

Trusted Laboratory and Educational Specialists

Carbon Report

Kick Technology

October 1st 2022 to September 31st 2023



Carbon Footprint 2022 – 2023

Reporting year:

01 October 2022 to 31 September 2023

Emissions measured:

Electricity, Natural Gas, Transmission and Distribution Losses (T&D losses), Well-to-tank (WTT), Water, Waste, Fleet, Business Travel (Commuting emissions measured separately).

Summary:

Carbon footprint (tCO₂e): **100.89** Scope 1 (tCO₂e)- **71.04** Scope 2 (tCO₂e) - **3.87** Scope 3 (Water, Waste, Business Travel, WTT, T&D losses) (tCO₂e) - **25.98**



Note: The carbon footprint is measured using the location-based method, which calculates Scope 2 electricity emissions based on the average emissions intensity of grids where energy consumption takes place (utilising the grid-average emission factor data), and the market-based method, which reflects emissions from electricity deliberately chosen by companies or resulting from their lack of choice.



Carbon footprint - overall breakdown

Year	2020/2021	2021/2022	2022/2023
Gas	42.17	41.51	37.61
Electricity	5.84	5.48	4.80
Business Travel (not including grey fleet)	46.27	51.6	48.49
Business Travel – (grey Fleet)	9.44	7.64	9.75
Waste	0.16	0.16	0.16
Water	0.08	0.11	0.09
Total	103.97	106.48	100.89



Units measured in (tCO₂e) and numbers rounded to two decimal places



Carbon footprint Comparison

Notes:

- Emissions decreased by 5.23 % compared to 2021 / 2022 and a 2.96 % compared with the 2020 / 2021 baseline. The decrease in emissions occurred due to a number of improvements made to the warehouse. In March 2023, there was a renovation of the staff kitchen, the fluorescent lighting there were replaced with LED. In May 2023, two of the four gas heaters were decommissioned, and there was also the installation of a monitoring and control system for the gas heating within the warehouse. These improvements made a significant impact on the overall carbon footprint of Klick Technology.
- There was a 10.8% reduction in the emissions from gas, compared with the 2020 / 2021 baseline.
- There was a 17.8% reduction in the emissions from electricity, compared with the 2020 / 2021 baseline.
- The total reduction in emissions occurred despite an increase in the annual mileage, an increase of **20,698 miles** compared with the baseline year. If it wasn't for the increase in mileage the overall carbon footprint of Klick in 2022/2023 would have been significantly smaller.





Carbon footprint – Travel emissions breakdown

Notes:

- Travel emissions equated to the largest part of Klick Technology's Carbon Footprint, accounting for **58.24 tonnes** of CO₂e. There is a decrease of **1.7%** from the previous year but represents a 4.5% increase from the base line year
- For the economic and operational viability of the business, the annual mileage increased from **157,109** miles from the baseline of 2020/2021 to **177,807** miles. The average kgCO₂e per mile was **0.3275 kg**. This average reduction per mile was a result of more mileage from Hybrid cars than in previous years.

tonnes of CO ₂ e per vehicle type			
Year	2020-2021	2021-2022	2022-2023
Directly Managed fleet – Average Car Diesel	33.07	33.52	31.20
Directly Managed fleet – Average Car Petrol	5.2	6.58	3.48
Directly Managed fleet – Average Van Diesel (up to 3.5 tonnes)	8.04	7.97	5.34
Directly Managed fleet - Hybrid		3.53	8.46
Grey Fleet – Average Car Diesel	9.44	7.64	9.75
Total	55.71	59.24	58.24



Units measured in (tCO $_2e$) and numbers rounded to two decimal places





Carbon footprint – Commuting emissions breakdown

Notes:

- This was the first year that commuting emissions were measured, there was a 100% completion rate of the commuter survey. The total mileage was 77,460 miles, accounting for 23.77 tonnes of CO₂e.
- 26% of the employees driving to work use an electric or hybrid car. A charging point in the car park could incentivise further electric car uptake.









TYPES OF VEHICLES





Carbon footprint – Water emissions breakdown

Notes:

- Emissions from water supply and treatment are negligible on the overall carbon footprint of Klick Technology.
- Reductions could still be made by installing aerators to taps, using toilet cistern hippos and reusing wastewater for onsite purposes, such as watering plants, allotments or herb gardens.

Year	2020 - 2021	2021 - 2022	2022 - 2023
Water Supply cubic metres	187.56	254.9	232
Water Treatment cubic metres	187.56	254.9	232
Water Supply (tCO ₂ e)	0.03	0.04	0.04
Water Treatment (tCO ₂ e)	0.05	0.07	0.05
Total (tCO ₂ e)	0.08	0.11	0.09





Carbon footprint – Waste emissions breakdown

Notes:

It should be noted that the emissions associated with waste in this report are negligible to the overall carbon footprint and to the amount of waste that is produced on site. To date there has been no record of the waste produced on site. The company *'Select a Skip UK'* is utilised by Klick Technology because they have a network of 1,100 providers across the country who are fully licensed, audited and approved. The emissions associated with on site waste should be taken account in the future. If requested, *'Select a Skip UK'* will provide the weight by type and will offer the service free of charge. Some of their providers will provide a rebate for the scrap metal, if Klick let them know before hand, it could potentially be put in the mixed waste skip.

The type of waste produced on site varies but it usually consists of the following;

- Plasterboard
- Scrap metal
- Rubble
- Hazardous Waste
- Plastics
- Mixed Waste (inc carpet tiles, ceiling tiles, timber, sheet materials, stud walls)

The wastage of hazardous materials is very low across the company and is likely to have a negligible effect on overall emissions. Despite this, Klick is dedicated to minimising the use and waste of these materials, reducing the potential impact on both personnel and the environment. The main hazardous materials used and wasted on site are as follows: ·.

- Silicone (clear, white, grey) to finish worktops, which is classified as 'HARMFUL' and 'HARMFUL TO THE ENVIRONMENT'
- PVA Glue to adhere surfaces to one another, which is classified as 'HARMFUL' and 'HAMRFUL TO THE ENVIRONMENT'.
- UPVC Cleaner (alcohol based) to clean surfaces of adhesive, which is classified as 'HARMFUL', 'HAMRFUL TO THE ENVIRONMENT', 'TOXIC' and 'FLAMABLE'. Because it evaporates into the air it does not require special disposal. Provided they are empty, UPVC cleaner plastic bottles can be recycled in general waste.

- Aerosols – used occasionally on site to touch up paintwork, these are classified as 'HARMFUL' and 'HARMFUL TO THE ENVIRONMENT' and 'FLAMABLE'. Provided they are empty, they can be recycled in general waste.



- The amount of Polystyrene wasted is an issue, other equipment suppliers using alternatives to polystyrene should be investigated. Feedback to relevant suppliers that they should change from polystyrene - direct and/or via relevant trade body.
- Partnerships should be formed with waste minimisation, recycling and reuse charities and social enterprises to find another life for waste. Which would lead to less skips being needed.

Tonnes of CO ₂ e fro	om Waste	2020 - 2021	2021 - 2022	2022 - 2023	
Paper and board n	nix	0.03045	0.029	0.0298	
General Dry Mixed Recycling General Dry Mix Combustion Total		0.0402	0.038	0.0394	
		0.9378	0.0901	0.0919	
		0.164408	0.1571	0.161096	
	Tonnes of Wa	ste	2020 - 2021	2021 - 2	2022 2022 – 2023
	Paper and board mix General Dry Mixed Recycling General Dry Mix Combustion		1.43	1.375	1.4
			1.887	1.815	1.85
			4.404	4.235	4.32
	Total		7.721	7.425	7.57



Sustainable Development Goals

The Sustainable Development Goals (SDGs), also known as the Global Goals, are a collection of 17 interrelated goals set by the United Nations. They cover a broad range of social and economic development issues. These include poverty, hunger, health, education, climate change, gender, equality, water, sanitation, energy.

These 17 sustainability goals have been constructed to tackle the biggest challenges the world faces. By measuring and reducing the carbon footprint and paying the 'Real Living Wage', Klick can directly and measurably contribute to 9 SDGs.





Roadmap to Net Zero

Work	Completed	Future work	Predicted emissions reduction (tCO ₂ e)
Installation of LED in office	November 2019		
Installation of PIR system and LEDs in Warehouse	January 2020		
Phasing out of radiant heater in Warehouse	May 2021		
Installation of LEDs in corridor and sales room	November 2021		
Renovation of staff kitchen to help keep warehouse workers warm, with LED rather than fluorescent lighting	March 2023		
2 of 4 warehouses gas heaters decommissioned	May 2023		
Installation of monitoring and control system for gas heating in warehouse	May 2023		
Construction of office in Warehouse so that staff remain warm now that we don't heat whole space	December 2023		
Install lighting controls		2024	2.1
Replace local central air distribution with new electric radiant system		2025	21.5
Install photovoltaic system		2026	2.2
Fleet transitioning to all electric vehicles		2029	42,560
Retrofit or replace roof to improve thermal performance		2031	9.2
Replace existing glazing		2032	5.5
Install external wall insulation		2033	1.5
Replace existing natural gas low temperature hot water boiler with an air source heat pump		2034	2.1
Behavioural change (Promoting energy conservation, waste reduction, sustainable business travel, and other eco-friendly practices)		2024-2038	3.8







Notes for Net Zero Road Map:

- The data for the predicted emissions reduction were estimated using the MEES Asset Energy Report, please refer to spreadsheet 'recommendations with emissions reductions' spreadsheet.
- The reduction of emissions through switching to an electric fleet were calculated using 2023's total business travel mileage and the BEIS 2023 conversion factors for electric vehicle and subtracting from the total (tCO₂e) from 2023. It is the single biggest reduction that Klick Technology can make, with an estimated 42.56 tCO₂e saved.
- The MEES report suggests that for the recommendations; Installation of lighting controls, replacement of local electric central air distribution with new electric radiant system and the installation of a photovoltaic system will have a payback period of less than 7 years, it is therefore advisable that these recommendations are prioritised.
- Staff behaviour change may require new policies and practices to energy conservation, waste reduction, sustainable business travel, and other eco-friendly practices.
- Reducing commuting emissions is crucial for mitigating the environmental impact, public transportation, car pooling and cycling will be encouraged going forward.
- Efforts should be made to measure, verify and reduce emissions associated with the supply chain of the raw materials used in Klick's products. Suppliers and Manufacturers should be engaged on the topic as soon as possible.

General recommendations

Data collection and quality

- Evidence pack: At the end of the financial year, collate all relevant invoices in an evidence pack.
- Utilities: Take readings of all meters on the last day of the month. Investigate the installation of smart meters.
- **Fuel:** Introduce fuel cards for those people that don't already have them.
- Travel: continue to accurately record business travel and commuting data.



Building

Energy efficiency: Regular 'energy audits' will help identify where most energy is being used and potential wastage from equipment, lights and heat loss. Investigate the installation of LED, T5 and sensor lighting and the upgrade of heating controls. Engage with staff and involve them in finding ways to reduce emissions.

Travel

Choose fuel efficient vehicles. Electric or hybrid cars are exempt from various taxes. Subsidies are also available for smallest vehicles. Provide incentives for employees to opt for low carbon cars, and limit choices to those which meet sustainability criteria.

Use public transport. Promote and incentivise public travel where possible, record mode of travel, destination/origin and distances travelled in expense claim forms.

Waste

Carry out a waste management audit: To understand what waste you are producing, where it is coming from and what the best route for it would be. Provide plenty of bins for segregating waste correctly and encouraging recycling.

Engage with 'Select a skip' to help you reduce landfill waste and instead increase the proportion that goes to recycling and to energy from waste. Start measuring and recording the weight by type and by site

Water

Check your meters at night, or when water is not in use, to monitor leakage.

Introduce a water use awareness campaign in communal kitchen areas.

Paper

Buy paper from sustainable forests or recycled content. Ask for FSC or PEFC branded paper as a minimum - ideally with the EU Eco label.



<u>Appendix</u>

Operational Boundary	Scope	Unit	Data Source	Data Accuracy	Comments, omissions, estimates or extrapolations
Electricity	2 and 3	kWh	Primary source - emissions report & invoices	Actual	An emissions spreadsheet was the primary source of evidence, with invoices provided to check. Your electricity consumption is shown in the carbon footprint as Purchased Electricity emissions (Scope 2 emissions) and Electricity Transmission and Distribution losses (Scope 3 emissions). Note: unless otherwise stated in the report all electricity emissions are location based (i.e. calculated using carbon emission factors for average UK national grid electricity). Do let us know if your electricity is from 100% renewable energy and we will provide dual reporting to show both market based and location based electricity emissions.
Natural Gas	1	kWh	Primary source - emissions report & invoices	Actual	An emissions spreadsheet was the primary source of evidence, with invoices provided to check.
Water Supply & Treatment	3	m³	Primary source - emissions report & invoices	Actual	An emissions spreadsheet was the primary source of evidence, with invoices provided to check.
Waste	3	Tonnes	Primary source - directly from Bagnall & Morris (B&M)	Actual	An emissions spreadsheet was the primary source of evidence, with the waste support provided by Bagnall & Morris as evidence.
Business Travel	1+3	miles	Primary source – emissions report	Actual and Estimated	Total fuel mileage per vehicle in company-owned vehicles were provided.
Employee Commuting	3	miles	Primary source - summary	Actual and Estimated	100% survey completion rate, however there could be some human error in the distances travelled on the commute. An assumption was made that full time employees come into the office 48 weeks of the year. Documented on the spreadsheet – 'Commuter Survey Spreadsheet'
Net Zero Road Map	1, 2 and 3		Secondary source - MEES Asset Energy Report by Murton & Co.	Estimated and Predicted	Predictions made using the data from the MEES report, documented on the spreadsheet - 'recommendations with emissions reductions'.



Eco

Pathways

About this report

Company name:	Klick Technology
Sector:	Lab Furniture and Lab Refurbishment
Reporting Period:	1 st October 2022 – 31 st September 2023
Reporting Boundary:	Office and Warehouse
Emissions Sources included:	Electricity, Gas, Water, Water, Business Travel and Employee Commuting
Total employees for the year:	16 Full time employees and 2 part time employees
Total Floor space:	1354.31 m ²
Data Collection lead:	Freddie Whitehurst
Data source:	'Master spreadsheet 2022 -2023' – Data sourced from Freddie via the Klick Technology's accountant. 'Commuter survey spreadsheet' and 'recommendations with emission reductions'
Baseline Conversion Factor:	Greenhouse gas reporting: conversion factors 2023 from the Department for Energy Security and Net Zero
Prepared by:	Kit Connell – Managing Director at Eco Pathways
Checked by:	Osbert Lancaster – Director at Realise Earth
Date:	5 th Jan 2024



Thank You

Get in Touch

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