

A stylized illustration of three wind turbines in a landscape, rendered in a light green color against the dark green background. The turbines are positioned on a rolling horizon line.

CARBON OUTPUT REPORT 2021

CONTENTS

EXECUTIVE SUMMARY	3
INTRODUCTION	4
SPECIFICS AND SUPPORTING INFORMATION	7
SCOPE 1	11
SCOPE 2	13
SCOPE 3	16
TOTAL CARBON EMISSIONS	21
INTENSITY RATIOS	23
ANNUAL PERCENTAGE CHANGE	25
COVID-19 IMPACTS	27
ANNEX	30

EXECUTIVE SUMMARY

In June 2019, the UK government became the first major economy to pass the legally binding 2050 target of reaching Net Zero Greenhouse Gas Emissions. At Wilson James, we have pledged to achieve carbon neutrality by 2040. As part of this commitment, it is essential that we keep track of our carbon reduction progress year on year. This report aims to uncover the majority of Wilson James' scope 1, 2 and 3 carbon emissions within the period 1st January 2021 to 31st December 2021.

Overall, we have reduced our carbon emissions by 7.6% compared to 2020. Some areas did see increases in carbon emissions, namely business related travel via rail and road. This was somewhat to be expected due to the gradual return to normal working practices as COVID-19 restrictions lifted throughout the year.

2021 was certainly more 'normal' than 2020, however the results presented show that COVID-19 restrictions still had some impact on emissions during various periods of the year. By comparing 2019 emissions with 2021 emissions it is also clear that the ways in which we work, even when no COVID restrictions are in place, have certainly changed for good.

A stylized globe of the Earth with a green and blue color palette. Two green circles are overlaid on the globe: a solid green circle on the left and a hollow green circle on the right. The globe is set against a background of faint white recycling symbols.

“The climate crisis has already been solved. We already have the facts and solutions. All we have to do is wake up and change.”

Greta Thunberg, Climate Activist



1.0

INTRODUCTION

1.1 SUSTAINABILITY PRIORITIES

Sustainability lies at the heart of Wilson James vision to deliver excellence for every project and for every client, whilst raising Industry Standards across our three service lines. We are committed to playing our part in ensuring a sustainable future for future generations to enjoy. We do this through our Sustainability Programme built around the three pillars of 'People, Planet and Performance', which reduces our impact on the environment whilst promoting social and economic improvement.

Sustainability is at the forefront of good business. At Wilson James we understand the impact of our actions on the planet and the consequences for future generations, and actively play our part in mitigating this impact. Our performance in terms of carbon reduction, circular economy, corporate responsibility and employee wellbeing is regularly reviewed at Board level and we continue to invest in ways to reduce our impact and improve our performance.

More recently our clients are demanding higher levels of sustainability engagement to meet their own objectives, which challenges us to remain one step ahead and deliver best practice through investment in our People, Planet and Performance programme. Many of our business partners and stakeholders also adopt industry expectations against which we are judged.

Our Sustainability Strategy sets out our ambitious framework to develop our business over the next 10 years. It reflects industry best practice, as well as National and regional Policy, with our priorities (Table 1) derived from our significant impacts which are directly associated with our business activities, or those within our realm of influence. As a 'people-business', many of our impacts relate to the choices our employees make, their wellbeing, how we interact with our local communities, the goods and services that we procure, or the services that we provide.

Our ten year plan is to reduce our carbon emissions by 30% absolutely by 2030, so as to ensure that we are on track to deliver our longer-term goal of Net Zero Carbon Emissions by 2040- ten years ahead of the National target because we believe that if we wait until 2050 to act, it will be too late.

We are also aiming to have completed our Carbon Management Plan by July 2022, which will deep dive into how we will reach our 2040 Net Zero Carbon target step by step.

“There’s one issue that will define the contours of this century more dramatically than any other, and that is the urgent threat of a changing climate.”

Barack Obama

PEOPLE	<ul style="list-style-type: none"> PEO1: We will provide a workplace in which sustainability, well-being and behavioural safety (WBS), and equality, diversity and inclusion (EDI) is valued PEO2: We will give back to our communities through the creation of jobs, volunteering opportunities, community outreach, support for good causes, and robust apprenticeship programmes, across all sectors
PLANET	<ul style="list-style-type: none"> PLA1: We will achieve Net Zero Carbon by 2040 PLA2: We will invest in circular economy practices, optimise resource efficiency, monitor and reduce our consumption of natural resources, and prioritise the procurement of sustainable products and materials
PERFORMANCE	<ul style="list-style-type: none"> PER1: We will work collaboratively to build a successful sustainable business, with a proven reputation where CSR is at the heart of what we do PER2: We will drive improved ethical performance throughout our supply chains in accordance with the values and behaviour standards set out in our Ethics Policy

Table 1 – Wilson James Six Sustainability Priorities

1.2 PURPOSE OF REPORT

Through our Sustainability Programme we aim to establish a best practice culture, particularly in the carbon arena, where we intend to build carbon resilience into our business operations, deliver a significant reduction in our direct and indirect carbon emissions and achieve Net Zero Carbon by 2040. We recognise that our future success will depend on our ability to navigate to a low carbon and circular economy, by shifting the way we do business, investing in new technology, research and initiatives, and embracing this change.

This report aims to contribute towards our Wilson James Sustainability Planet Priority: ‘We will achieve Net Zero Carbon by 2040’. By calculating and outlining the carbon emissions produced by Wilson James in 2020, identifying their scopes and sources, providing intensity ratios and past comparative figures, we are able to start thinking about setting Science Based Targets for carbon reduction for Scope 1 & 2 (and eventually scope 3) emissions using the Science Based Target Initiative Service Sector criteria.

In order to reach our Net Zero Carbon target by 2040, we are suggesting at least a 30% reduction in carbon emissions by 2030. Carbon output at Wilson James will be reviewed on a calendar yearly basis.



2.0

**SPECIFICS AND
SUPPORTING
INFORMATION**

2.1 TIMEFRAME

The information included within this report refers to carbon output from 1st January 2021 to 31 December 2021. Carbon output will be measured internally on a calendar yearly basis, with the addition of SECR and ESOS reporting calculated for Wilson James' financial year timeframe.

2.2 METRIC

Carbon output is measured in this report in kgCO₂e, which can also be easily converted into tonnes of CO₂ by dividing by 1000. In most instances either fuel usage or mileage have been captured to convert into kgCO₂e. This conversion is made simple through the BEIS (Department for Business, Energy and Industrial Strategy) conversion factors, which are updated yearly on gov.uk.

KgCO₂e refers to 'kilograms of carbon dioxide equivalent'. This is a standard unit for measuring carbon footprints. "CO₂e" is a term for describing different greenhouse gases in a common unit. For any quantity and type of greenhouse gas, CO₂e signifies the amount of CO₂ which would have the equivalent global warming impact.

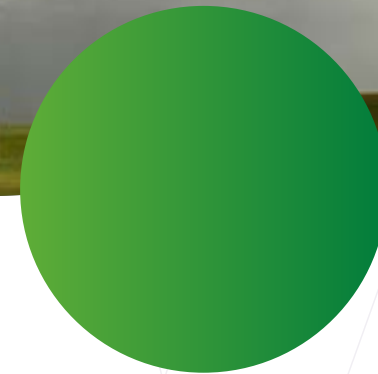
2.3 DEFINITIONS

Emission Types:

Scope 1 – direct emissions from company owned or controlled sources

Scope 2 – indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by a company

Scope 3 – all other indirect emissions that occur in a company's value chain (upstream and downstream)



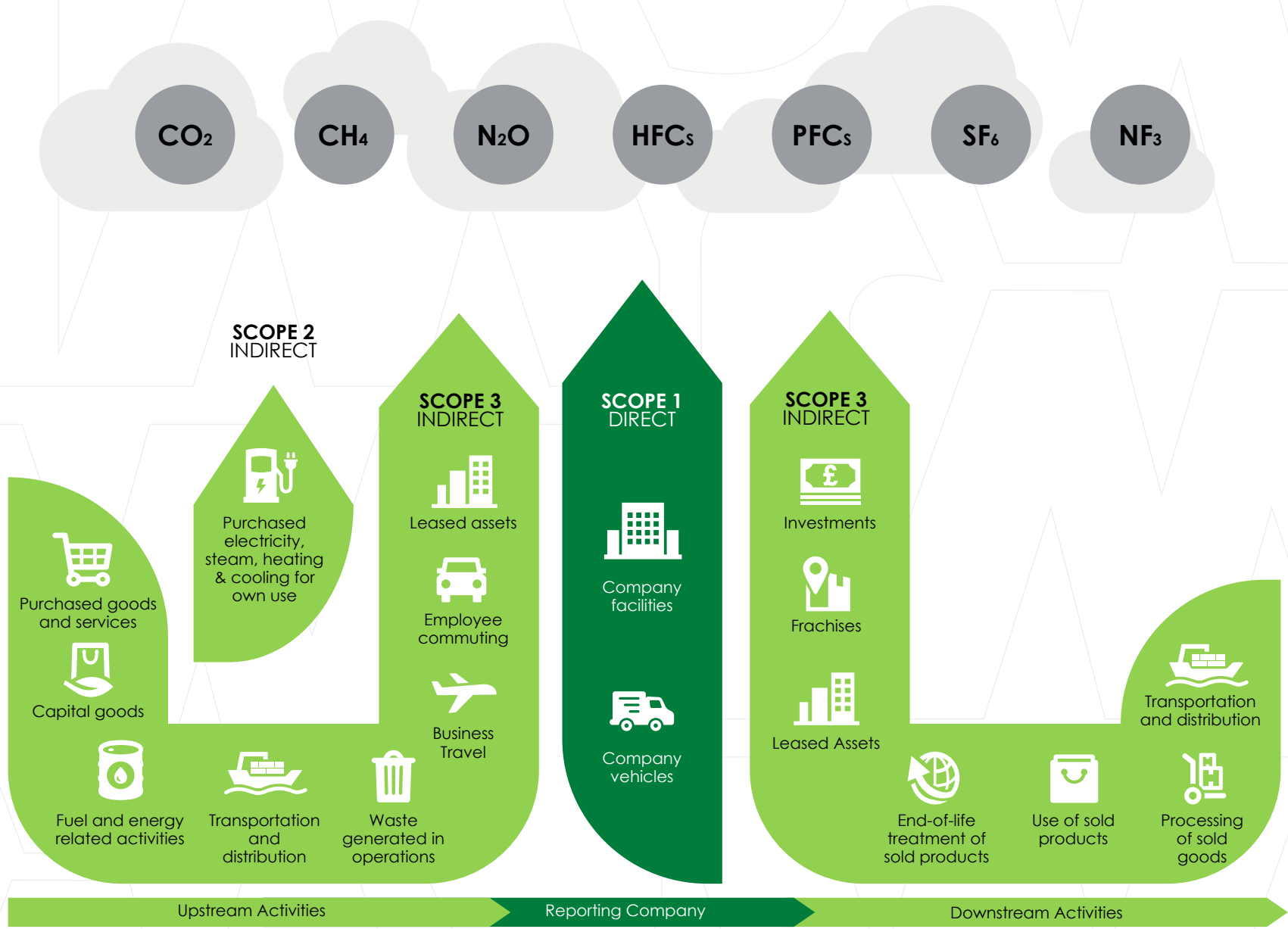


Figure 1. Scope 1, 2 and 3 emission examples via ghgprotocol.org

2.4 SOURCES MEASURED AND EXCLUDED

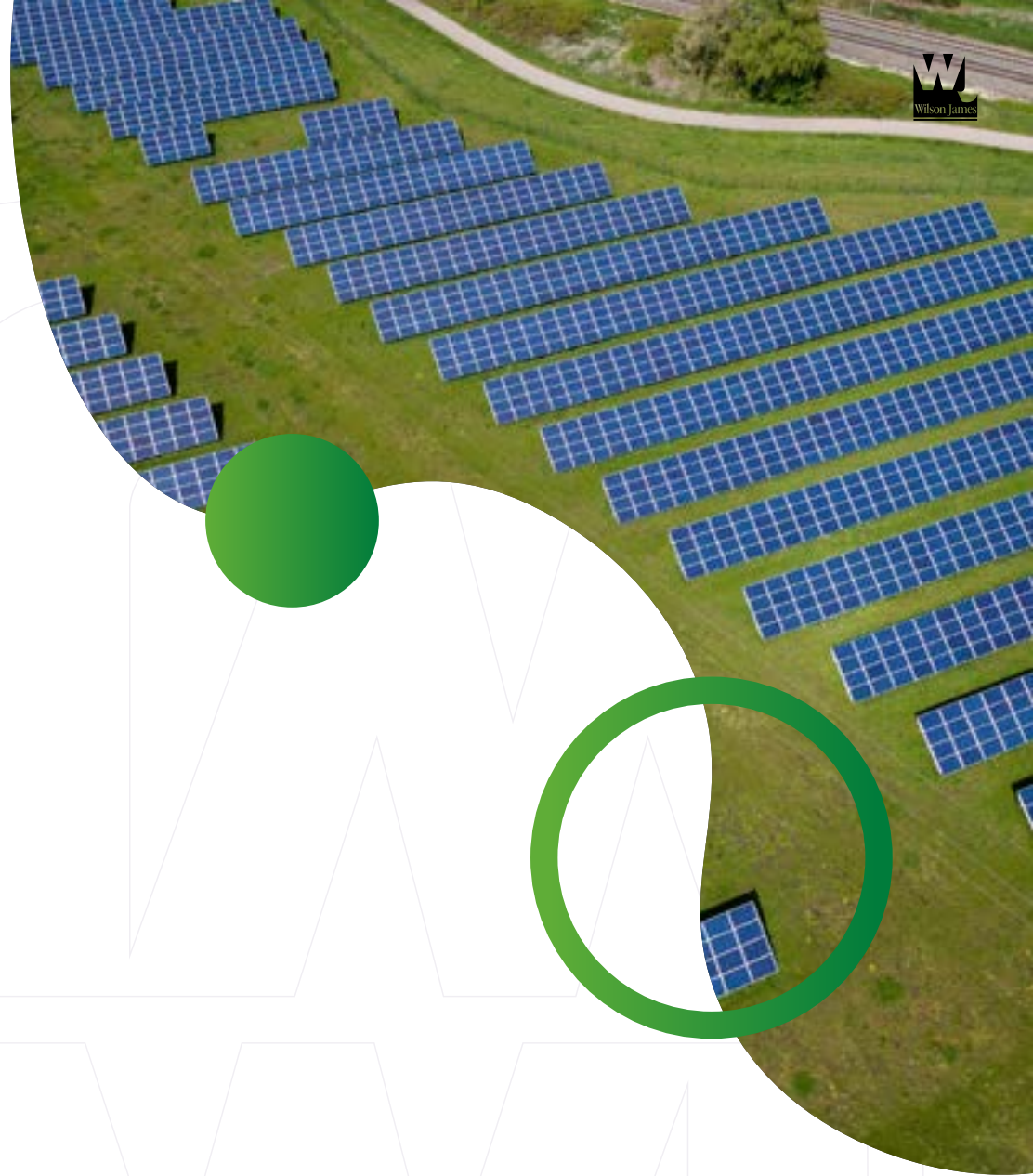
The sources of greenhouse gas emissions making up Wilson James carbon footprint are as follows:

- Fleet
- Energy usage in offices
- Business travel (road, rail and air)
- Supply chain
- Staff travel to and from work

This report includes all carbon emissions produced by Wilson James fleet, business travel and energy usage in offices.

Not included are supply chain emissions and staff travel to and from work. Gathering supply chain emission data is a large task and requires deep analysis of all Wilson James contractors and suppliers. It also requires them to uncover their company emissions for our usage. We hope to gain a better understanding of this in the future, but for now as it comes under Scope 3 emissions and is not solely controlled by us, we have noted as being a lower priority.

Staff travel is a work in progress. Collecting this information requires rolling out specific travel surveys to all Wilson James employees (5000+) in different sectors of the business. There are plans to roll this out in the near future (next 6-12 months), however we felt that due to the impact of COVID-19 on many of our employee's jobs and working life, 2020 was not the appropriate time to focus on this or use as an accurate baseline.





13.0
SCOPE 1

3.1 TABLE 2: FLEET 2021

Number of transactions	Fuel Types	Quantity of fuel (litres)	Total kgCO2e emitted in 2021
9109	Unleaded/Premium Unleaded/Diesel/ Premium Diesel	248255.56	613780.63

3.2 COMPARISON WITH 2020

Below is a comparison to the emissions produced by fleet in 2020.

Annual Emissions produced by Wilson James Fleet

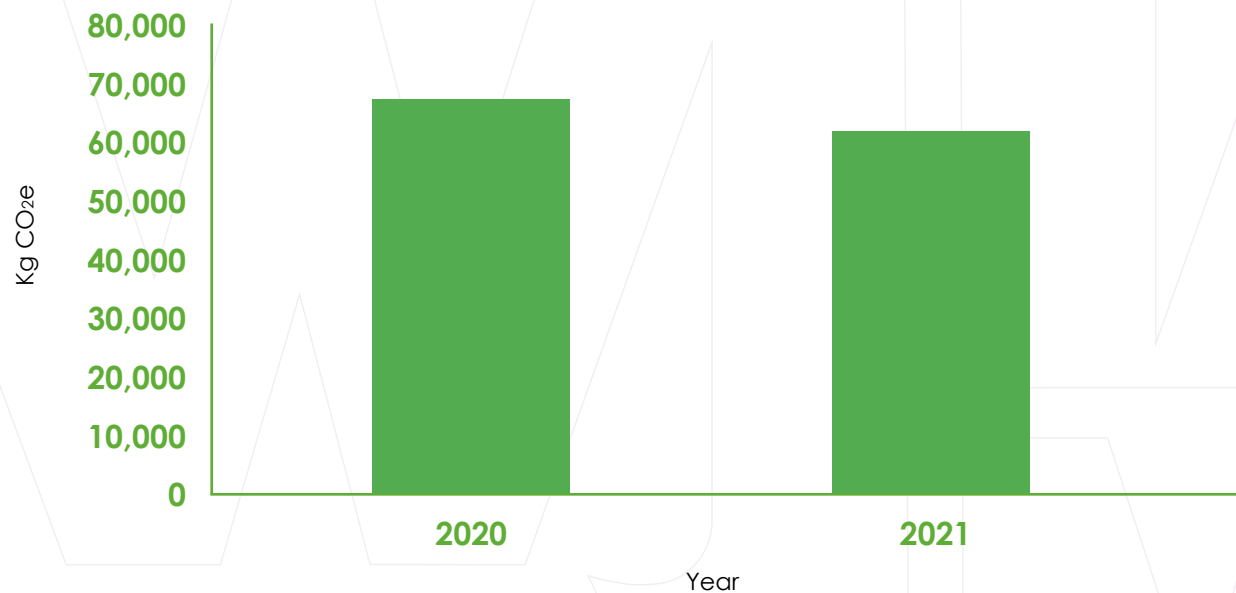



Figure 2.



14.0
SCOPE 2

4.1 TABLE 3: OFFICE ENERGY USAGE 2021

Site	Monthly Consumption 2021 (kWh)	Monthly Emissions per Site (kgCO ₂ e)
Chalkwell Lawns, Suite 17 Accounts	10,201	2,166
Office 14, Chalkwell Lawns, SS0 9HR	12,733	2,704
Office 15, Chalkwell Lawns, SS0 9HR	44,558	9,461
Office 7, Chalkwell Lawns SS0 9HR	2,899	616
80-81 Fleet Street, 3rd & 6th Floor	15,838	3,363
Well Court, London	3,714	789
Unit 3B, Thames Road	103,123	21,896
Unit 4, Thames Road	75,488	16,028
Unit 7, Thames Road	22,602	4,799
NWCD, Madingley Rd, Cambridge	17,636	3,745
Osprey House, Manchester	3,196	679
Suite 3, Greenwell Road	2,087	443
Suite 3, Greenwell Road	9,879	2,098
Total	323,954	68,785

4.2 TABLE 4: EMISSIONS BY MONTH

January 2021	February 2021	March 2021	April 2021	May 2021	June 2021	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021
6597.1	6034.2	5825.3	4447.7	10086.3	3052.7	4030.5	4423.5	4558.9	5419.9	6907.3	7401.9

Kg CO₂e

Annual Emissions produced by Office Energy Use

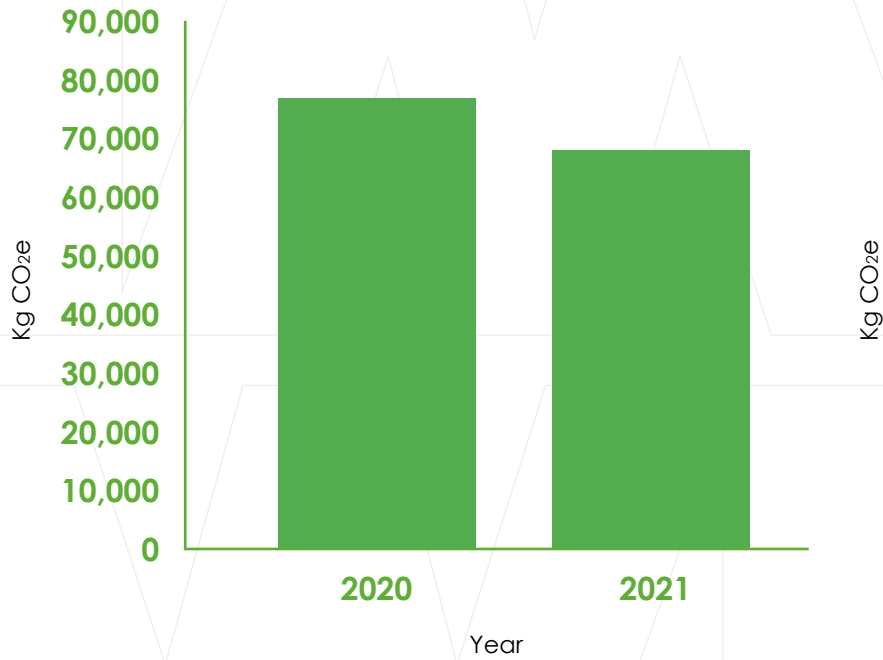


Figure 3.

Monthly Electricity Usage 2020/2021

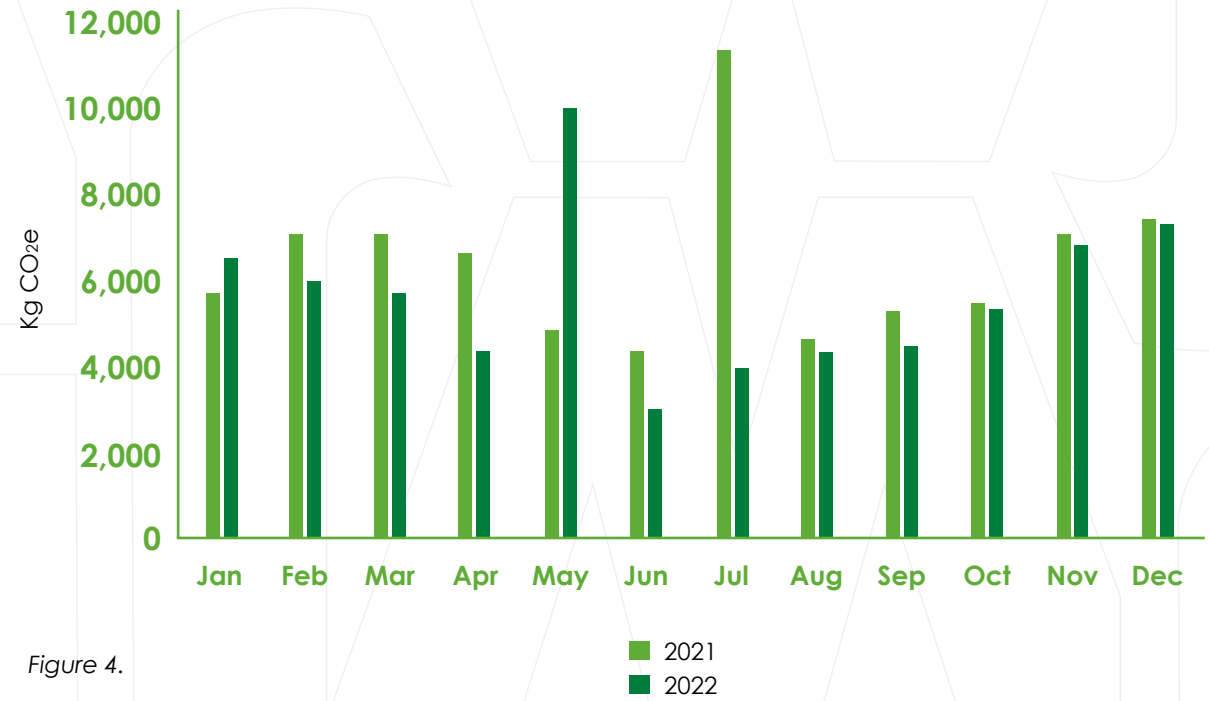


Figure 4.



15.0
SCOPE 3

5.1 TABLE 5: BUSINESS TRAVEL – ROAD 2021

5.1.1 Table 5: Monthly Business Travel Emissions via Road

Month	kgCO ₂ e
Jan-21	3484.7
Feb-21	6438.5
Mar-21	8496.3
Apr-21	7223.0
May-21	6074.7
Jun-21	9561.4
Jul-21	10080.4
Aug-21	9054.4
Sep-21	11233.7
Oct-21	8921.9
Nov-21	11256.6
Dec-21	5343.2
Total	97168.9

5.1.2 ANNUAL EMISSIONS FROM ROAD BUSINESS TRAVEL

Annual Emissions from Road Business Travel (2019 to 2021)

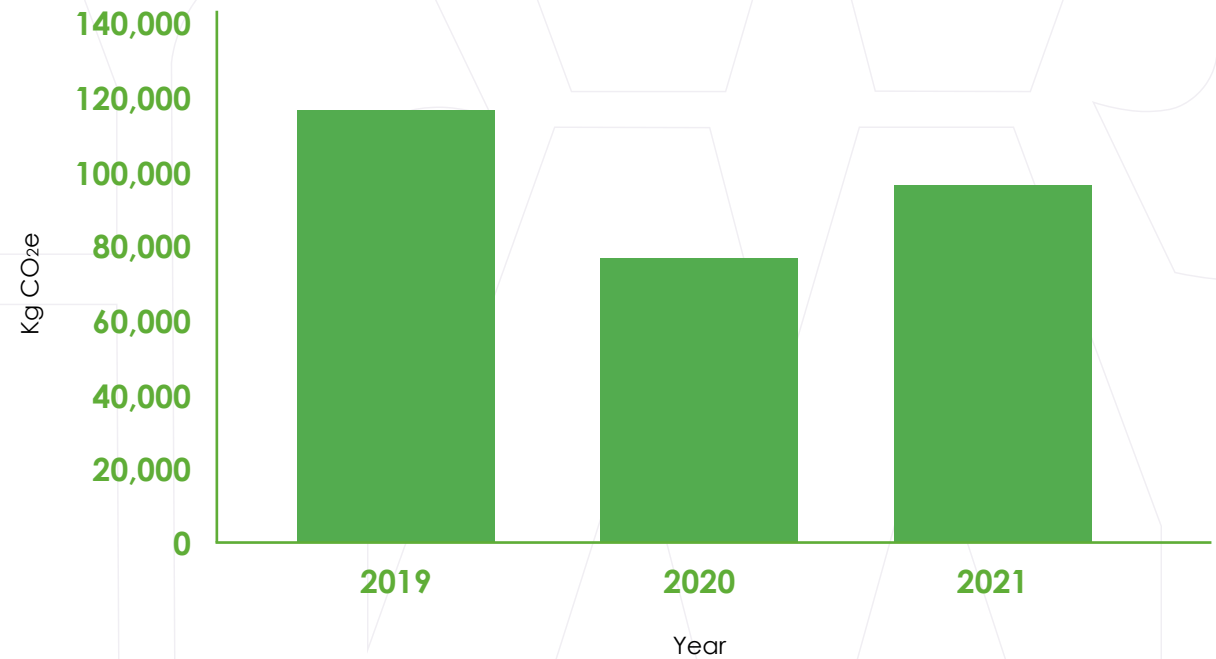


Figure 5.

5.1.3 MONTHLY EMISSIONS FROM ROAD BUSINESS TRAVEL COMPARISONS

Monthly Carbon Emissions from Road Business Travel (2019 to 2021)

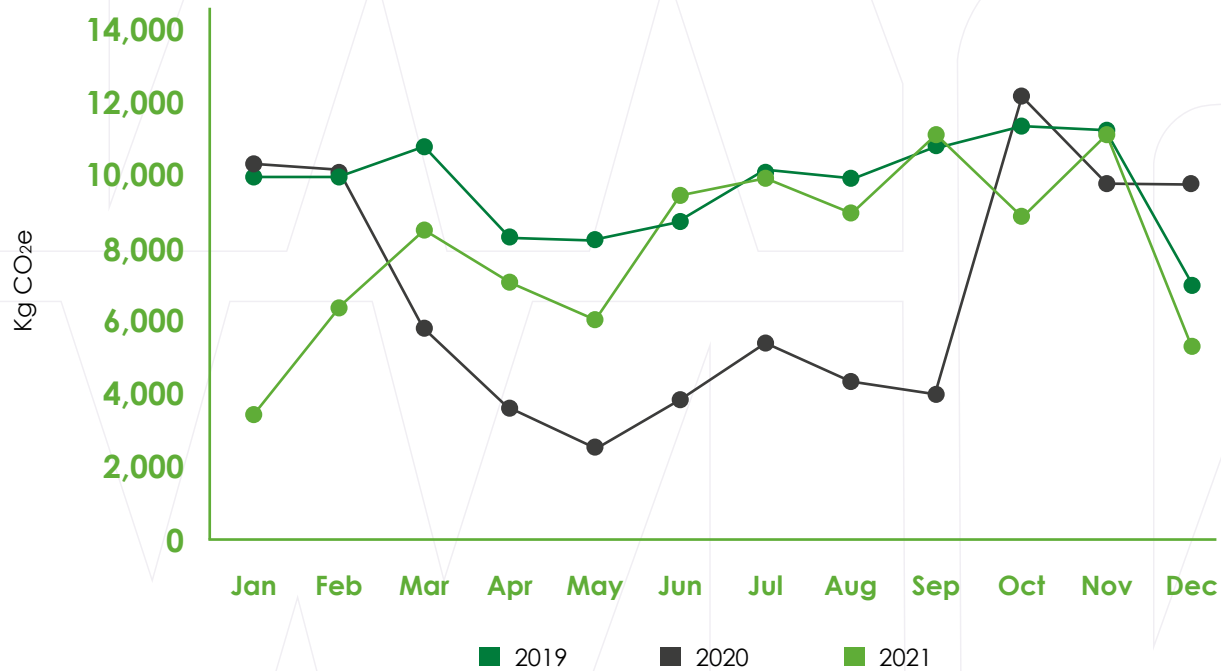


Figure 6.

5.2 BUSINESS TRAVEL – RAIL 2021

5.2.1 Table 6: 2021 Rail Travel Emissions

National Rail Emissions (kgCO2e)	4,376.99
London Underground Emissions (kgCO2e)	336.1
Total Emissions Output in 2020 (kgCO2e)	4,713.08

5.2.2 ANNUAL EMISSIONS FROM RAIL BUSINESS TRAVEL

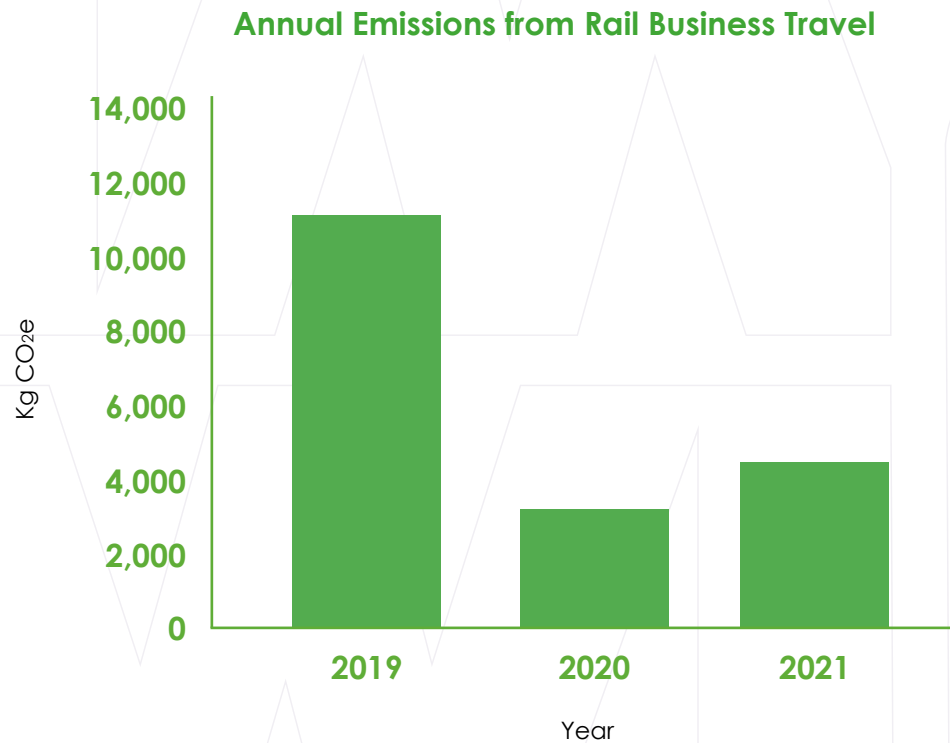


Figure 7.

5.2.3 ANNUAL NATIONAL RAIL AND LONDON UNDERGROUND EMISSIONS (SPLIT)



Figure 8.

5.3 BUSINESS TRAVEL – AIR 2021

Annual Emissions from Air Business Travel (2019 to 2021)

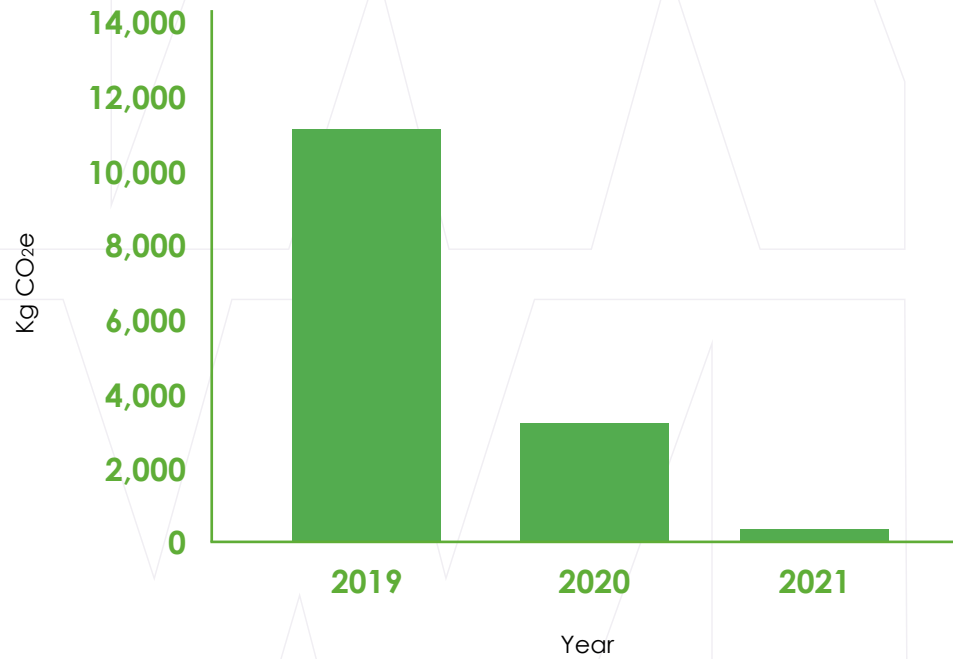


Figure 9.





16.0

**TOTAL CARBON
EMISSIONS**

TABLE 7: WILSON JAMES LTD.'S TOTAL ENERGY CONSUMPTION BY SOURCE.

Source	Total Emissions (kgCO ₂ e)
Business Travel- Rail	4,713.1
Business Travel- Air	259.2
Business Travel- Car	97,168.9
Utility Bills	68,785.2
Supply Chain	-
Staff Travel	-
Fleet	613,780.6
Total	784,706.93

Total Carbon Emissions (%)

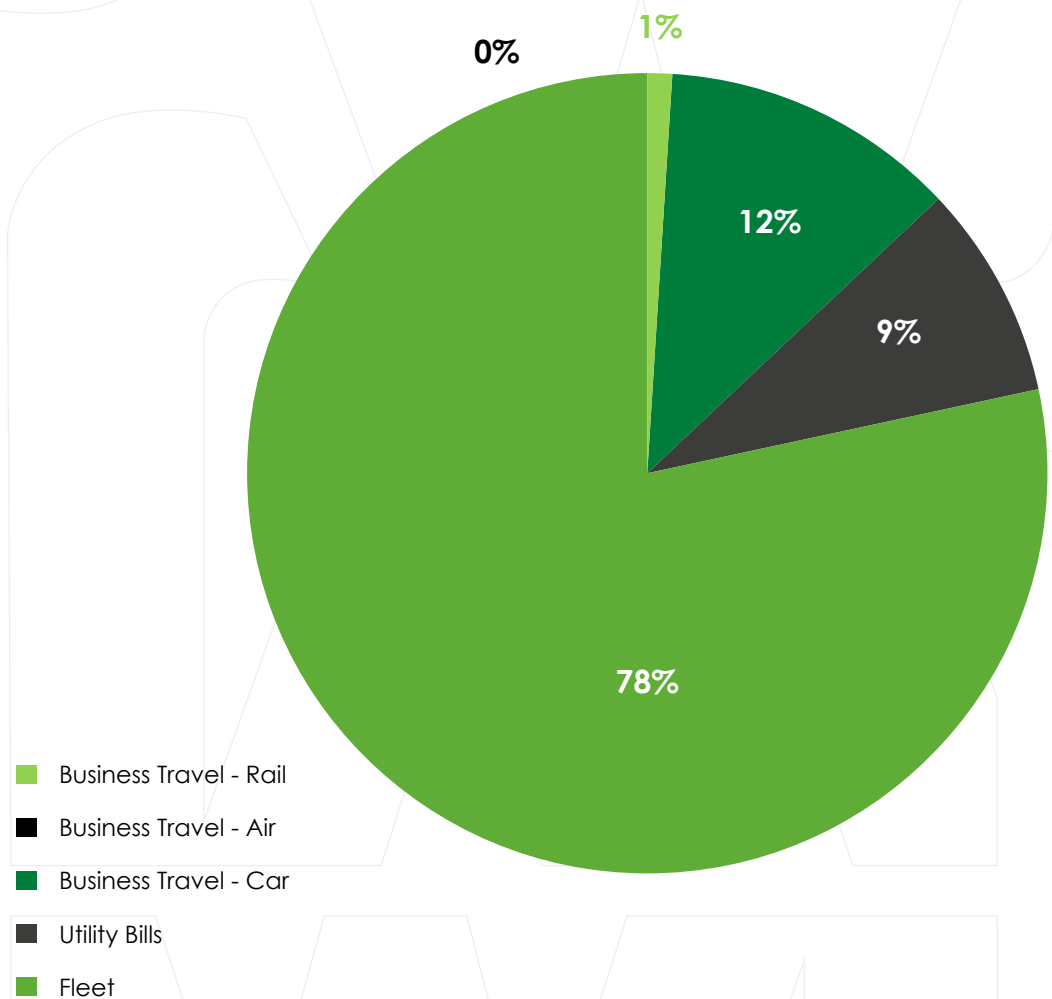


Figure 10. Pie chart representation of Wilson James Ltd.'s 2021 carbon emissions by percentage



7.0

INTENSITY RATIOS

Number of WJ permanent
(non-agency) WJ
employees



4,906

Kg of carbon emitted per
employee



159.95

Total 2021 Carbon
Emissions



784,706.93

Kg CO₂e

Kg of carbon emitted per
£1,000 spent



3.83

Turnover 2021



£205m



18.0

**ANNUAL
PERCENTAGE
CHANGE**

TABLE 10: ANNUAL PERCENTAGE CHANGE

Data	% change from 2020 to 2021
Business Travel – Rail	36.67%
Business Travel – Air	-92.36%
Business Travel – Road	18.25%
Utility Bills	-11.92%
Fleet	-10.02%
Overall	-7.60%



19.0

**COVID-19
IMPACTS**

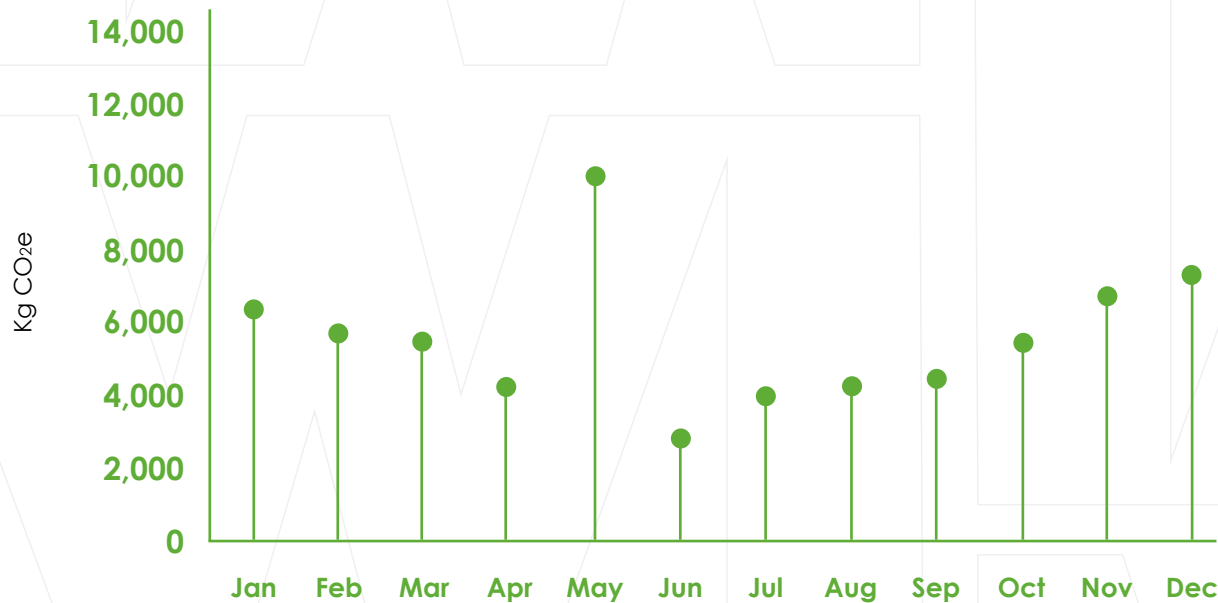
TABLE 10: ANNUAL PERCENTAGE CHANGE

It is important to take into account the impacts of COVID-19 in this report.

The UK entered its third national lockdown in early January 2021 with some restrictions still in place until as late as 19th July 2021. This has had some effect on our business operations, however the impact has not been as significant as we saw in 2020.

Construction work was still able to carry on throughout the lockdown, meaning fleet vehicles journeys took place as normal. Business travel and energy usage in offices will have been effected as employees were advised to work from home where possible.

Monthly carbon emissions from office energy usage



Office electricity usage fell from January to April. A large increase can be seen in May due to an outlying reading at Unit 3B in the LCCC which we are currently investigating further.

As we began to return back to the office in the latter half of the year, office energy emissions continually rose month on month.

Figure 11.

Monthly carbon emissions from road business travel

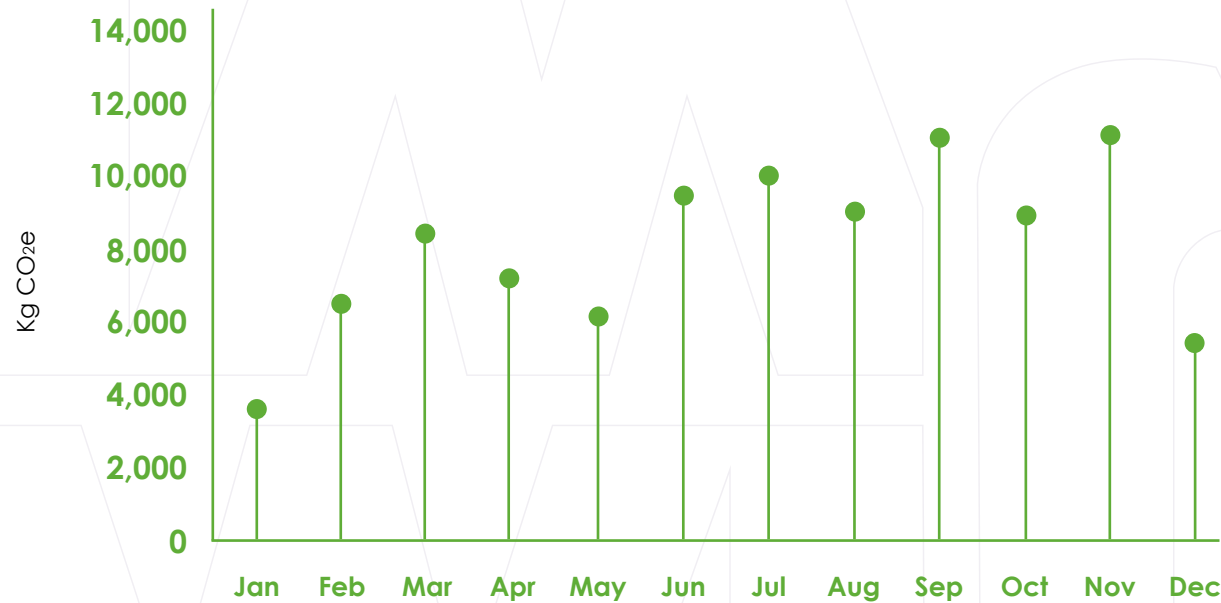


Figure 12.

Business travel via road slowly increased throughout the year which is as expected as we gradually unlocked the country. Site visits were still being carried out for the entirety of the year and therefore emission levels never fell too low.

However, we do see peaks throughout the summer months to November when the UK was in no form of lockdown. Business travel rapidly fell again in December which will be due to a reduction in site visits during the holiday season and the rapid spread of the Omicron variant of COVID-19.

2021 was certainly more 'normal' than 2020, however these results show that COVID restrictions still had some impact on emissions during various periods of the year. By comparing 2019 emissions with 2021 emissions it is also clear that the ways in which we work, even when no restrictions are in place, have certainly changed for good.



10.0
ANNEX

10.1 METHODOLOGY

Fleet

Fleet data is requested to our Fleet Coordinator who is able to extract data reports on fuel usage. Each fuel transaction is recorded, along with vehicle type and fuel type. Fuel usage is recorded in litres. In order to convert fuel usage (litres) into kgCO₂e a conversion factor (CF) must be used. Conversion factors are listed by BEIS on gov.uk and updated annually. The following formula was used:

$$\text{Litres} * \text{CF} = \text{kgCO}_2\text{e}$$

The CF depends on the type of fuel used. There were 4 different fuel types present in our Wilson James fleet:

Fuel Type	Conversion Factor
Unleaded	2.19352
Premium Unleaded	2.33969
Diesel	2.51233
Premium Diesel	2.70553

This was calculated for each fuel transaction and then totalled to give full 2021 fleet emissions.

OFFICE ENERGY USAGE

Energy usage was collected monthly for each office via utility bills in kWh. To convert from kWh to kgCO₂e the following formula was used:

$$\text{kWh} * \text{CF} = \text{kgCO}_2\text{e}$$

The 2021 conversion factor for electricity in kWh to kgCO₂e is 0.21233.

The carbon emissions for each month in 2021 was added together to result in the total carbon emissions produced by all WJ offices in 2021.

BUSINESS TRAVEL – ROAD

Business road travel could only be collected through expense claims. As part of an expense claim, the total distance travelled in miles, engine size of vehicle and fuel type must be input, so using this information along with conversion factors the kgCO₂e was able to be calculated.

Engine size:

001	Up to 1400 cc Capacity
002	1400 - 2000 cc Capacity
003	Over 2000 cc Capacity

Fuel type:

	Private (Petrol) No Allowance
A	Allowance (Petrol)
D	Company Car (Diesel)
P	Company Car (Petrol)
Y	Allowance (Diesel)
Z	Private (Diesel) No Allowance

Selecting the correct conversion factor:

Engine size/fuel type	Conversion Factor
< 1400 cc (petrol)	0.24052
< 1400 cc (diesel)	0.22143
1401 – 2000 cc (petrol)	0.30231
1401 – 2000 cc (diesel)	0.26549
> 2000 (petrol)	0.44914
> 2000 (diesel)	0.33348
< 1400 cc (electric)	0.07348
1401 – 2000 cc (electric)	0.08455
2000 cc (electric)	0.09762

Then the following formula is applied:

$$\text{Mileage} * \text{CF} = \text{kgCO}_2\text{e}$$

BUSINESS TRAVEL – RAIL

Business rail travel was collected via expense claims. Distance input is not a mandatory field on our SAP expense claim system for rail tickets, therefore in a lot of cases no distance could be measured which is a vital piece of information for this calculation.

In order to avoid disregarding the majority of this data and losing out on counting these emissions, the distances that were recorded were taken and averaged based on the distanced travelled per pound (£) spent. This then gave a best guesstimate of each transactions distance based on the price of the ticket. This was done separately for National Rail and Tube.

The following table outlines how emissions per £ spent were gained:

Type	Average km travelled per £ spent	Conversion Factor	kgCO2e output per £ spent
	This was calculated by averaging those transactions that did include distance travelled	2021 BEIS conversion factors (km to kgCO2e)	Multiplied km per pound spent by conversion factor
National Rail	3.61	0.03549	0.128109566
Tube	2.31	0.02781	0.0642411

Then the expenditure on National Rail tickets and Tube tickets were calculated and multiplied by their respective conversion factors:

$$\begin{aligned}
 & \text{'Total expenditure (National Rail)' * 'kgCO2e output per £ spent (tube)'} \\
 & \quad \& \\
 & \text{'Total expenditure (Tube)' * 'kgCO2e output per £ spent (tube)'}
 \end{aligned}$$

These two numbers were then added together to give the total:

**National Rail Emissions
(kgCO₂e)**



4,376.99

Tube Emissions (kgCO₂e)



336.1

**Total Emissions Output in
2020 (kgCO₂e)**



4,713.08

N.B. This calculation is not accurate as train fares vary considerably due to supply and demand, but was the best available figure.

BUSINESS TRAVEL – AIR

Flight booking is done through admin and personal assistants. All flight details were requested. Flight distance (km) was calculated between Origin and Destination location for each flight. Then the following formula was applied:

$$\text{km} * \text{CF} = \text{kgCO}_2\text{e}$$

The 2020 conversion factor for km in the air to kgCO₂e varies depending on flight length and class flown in:

Haul	Class	Unit	Conversion Factor to kgCO ₂ e
Domestic, to/from UK	Average passenger	passenger.km	0.2443
Short-haul, to/from UK	Average passenger	passenger.km	0.15553
	Economy class	passenger.km	0.15298
	Business class	passenger.km	0.22947
Long-haul, to/from UK	Average passenger	passenger.km	0.19085
	Economy class	passenger.km	0.14615
	Premium economy class	passenger.km	0.23385
	Business class	passenger.km	0.42385
	First class	passenger.km	0.58462
International, to/from non-UK	Average passenger	passenger.km	0.18181
	Economy class	passenger.km	0.139245
	Premium economy class	passenger.km	0.22278
	Business class	passenger.km	0.40379
	First class	passenger.km	0.55695

 info@wilsonjames.co.uk

 [@WJLtd](https://www.facebook.com/WJLtd)

 [@WJ_Ltd](https://twitter.com/WJ_Ltd)

 www.linkedin.com/company/wilson-james