
Scope 3 – Indirect emissions from the organisation's value chain

The report has been compiled from the data sets submitted by Vizst the data has not been sampled or validated and has been taken in good faith.

Main Contributors	
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Carbon Footprint Calculation

Activity	Unit	Volume	Scope 1 tCO2e	Scope 2 tCO2e	Scope 3 tCO2e	Total Tonnes CO2e	%
Gas	m3	28176.00	5.07			5.07	3.27
Electricity	kWh	76671.00		15.88		15.88	10.25
Water Supply	m3	127.00			0.02	0.02	0.01
Water Treatment	m3	120.65			0.02	0.02	0.02
Waste Recycling	tonnes	2.53			0.05	0.05	0.03
Waste General	tonnes	1.36			0.71	0.71	0.46
Business Travel Air	p km	21846.00			5.38	5.38	3.48
Business Travel National Rail	p km	28392.00			1.01	1.01	0.65
Business Travel Underground	p km	200.00			0.01	0.01	0.00
Business Travel Taxi	km	70.00			0.02	0.02	0.01
Down Stream Logistics Land	t.km	50331.00			97.64	97.64	63.05
Downstream Logistics Air	t.km	2058.00			0.89	0.89	0.57
Grey Fleet – Car, Small Petrol*	miles	3278.00			0.74	0.74	0.48
Grey Fleet – Car, Med Petrol*	miles	2810.00			0.67	0.67	0.43
Grey Fleet – Car, Large Petrol*	miles	6689.00			2.06	2.06	1.33
Grey Fleet – Car, Small Diesel	miles	3130.00			0.70	0.70	0.45
Grey Fleet– Car, Med Diesel	miles	8847.00			2.38	2.38	1.54
Grey Fleet – Car, Large Diesel	miles	10008.00			2.74	2.74	1.77
Commute – Car, Average	miles	51672.00			14.12	14.12	9.12
Homeworking	hours	14224.00			4.75	4.75	3.07
Totals			5.07	15.88	133.92	154.87	100.00

Intensity Metrics

Tonnes CO2e per Employee (43)   3.6

Tonnes CO2e per £m Turnover (£10m)   15.49

* Includes hybrids

Methodology

The World Resources Institute Greenhouse Gas (GHG) Corporate Accounting and Reporting Standard (2015) has been followed to allow easy comparison with equivalent organisational reporting.
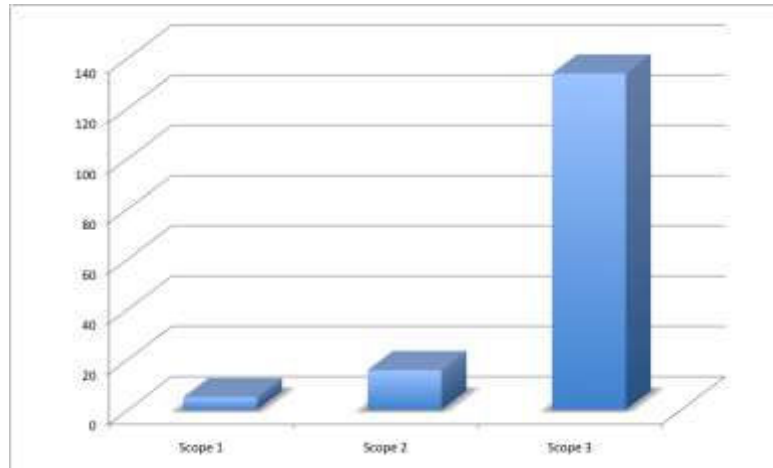
The methodology adopted also complies with ISO14064-1:2018 Greenhouse gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gases emissions and removals.

The UK Government GHG Conversion Factors for Company Reporting for 2022 (Full Set Version 2) have been used to prepare this report which complies with the requirements of Procurement Policy Note 6/21: Taking account of Carbon Reduction Plans in the Procurement of major government contracts.
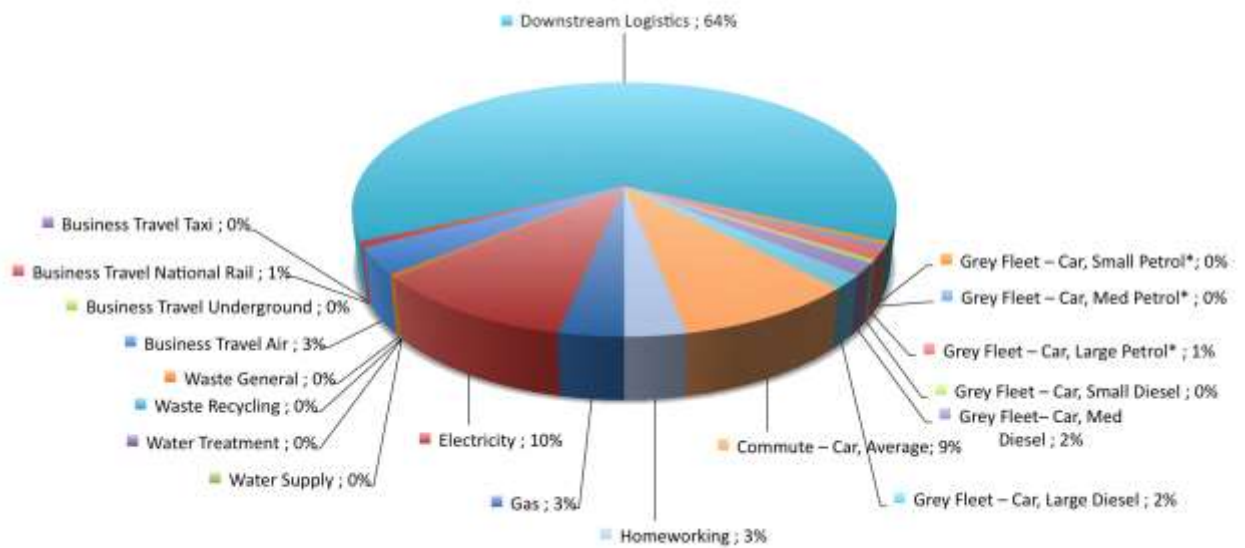
The carbon footprint for 2022 has been produced using data supplied by the Client. No primary data was viewed or sampled for accuracy or completeness.

Carbon by scope and activity

GHG Emissions in Tonnes CO$_2$e by Scopes 2023

GHG Emissions in Tonnes CO$_2$e by Activity 2023 – 154.87 tonnes

- Downstream Logistics ; 64%
- Business Travel Taxi ; 0%
- Business Travel National Rail ; 1%
- Business Travel Underground ; 0%
- Business Travel Air ; 3%
- Waste General ; 0%
- Waste Recycling ; 0%
- Water Treatment ; 0%
- Water Supply ; 0%
- Electricity ; 10%
- Gas ; 3%
- Homeworking ; 3%
- Commute – Car, Average; 9%
- Grey Fleet – Car, Small Petrol*; 0%
- Grey Fleet – Car, Med Petrol* ; 0%
- Grey Fleet – Car, Large Petrol* ; 1%
- Grey Fleet – Car, Small Diesel ; 0%
- Grey Fleet– Car, Med Diesel ; 2%
- Grey Fleet – Car, Large Diesel ; 2%

General Observations

In line with the majority of carbon footprint assessments Vizst's Scope 3 emissions account for the majority of the company carbon footprint, at around 88%, and the biggest single contributing factor being downstream logistics at 63%. It will therefore be worthwhile discussing carbon and carbon reduction plans with logistics partners as their future plans (e.g. hybrid/electric vehicles) will be a central element of Vizst's progress towards net-zero carbon.

Linked to the above, the development of a Sustainable Procurement Policy (if one does not already exist) may be beneficial. Simply asking questions about sustainability can often lead to mutually beneficial outcomes, a number of which may already exist. If improved opportunities don't already exist, the fact that suppliers increasingly realise that sustainability is being taken into the commercial decision-making process is likely to lead to improved future opportunities on this agenda.

Other areas worth noting include.

- If the opportunity arises explore green energy tariffs when negotiating new energy contracts. Green energy is usually evidenced through a Renewable Energy Guarantee of Origin (REGO) certificate.

- Engage waste providers on constantly improving waste data. Although not a material element of your carbon footprint, waste in general seems to increasingly appear in generic bids and tender processes.

- Increase guidance on when to use teams/zoom as opposed to client/supplier meetings in person. This may reduce business mileage.

- Some areas of data collection, especially around expenses and business travel could be reviewed.

- Consider drafting or updating in addition to a Sustainable Procurement Policy, a carbon management policy allocating responsibilities within the team (in effect creating carbon champions)

- Consider becoming a carbon literate organisation.

    - https://carbonliteracy.com/organisation/become-a-clo/

- Consider offsetting carbon emissions.

    - There are numerous options for offsetting carbon emissions, but a good starting point is the Gold Standard
    - How to Reduce your Climate Impact and Contribute to Sustainable Development (goldstandard.org)