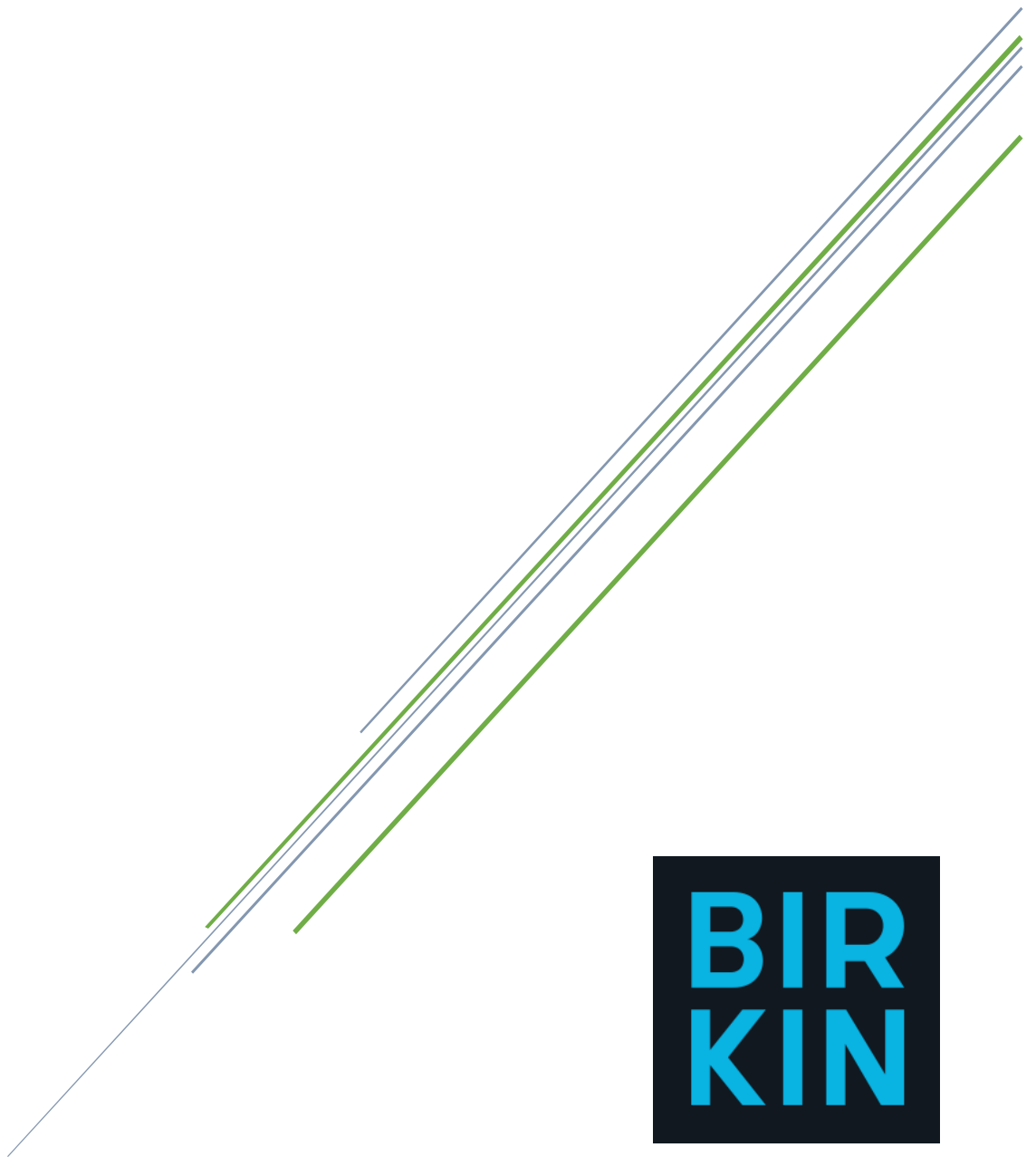


BIRKIN CLEANING SERVICES LTD

Organisational Carbon Footprint Report 2023



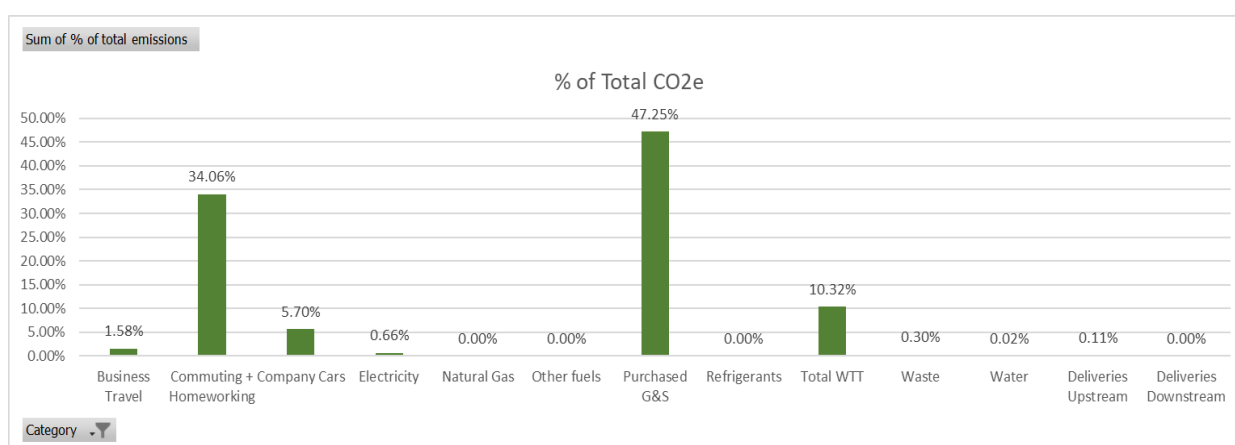
Neutral Carbon Zone
Analysis and Report on Organisational Emissions

EXECUTIVE SUMMARY

This report details Birkin carbon footprint for the 2023 calendar year.

The analysis shows that Birkin’s carbon emissions for the period amounted to **1,899.17 tonnes of CO₂e**. The largest single source of emissions was Purchased Goods and Services (47.25%) followed by Commuting and Homeworking (34.06%), Energy and Fuel related Activities (Well-to-Tank and Transmission & Distribution) (10.32%), and Company Cars (5.70%) as illustrated in Figure 1.

Figure 1: Percentage of Carbon Emissions by Activities, 2023



In addition to reviewing the absolute footprint, this report also benchmarks emissions “per £ million turnover” and “per full time employee (FTE)” – shown in Table 1. As opposed to absolute metrics, these intensity metrics provide relative tCO₂e figures for organisational carbon footprints. This allows for comparison between companies, but can also provide a useful alternative to absolute figures. For example, if a company is growing rapidly the absolute tCO₂e figure may increase, however the intensity metric will be useful in highlighting relative improvements in carbon intensity.

Table 1: Intensity Metrics

Emissions	2022	2023	% difference
Total Footprint (Kg CO ₂ e)	1,694.86	1,899.17	12%
Revenue (GBP)	20,400,000.00	23,600,000.00	16%
Total footprint / FTE	1.44	1.40	-3%
Total footprint / million revenue	83.08	80.47	-3%

INTRODUCTION

Birkin retained Neutral Carbon Zone to measure their organisational carbon footprint.

This section outlines the processes and methodology used in this project. It explains the calculation principles and sets the operational boundaries of the footprint. The following section presents an in-depth analysis of all the emissions sources. This report includes Scope 1 Direct Emissions, Scope 2 Energy Indirect Emissions and Scope 3 Other Indirect Emissions.

The reporting period is 1st January 2023 to 31st December 2023.

PART 1 – STANDARD AND SCOPE

1.1 FOOTPRINTING PROCESS

A carbon footprint assessment measures the carbon emissions generated by your organisation's activities. The carbon footprint report is the critical first stage of a comprehensive and commercially focused carbon management plan. To measure your carbon emissions, this report follows the methodology of the internationally recognised standard ISO-14064-1:2006.

ISO 14064 requires an organisation to report its carbon emissions in three scopes as described below.

- Scope 1 - Direct Emissions - Emissions from greenhouse gas sources owned or controlled by the organisation.
- Scope 2 - Energy Indirect Emissions - Emissions from the generation of imported electricity, heat or steam consumed by the organisation.
- Scope 3 - Other Indirect Emissions - Emissions which are consequences of an organisation's activities but arise from sources that are owned or controlled by other organisations.

ISO 14064 requires the measurement of carbon emissions arising from Scope 1 and 2. While not mandatory, inclusion of Scope 3 emissions is advised as it can lead to a greater understanding of the company's wider impacts.

In this report, the term 'carbon emissions' not only includes carbon dioxide (CO₂), but all other greenhouse gases (GHG) covered under the Kyoto Protocol: methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulphur hexafluoride (SF₆).

1.2 SCOPE OF THE FOOTPRINT

ORGANISATIONAL BOUNDARY

In accordance with ISO 14064, the approach used in this footprint is based on the principle of operational control. Under the control approach we accounted for 100% of the GHG emissions from operations over which Birkin has control. Control can be defined in either financial or operational terms.

- The financial control approach – Birkin has financial control over an operation if it has the ability to direct the financial and working policies of the organisation with a view to gaining economic benefits from its activities.
- The operational control approach – Birkin has operational control over an organisation if it or one of its subsidiaries has the full authority to introduce and implement its working policies at the business.

Operational control approach has been used for Birkin's footprint calculation.

OPERATIONAL ACTIVITIES

Activities Included in the Scope for the Footprint

In accordance with ISO 14064 the organisational boundaries for this carbon footprint were company vehicles, natural gas, fuels, refrigerants, electricity, business travel, commuting, homeworking, water, waste, purchased goods and services and well-to-tank.

Activities Excluded from the Scope of the Footprint

No activity deemed to be a significant driver of carbon emissions has been excluded from the scope of this footprint.

1.3 DATA ACCURACY

The data provided by Birkin covers the period from 1st January 2023 to 31st December 2023. The majority of data was primary, but some data was secondary and extrapolated using benchmark approaches. Neutral Carbon Zone collated the supplied data and summarised it in a single summary spreadsheet.

Business Travel – Data was supplied as spend, therefore no Well-To-Tank has been calculated.

Commuting and Homeworking – data was derived from a recent staff survey which received 152 responses. This is an 11% response rate therefore benchmarks were created from the collected data and extrapolated out to predict where there was a shortfall in primary data.

Waste – A management based decision was used to calculate general waste for office staff. Recycling data was provided by Birkin. Calculations source from UK waste statistics from www.gov.uk.

Scope Categories	Data/Evidence Provided
Business Travel	Manually inputted spend into portal
Commuting + Homeworking	11% survey response rate
Company Cars	Manually inputted spend and miles into portal
Electricity	Manually inputted kWh into portal
Purchased G&S	Spend breakdown based on EPA Emissions Factors
Waste	Management based decision
Water	Manually inputted into portal, invoices as evidence
Deliveries Downstream	Manually inputted into portal

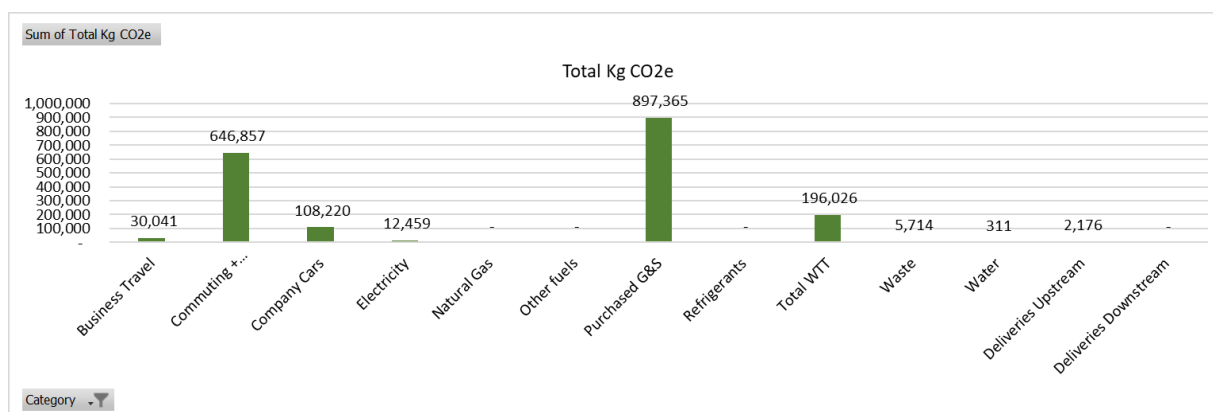
PART 2 - RESULTS

2.1 SUMMARY OF RESULTS

EMISSIONS BY ACTIVITY

The results of the project show that Birkin carbon footprint for the 2023 calendar year was **1,899.17 tonnes of CO₂e**. A breakdown of emissions by activity is shown in the chart below:

Figure 2: Emissions in Kg of CO₂e by activity



Purchased Goods and Services in Scope 3 accounted for the largest proportion of emissions at 897.37 tCO₂e (47.25%), followed by Commuting and Homeworking 646.86 tCO₂e (34.06%), Energy and Fuel related Activities (Well-to-Tank and Transmission & Distribution) 334.22 tCO₂e (10.32%) and Company Cars 72.00 tCO₂e (5.70%).

CARBON FOOTPRINT

Table 2 details Birkin’s organisational carbon footprint by type of emission and activity.

Table 2: Emissions Data

Scope	Category	Total Kg CO ₂ e	% of total emissions scope wise	% of total emissions
Scope-1	Natural Gas	-	0.00%	0.00%
	Other fuels	-	0.00%	0.00%
	Refrigerants	-	0.00%	0.00%
	Company Cars	108,220	100.00%	5.70%
	Total Scope-1	108,220	100.00%	5.70%
Scope-2	Electricity	12,459	100.00%	0.66%
	Total Scope-2	12,459	100.00%	0.66%
Scope-3	Business Travel	30,041	1.69%	1.58%
	Commuting + Homeworking	646,857	36.37%	34.06%
	Waste	5,714	0.32%	0.30%
	Water	311	0.02%	0.016%
	Deliveries Upstream	2,176	0.12%	0.11%
	Deliveries Downstream	-	0.00%	0.00%
	Purchased G&S	897,365	50.46%	47.25%
	WTT-Electricity	3,840	0.22%	0.20%
	WTT-Company Cars	27,626	1.55%	1.45%
	WTT-Business Travel	-	0.00%	0.00%
	WTT-Commuting + Homeworking	164,028	9.22%	8.64%
	Total Scope-3	1,778,492	100.00%	93.65%
		Total Kg CO₂e	1,899,170	

2.2 SCOPE 1 - DIRECT EMISSIONS

Direct Emissions arise from the generation of greenhouse gases in company-owned or leased assets. In most businesses these arise from consumption of gas in buildings (heating & hot water) and fuels in company-owned vehicles. They also arise as a result of other heating fuels, chemical reactions and gas leakage (fugitive emissions) during manufacturing, production and from air conditioning systems.

Direct Emissions amounted to **108.22 tonnes of CO₂e** or 5.70% of Birkin's total footprint and stems from the usage of Company Vehicles.

2.3 SCOPE 2 - INDIRECT ENERGY EMISSIONS

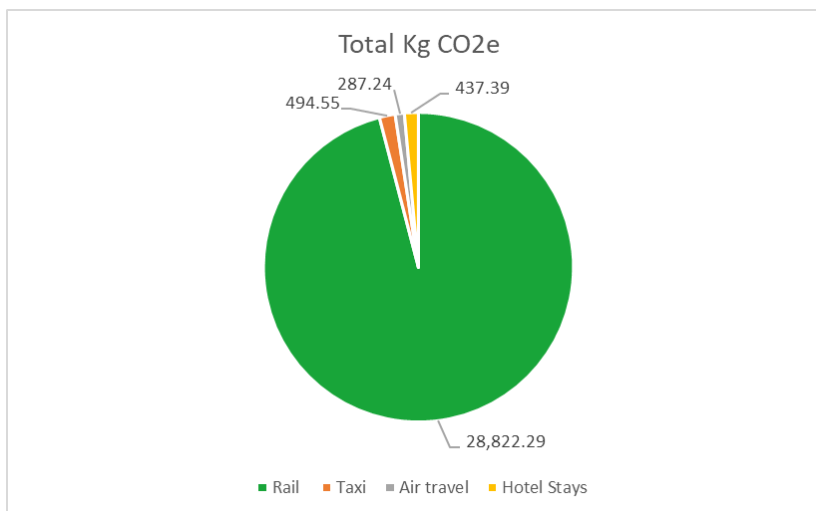
Indirect Energy Emissions arise from the generation of imported electricity, heat or steam consumed by the company. For Birkin, indirect energy emissions stemmed from the consumption of electricity for lighting, cooling, IT and other electrical equipment. Birkin's Scope 2 emissions amounted to **12.46 tonnes of CO₂e** or 0.66% of the total footprint.

2.4 SCOPE 3 - INDIRECT OTHER EMISSIONS

The sources of Other Indirect Emissions comprised 93.65% of total emissions or **1,778.49 tonnes of carbon dioxide equivalent**. This arises mainly from Purchased Goods and Services and Commuting and Homeworking.

Business Travel

Business journeys made by Birkin staff resulted in **30.04 tonnes of CO₂e** (1.58% of total emissions). The majority of these emissions stem from Rail Transport.



Employee Commuting and homeworking

The category of employee commuting covers both the emissions from commuting made by Birkin staff to work and emissions associated with homeworking. This category totalled **646.86 tonnes of CO₂e** or 34.06% of total emission. Figure 4 below shows the split in emissions between commuting and homeworking.

Figure 4: Employee Commuting Emissions Split

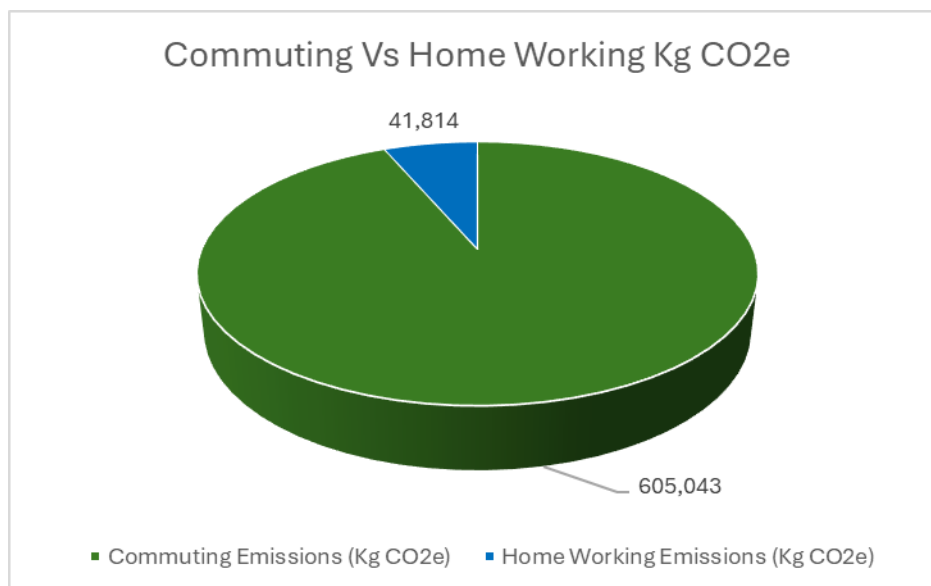


Table 3 outlines emissions based on commuting mode and distance travelled.

Table 3: Commuting Data

Mode of Transport	Distance (km)	Total Kg CO2e
Petrol Cars	1,389,431	224,192
Diesel Cars	1,076,757	161,966
EV Cars	35,120	1,715
Hybrid Cars	256,493	34,062
Diesel Vans	5,859	833
National Rail	316,318	11,218
Overground	114,516	3,276
Underground	384,500	10,690
Bus	1,537,853	157,092
Walk/Cycle	545,135	-
Total	5,661,985	605,043.30

Waste

In the 2023 calendar year, Birkin produced 12.13 tonnes of waste resulting in **5.71 tCO₂e**, 0.51% of the total footprint. Table 4 below outlines the split in waste type and emissions.

Table 4: Waste Data

Waste Type	Tonnage	Emmissions kgCO2e
Mixed Recycling	0.66	14.13
General Waste to landfill	11.47	5,700.01
Total	12.13	5,714.14

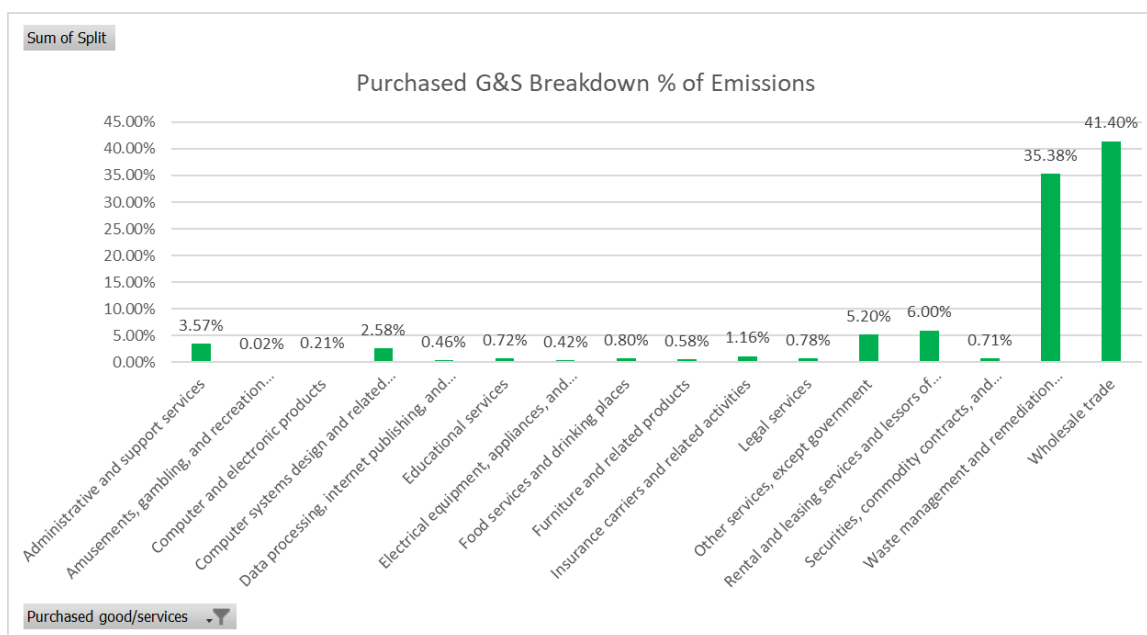
Water

Water consumption amounted to approximately 824m³. Emissions associated with supply and treatment of water therefore resulted in **0.311 tonnes of CO₂e** or 0.028% of the total footprint.

Purchased Good & Services

Goods and services purchased by Birkin resulted in **896.90 tonnes of CO₂e** (79.47% of total emissions).

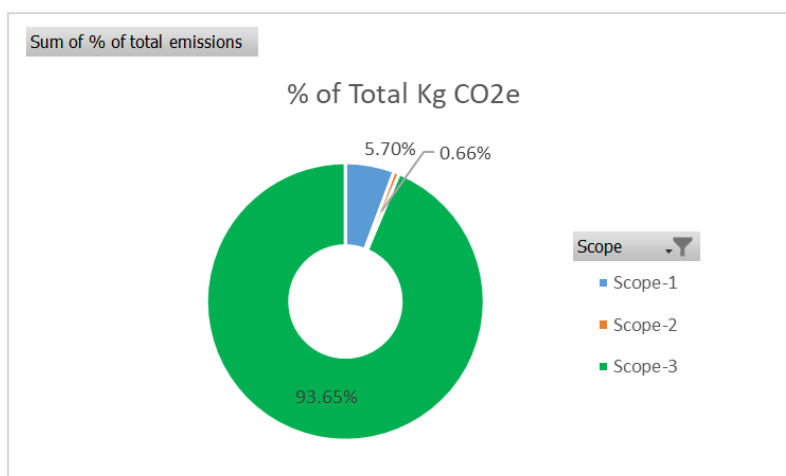
Figure 5: Emissions breakdown by category for P G&S



Well-to-tank (WTT) and Transmission & Distribution (T&D)

WTT and T&D emissions are those emissions associated with the upstream processes of extracting, refining, and transporting raw fuel and energy to the vehicles, assets, or other process under scrutiny. Birkin’s WTT and T&D emissions amounted to **37.54 tCO₂e** or 10.32% of the total footprint, and is made up of gas and electricity consumption, as well as fuel consumption relating to business travel, employee commuting, and deliveries. Note that this emissions driver is dependent on other categories, and therefore rises and falls with other scopes. For example, as more fuels like gas must be extracted, processed, and transported to Birkin company site, more well-to-tank emissions are released.

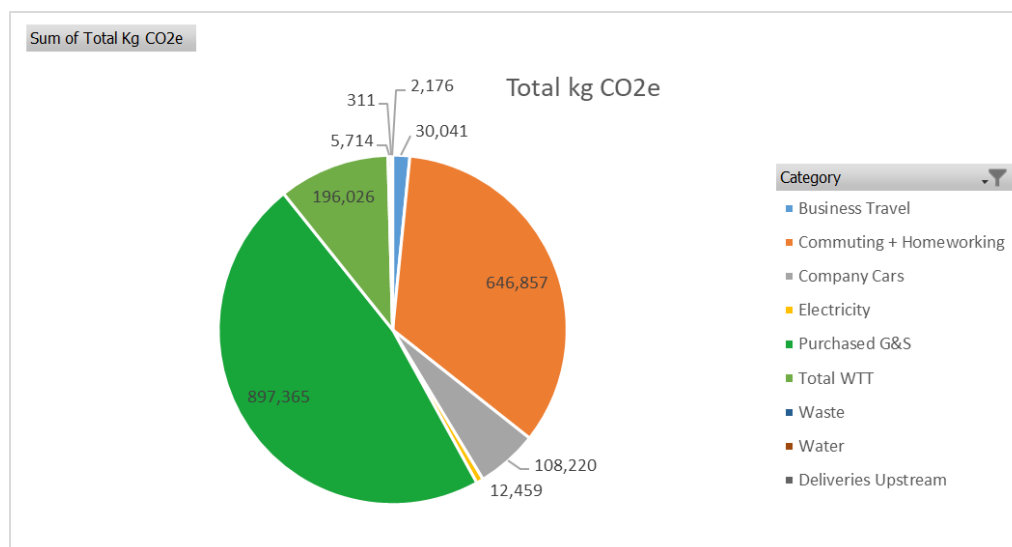
Figure 6: Emissions split by Scope



2.5 Conclusion and Recommendations

Neutral Carbon Zone has analysed Birkin’s footprint and are able to provide the following recommendations to reduce emissions. These recommendations are ordered in terms of priority, starting with the highest emissions activity. If undertaken, these recommendations have potential to significantly reduce Birkin’s carbon footprint.

Figure 7: Emissions in kgCO₂e by Category

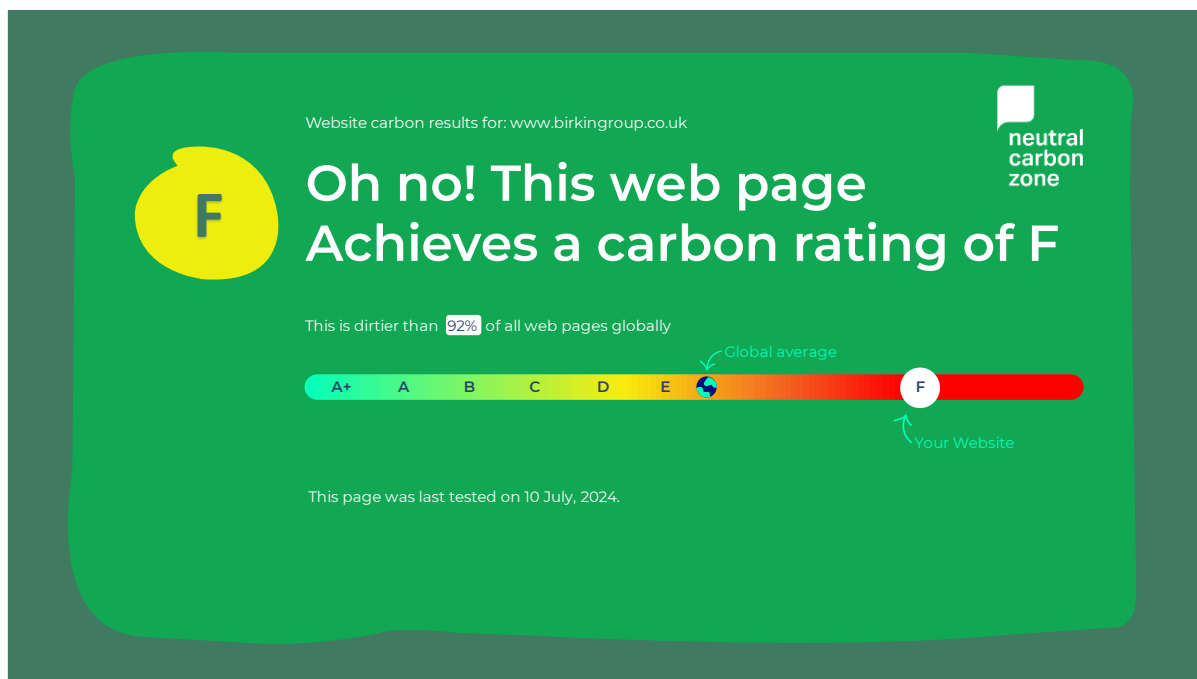


- Purchased Goods & Services was the largest emissions driver. It accounts for approximately 47.25% of total emissions. NCZ recommends that Birkin carries out an in-depth supply-chain analysis in order to identify the specific individual impacts of the goods and services being purchased and highlight any potential efficiencies that are available and/or currently appropriate to be implemented. This can be facilitated through NCZ Platinum certification.
- Employee commuting and homeworking is the second largest emissions driver at 34.06% of emissions. Emissions can be reduced by encouraging greater use of public transport i.e., buses, overground and underground where possible and/or car-share schemes, walking/cycling and other active transport options to reduce the use of more carbon intensive modes of transport such as petrol and diesel personal vehicles.
- Well to Tank emissions, the third largest emissions driver (10.32%), will subsequently fall with the reduction in other energy and fuel related activities.

- Company vehicles was the fourth largest emissions driver. Neutral Carbon Zone therefore recommends Birkin consider a transition analysis of their vehicle fleet towards more hybrid and/or electric vehicles wherever feasible. Emissions can also be further reduced by avoiding any unnecessary use of fossil fuelled vehicles where less emission intensive options are available and practical, including greater use of public transport, car-share schemes and active transport (walking and cycling) should be considered wherever practical and/or appropriate.
- Business travel accounts for 1.58% of total emissions. Data was supplied as spend data. Establishing a process to track fuel use and/or distances travelled by type is recommended. Additionally, consideration into alternative options regarding modes of transport and route/requirement analysis can be influential in the reduction of emissions in this category.
- Purchased electricity accounted for 0.66% of total emissions. This can be reduced further by switching to a 100% renewable energy tariff for purchased electricity and investigating the opportunities for the reduction in electricity consumption.
- Waste accounts for 0.30% of total emissions. In order to reduce emissions associated with waste, Birkin would need to focus on waste reduction measures where possible. In order to understand how this can be done most effectively, a greater understanding of type of waste and disposal is needed. Birkin could also consider a zero waste to landfill policy.

Scope Categories	Best Practice Data/Evidence
Business Travel	Actual distances travelled/number of hotel stay nights
Commuting + Homeworking	100% survey response rate
Company Cars	Evidence of fuel purchases (for example fuel card reports)
Electricity	Evidence of consumption (for example landlord reports or invoices)
Purchased G&S	Emissions data specific for each supplier
Waste	Evidence of the amount of waste generated and disposal routes (for example supplier reports or invoices)
Water	Evidence of consumption (for example landlord reports or invoices)
Deliveries Downstream	Evidence of the distance travelled and weight of deliveries (for example supplier reports or invoices)

2.6 Further Recommendations – Website impact review



What is the Website Carbon Rating System?

The Website Carbon Rating System was designed to measure and simplify the understanding of the environmental impact of web pages. It rates websites on a scale from A+ to F, making it easy to see how energy-intensive a website is.

How does it work?

We set our benchmark for a good rating (A+ to E) to help us identify any sites that fall below the global average CO2 emissions for desktop web pages. Ratings go from A+ (very efficient) to E (which is still better than global average). Any website with emissions that exceeds the global average receives an F rating.

This update makes Website Carbon more powerful by comparing all results to the global average, not just the web pages tested on Website Carbon. This change offers a wider view, helping users understand the environmental impact of websites on a global scale.

Website Carbon Rating Scale

Rating	Grams CO2e per pageview
A+	0.095
A	0.186
B	0.341
C	0.493
D	0.656
E	0.846
F	≥ 0.847