

# ENVIRONMENTAL STATEMENT CY 2022

*Spreading Happiness. Reimagining Tea.*

SUMMER 2023 RELEASE





# About Bird and Blend

Bird & Blend Tea Co. is an eco conscious, independent, people-focused, award winning Tea Mixology Company on a mission to spread happiness & reimagine tea!

The company was set up and is run by Krisi and Mike, who met whilst studying Politics (of all things!) at university. Starting off packing tea in their bedroom and attending markets, building Bird & Blend from scratch while staying true to our ethos and values has been Krisi and Mike's passion. Now with an awesome team, multiple retail stores & a thriving international online store, Bird & Blend is leading the way in tea innovation in the UK.



## **We are Carbon Neutral**

We purchase offsets for all of the carbon that our business emits. Our offsets are purchased through Ecologi and fund wind power in vietnam as well as funding efforts to prevent deforestation in the Amazon.



## **We are planting trees**

We plant a tree every time someone purchases a disposable cup in our stores. We plant mangrove trees in madagascar that prevent soil erosion around waterways and have large carbon capture potential.



## **We use zero emission delivery partners**

We deliver all tea in London using a 100% zero emission delivery company. Who collect from our Worthing warehouse using an electric van and use cargo and push bikes for the last mile.

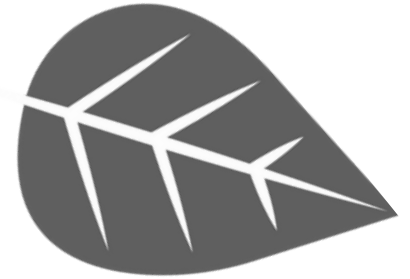


## **We use Solar Panels**

We had solar panels installed on our warehouse in 2022. This allows us to reduce the emissions related to transmission of electricity and ensure that we are using 100% renewable source.

## **We use 0 plastic in our packaging**

We do not use any plastic in our product packaging. It is made from plant based materials that can be composted or recycled.



## **We send 0 waste to landfill**

We do not send any of our waste to landfill. Instead it is incinerated and converted to energy.



## **We use Green Energy**

We purchase our energy from Bulb who supply energy from certified renewable sources. Our gas is from renewable sources when possible and any non-renewable gas is carbon offset by Bulb.



## **We try to incentivise**

We are part of the bike-to-work and electric vehicle scheme to encourage employees to use eco-friendly methods of commuting. We also request that all of our suppliers send their goods via shipping instead of flights

# Our Environmental Management System

Our Environmental Management System (EMS) uses the ISO 14001 framework and GHG protocol guidance for scope 3 emissions. Our EMS is not audited by a third-party.

We review all our activities to identify those that have a significant impact on the environment. Then we take action on how we can improve in those areas.

Throughout the year, we monitor progress and year we review our targets to ensure we are improving our environmental performance. All employees of Bird and blend are responsible for their parts in meeting environmental performance targets.

Cush Bennet, Sustainability and Ethics Lead is responsible for developing and running the EMS, internal audit system and producing an annual management review of environmental performance.

Mike Turner, Managing Director, acts as the main advocate for the companies environmental policies and practices.



## Legal Compliance

Each year we measure and identify where we are falling short so we can make improvements. A register is maintained, updated and controlled by our Environmental Management System.

We are not required to register with the Environmental Agency under the Producer Responsibility Obligations Regulations 2010 (as we produce less than 50 tonnes of Packaging Waste annually.)

All applicable environmental legal requirements are completed via our compliance obligations register.

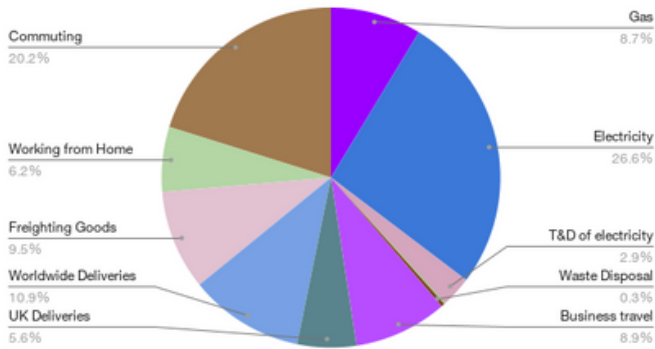


# Environmental Data 2021

## Carbon Emission by Activity

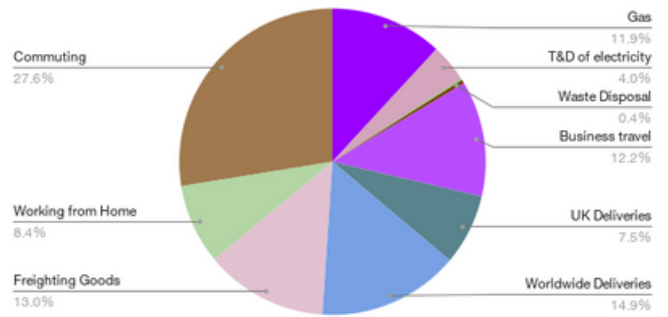
We measure all carbon emission activities for our business operation. We then consider if any of these activities utilise renewable energy or sources. These two pie charts compare the impact of the eco- friendly alternative sources. All our electricity is from renewable sources and is therefore not present in the market based chart.

Carbon Emissions by activity (% of total emissions)



Carbon Emissions by activity (% of total emissions)

Market Based- accounting for green energy use



## Significant Aspects

In 2022 there is an increase in overall GHG emissions, this is expected due to growth of sales and lack of COVID-19 restrictions on businesses. There is a significant increase of electricity and gas usage, this is attributed to improved meter reading, as electricity uses green energy sources it has little impact on overall GHG emissions. The waste figures drop back down to previous years, there may be a data error between either 2021 or 2022. Water usage decreases slightly, this could be attributed to closure of Tumbridge Wells store.

	2018	2019	2020	2021	2022
<b>GHG Emissions (tCO<sub>2</sub>)</b>	146.8	130.5	165.9	242	<b>255.1</b>
<b>Energy Usage Electricity (kWh)</b>	87,371	109,453	115,124	132,360	<b>227,006</b>
<b>Energy Usage Gas (kWh)</b>	13,056	13,056	12,213	15,553	<b>85,932</b>
<b>Waste Produced (kg)</b>	14,284	24,198	22,5154	60,819	<b>58,010</b>
<b>Water Used</b>	1,552	1,826	1,164	2,964	<b>2,519</b>

# Carbon Emissions (tCO2-e) by Activity - Market Based

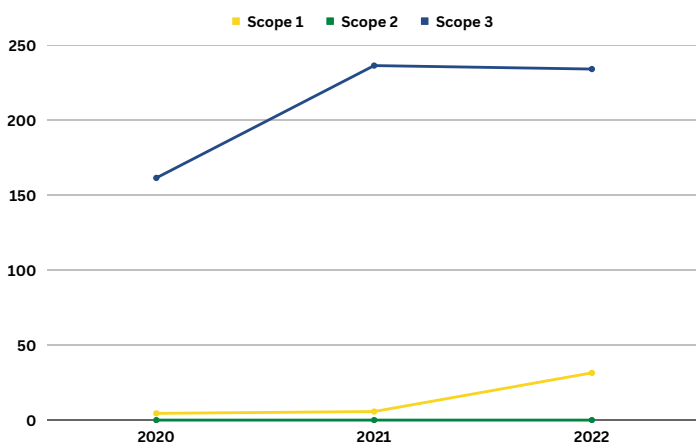
Activity	2018	2019	2020	2021	2022
<b>Scope 1</b>					
Gas	4.80	4.80	4.49	5.70	<b>31.48</b>
Refrigerant	0	0	0	0	<b>0</b>
<b>Scope 2</b>					
Electricity	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Scope 3</b>					
T&D of Electricity	4.3	5.39	5.67	6.17	<b>8.38</b>
Water Supply and Treatment	1.81	0.96	0.61	0.61	0.53
Waste Disposal	0.30	0.50	0.45	3.21	<b>1.06</b>
Business Travel	54.65	9.78	11.64	17.08	<b>32.35</b>
UK Deliveries	10.35	14.26	16.38	17.09	<b>19.89</b>
Worldwide Deliveries	40.34	63.35	63.35	55.94	<b>39.61</b>
Freighting Goods	21.40	21.75	32.26	48.94	<b>34.40</b>
Working from home	0.00	0.00	19.20	7.63	<b>14.32</b>
Commuting	8.85	9.70	11.82	79.56	<b>73.13</b>
<b>Total</b>	<b>146.8</b>	<b>130.5</b>	<b>165.9</b>	<b>241.9</b>	<b>255.1</b>

In 2022 the GHG emissions for Scope 1,2 and 3 show a complex picture due to improved calculations and reading for most aspects.

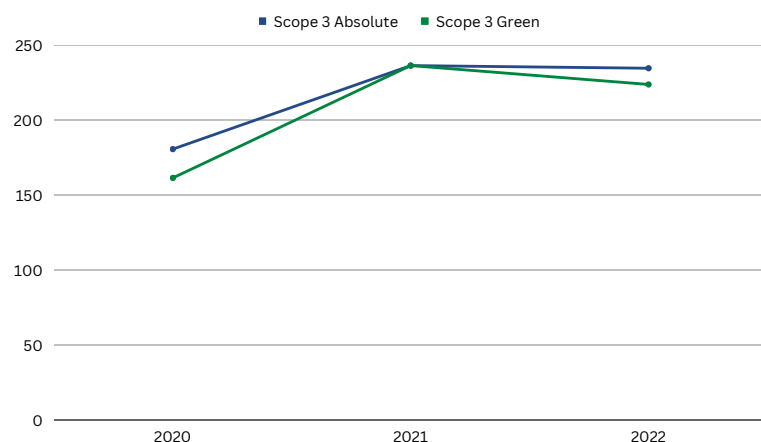
Scope 1 has increase most significantly over the last 3 years due to the improved meter reading for gas usage and the opening of warehouse that may have a higher gas usage.

Scope 3 has levelled off in 2022 this can be attributed to 1 store being closed and no new stores being opened. When comparing absolute emissions with green emissions across scope 3 emissions we can see a small decrease in 2022 due to green initiatives such as green energy use for people working at home, zero emissions delivery partner for London deliveries and small decrease in T&D of electricity due to solar panel installation.

Carbon Emissions by Scope 2020-2022 (tCO2)



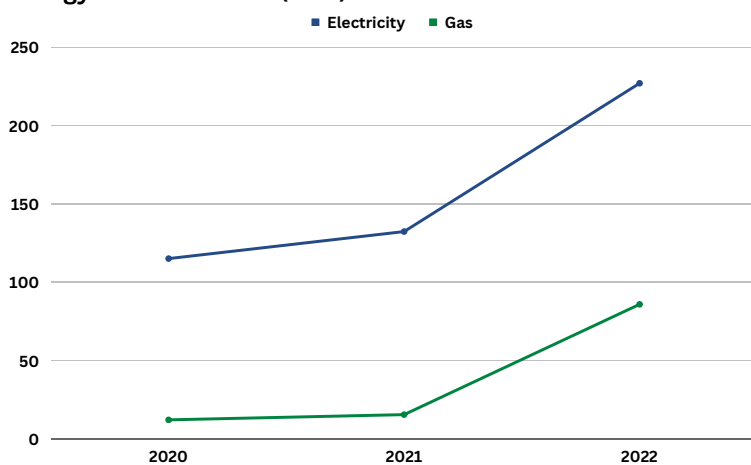
Scope 3 Emissions 2020-2022 Absolute vs green (tCO2)



# Energy Use

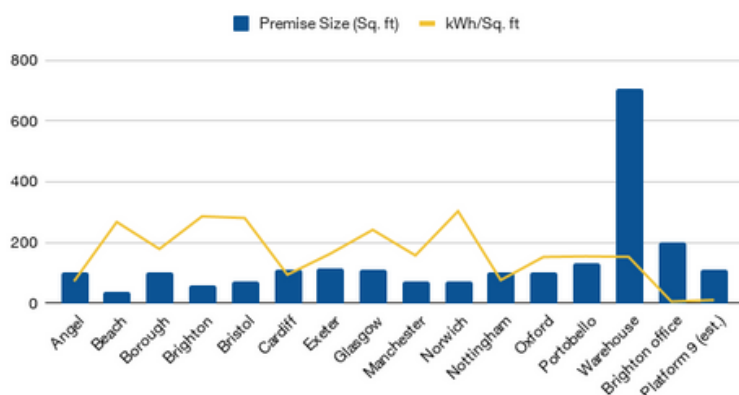
	2020	2021	2022
Electricity usage- 100% green external source MWh	115.12	132.36	<b>227.00</b>
Gas Usage- Mixed green renewable from external source mWh	12.21	15.55	<b>85.93</b>
Solar PV Generation - internal mWh	0	0	<b>0.91</b>

Energy Use 2020-2022 (kWh)



Electricity use increased by 56% this is due to improved meter reading and some of the usage could be attributed to 2021, however the utility companies are unable to provide this data. Gas also increase by a significant 453% this could be due to improved meter reading and a whole year of use at our warehouse. Our Solar PV system was installed in September 2022, it generated 0.91 mWh of electricity. We expect by 2023 it should generate approx 8% of our total electricity use. Reducing the demand on transmission of electricity.

Total Energy Usage vs Premise Size



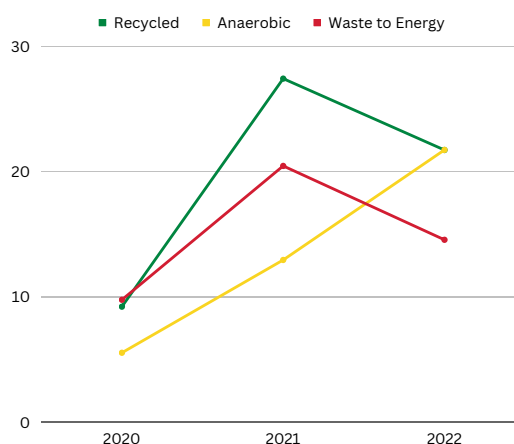
When comparing electricity use with size of premise we see that some of our smallest stores use the most amount of electricity per sq ft.

This could be attributed to either incorrect billing by utility companies or due to inefficiencies within these spaces.

# Waste

	2020	2021	2022
Recycled (kg)	9,210	27,423	<b>21,726</b>
Anaerobic Digestion (kg)	5,536	12,942	<b>21,730</b>
Waste to Energy (kg)	9,769	20,454	<b>14,555</b>
Hazardous Waste (Units)	0	0	<b>13</b>
Average Recycling Rate	56%	66%	<b>65%</b>

Waste Generation 2020-2022 (tonnes)



The average recycling rate has increased over the last 3 years via a combination of improved calculation of waste weights, awareness of waste streams and partnering with green waste management companies. There was a peak in waste generation in 2021 due to data collection being possible from our new warehouse site. However there was a decrease in 2022 accurate data collection of haulage weights instead of average weights. Our recycling rates have remained reasonably stable.

Positively the amount of waste being composted has increased, due to our compostable packaging being introduced across the business.

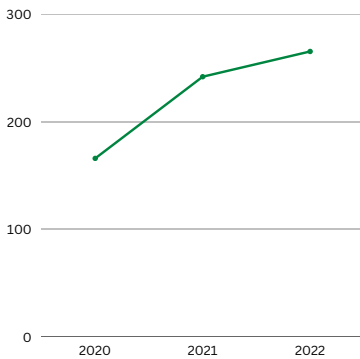
Some electrical items were disposed of as hazardous waste causing a small increase in emissions (0.8 tCO2)

# GHG emission as % of growth and Carbon Offsets

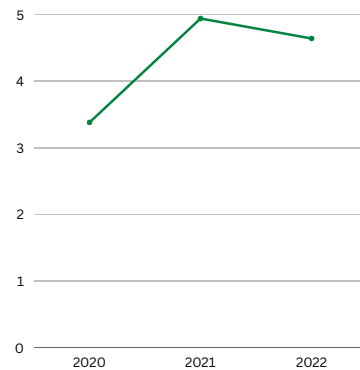
	2018	2019	2020	2021	2022
Carbon Emissions (tCO <sub>2</sub> )	146.8	130.5	165.9	241.9	<b>255.1</b>
% Change		-11.11%	27.11%	45.81%	<b>5.47%</b>
Emissions per employee (tCO <sub>2</sub> )	5.24	4.21	3.38	4.74	4.64
Carbon Intensity		0.036	0.040	0.031	<b>0.026</b>
Solar Panel Equivalent Emissions (tCO <sub>2</sub> )	0	0	0	0	<b>1.7</b>
Carbon Offsets Purchased (tCO <sub>2</sub> )	0	0	166	242	256

These figures analyse carbon emissions in relation to the growth of the business. Overall GHG emissions have increased by a less significant figures compared to previous years and carbon intensity has decreased year on year meaning our carbon emissions are decreasing relative to revenue growth. The emissions per employee are relative stable, this could be attributed to the closure of one store and no new store openings meaning there was no significant increase in full time staff. 2022 is the first year our solar panels installed at our warehouse have produced energy, saving 1.7 tCO<sub>2</sub>e in emissions, reflected in the carbon offsets needed.

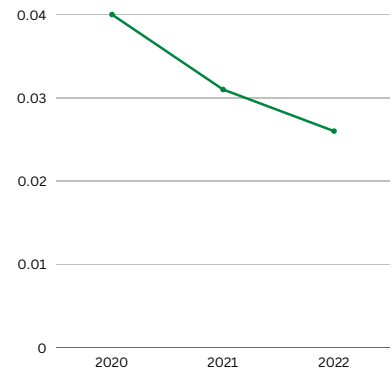
**Total Carbon Emissions 2020-2022 (tCO<sub>2</sub>)**



**Emission per Employee 2020-2022 (tCO<sub>2</sub>)**



**Carbon Intensity relevant to revenue 2020-2022 (tCO<sub>2</sub>)**

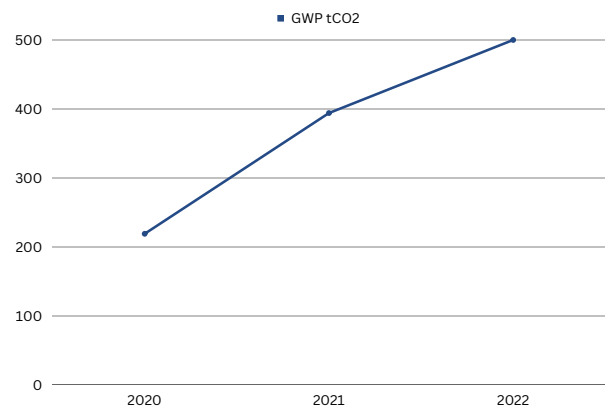




# Greenhouse Gas and Global Warming Potential

Greenhouse Gas		Tonnes GHG	GWP	tCO2-e/Year
CO2	Carbon Dioxide	204.35	1	<b>204.3</b>
CH4	Methane	0.47	25	<b>11.7</b>
N2O	Nitrous Oxide	0.87	298	<b>259.7</b>
CO2-E	Carbon Dioxide	209.41	0.117	<b>24.5</b>
PFC	Hydrofluorocarbons	0.00	12200	<b>0.0</b>
HFC	Perofluorocarbons	0.00	1430	<b>0.0</b>
SF6	Sulphur Dioxide	0.00	22800	<b>0.0</b>
<b>Total tCO2-e</b>				<b>500.2</b>

Emissions as related to global warming potential 2018-2022 (tCO2)

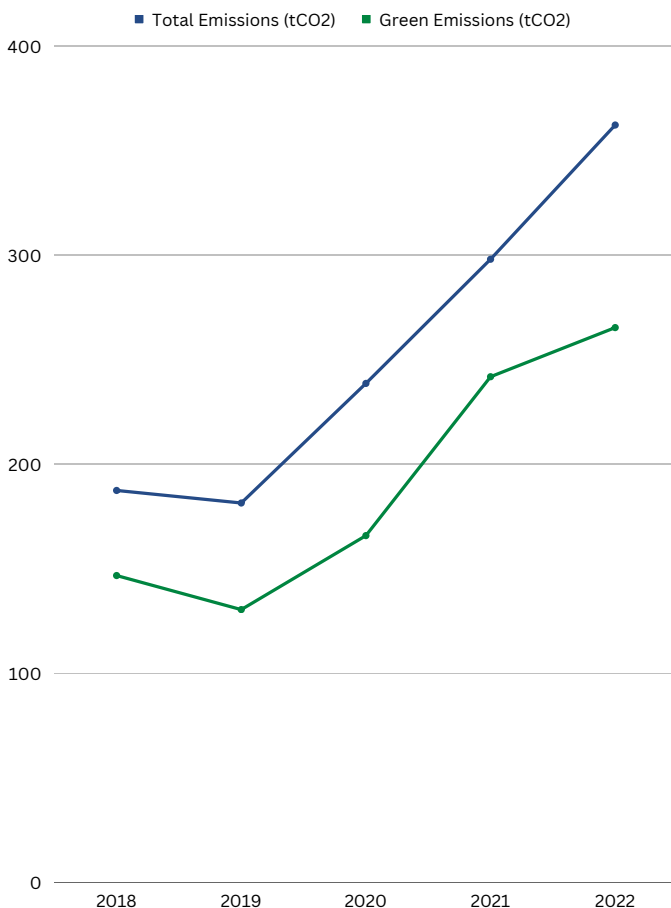


These calculations take into account the different global warming potentials of different greenhouse gases (GHG.) We utilise this to monitor specific activities that may emit a particularly potent GHG. Greenhouse gases warm the earth by absorbing energy and decreasing the rate at which energy can escape the atmosphere. The global warming potential allows comparisons between the differences between the gases ability to absorb energy and the radiative efficiencies. Nitrous Oxide traps heat in the atmosphere 265 times more powerfully compared to CO2, it is also implicated in thinning the ozone layer. Methane is also a potent greenhouse gas, it is 25 times more powerful than CO2. The main activities that add to N2O and CH4 are electricity use, business travel and commuting using vehicles.

Over the last 3 years our emissions related to GWP have increased by 43% therefore it is important to find ways to reduce high polluting activities.

## Tracking GHG over time

Total Emissions vs Green/Market based Emissions 2018-2022 (tCO2)



We measure the total emissions by all business activities as well as accounting for our 'green' emissions or market based emissions that account for business activities that using net-zero carbon processes for example, electric cars, green energy etc..

Over the last 5 years both our total and 'green' emissions have increased steadily alongside the growth of the business.

However 2021-2022 total emissions increased by 21% whereas green emissions only increased by 5%. This demonstrates the importance of green initiatives. In 2022 we partnered with a London based zero emissions delivery company, installed solar panels and had a greater proportion of employees using green energy when working from home.

These measures have slowed down the rate of carbon emissions growth. Continued investment in sustainable business practices could see our emissions start to decrease back towards 2020 levels, this would be a huge step towards achieving our net-zero goals.

In addition this slower emissions growth could also be attributed to the fact no new stores were opened in 2022, therefore 2023 data will provide a complete picture of what causes the slower growth of green based emissions.

# Objectives and Targets - Aspect Based

## Aspect 1 - Energy Consumption

Potential Impact: The generation, use and transmission and distribution of electricity creates greenhouse gases.

### **Objective 01: Reduce energy consumption**

Target 1.1: Absolute reduction of energy use by 5% over 5 years across all premises

- Install lighting and heating sensors where appropriate
- Install LED lighting in all premises
- Encourage energy saving practices

Target 1.2: Reduce market based emissions from gas over next 5 years

- Encourage energy efficient use of gas appliances via timers and sensors

Target 1.3: Reduce emissions from transmission of electricity

- Installation of solar panels at our warehouse

## Aspect 2 - Waste Generation

Potential Impact: Waste creates GHG emissions, pollutes land and water as well as damaging biodiversity.

### **Objective 02: Become a Zero Waste company**

Target 2.1: Reduce waste to energy by 5% over 2 years

- Ensure premises are using recycling facilities effectively

Target 2.2: Increase recycling rates by 10% over 2 years

- Change mylers to recyclable materials
- Find alternative to thermal label printer backing

## Aspect 3 - Greenhouse Gas Emissions

Potential Impact: Emissions generated from business operation add to effects of climate change

### **Objective 03: Reach Net-Zero emissions**

Target 3.1: Reduce absolute tCO<sub>2</sub> by 5% in 5 years

- Implement zero emission delivery across major cities in the UK
- Explore European and USA distribution centres
- Encourage zero carbon commuting and business travel options

Target 3.2: Reduce carbon emissions per employee to 4 tCO<sub>2</sub> over 3 years

- Limit business travel
- Encourage hybrid working practices where possible

Target 3.3: Improve data collection of scope 3 emissions

- Utilise new systems to improve data collection



# Objectives and Targets -Scope Based

**Absolute target:** reduction in tCO<sub>2</sub> regardless of growth

**Intensity target:** reduction of tCO<sub>2</sub> aligned with a business metric (sales, employees, premises)

**Baseline year:** to be set next year, to provide a true reflection of our carbon emissions with improved data collection. The objectives below are a demonstration of our intentions to achieve our net-zero goal.

## Scope 1

### *Long Term*

Absolute reduction of all scope 1 emissions (tCO<sub>2</sub>) by 50% over 20 years

Absolute reduction of all scope 1 emissions (tCO<sub>2</sub>) by 80% over 28 years, reaching target of net-zero by 2050

Long Term capital expenditure:

- removal of any air conditioning units and changed for renewable systems
- premises using gas switched to alternative renewable source

## Scope 2

Intensity target - reduction of location based tCO<sub>2</sub> measured in relation to revenue and employee headcount over 10 years

## Scope 3

Absolute reduction of all scope 3 emissions (tCO<sub>2</sub>) by 20% in 15 years,

Absolute reduction of all scope 3 emissions (tCO<sub>2</sub>) by 50% in 20 years

Absolute reduction of all scope 3 emissions (tCO<sub>2</sub>) by 90% in 28 years, reaching target of net-zero by 2050.

Long Term Capital Expenditure:

- changes to the distribution of goods out via worldwide distribution centres, zero emission delivery partners
- business travel minimised and zero emission alternatives encouraged
- cultural change to minimise emissions associated with commuting and support provided to use renewable electricity when work from home

Date Collection Targets

- Improve data collection for working from home and commuting
- Improve goods in data via more accurate quantity and weights

## Growth Related Targets

Employee metric: Emit no more than 5tCO<sub>2</sub> per employee. Aim to reduce emissions per employee to 4tCO<sub>2</sub> per employee in 3 years.

Carbon Intensity: Reduce tCO<sub>2</sub> per \$1 million revenue to under 0.010 in 3 years

