

Audit of Carbon Emissions and Decarbonisation Strategy to Achieve Net-Zero

May 2023

Cashflows

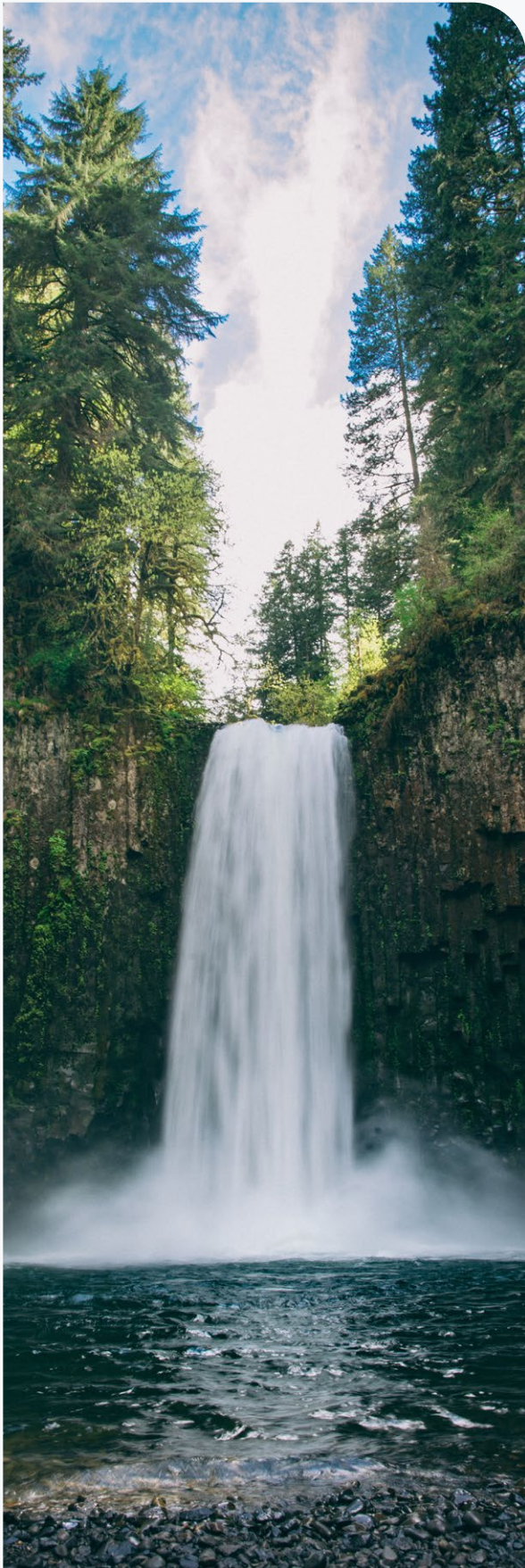
go green
experts

2023



Carbon footprint

net zero aligned



Go Green Experts supports organisations in the measurement and reduction of their carbon footprint. We have a wealth of experience supporting companies and non-profits in their drive to reach a lower environmental impact. We ensure that our work is in line with the latest science and standards.

Cashflows

Cashflows is a new breed of fintech payments company that makes it easy for small corporates and SMEs to accept card and digital payments – online, in store and on the move.

Through our own acquiring platform and gateway, Cashflows provides a safe, secure ecosystem for processing payments right across Europe. Cashflows products and services are built with the latest technology and the future in mind, to meet the specific needs of partners and customers.

With Cashflows, business is always personal. Our people work hard to understand our partners, customers, and industries, inside and out. Our people steer our business, transforming challenges, ideas, and technology into uncomplicated payments solutions that are easy to use and make perfect sense for businesses.

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1.

Executive Summary

To achieve Net Zero, Cashflows needs to remove carbon from our operations and wider business activities consistently each year until we reach a net-zero position by 2040.

An interim target of 51% reduction in CO₂e emissions by 2030 from the 2022 baseline position has been set – Cashflows commits to reduce scope 1 and scope 2 GHG emissions by this amount, with an ambition to also reduce scope 3 emissions.

Cashflows is also committed to achieving 80% renewable electricity use by 2025 and 100% renewable electricity use by 2035, as described in the Energy Reduction Strategy in this report.

These targets are consistent with a 1.5°C reduction pathway and are set in accordance with the Science-Based Targets Initiative (SBTi) guidance for SMEs.

These ambitious targets are aspirational in the medium to long term and a process of constant review of progress against targets over multiple years is required to achieve success.

The principles of the Science Base Targets Initiative states that offsets must be excluded from emissions reduction targets. Offsetting can be used for beneficial projects such as forest management but cannot be used to comply with emission reduction targets.

UK-wide decarbonisation programmes such as the UK Government's plans to ensure that Britain's homes and businesses are powered by affordable, clean and secure electricity by 2035 and encouraging the increase in electric vehicles, are factored into the reduction plan. The reduction of carbon emissions from electricity is currently averaging 12% per annum on the U.K. electricity grid.

The first step for Cashflows in creating the decarbonisation plan and strategy has been

to measure our organisation's carbon footprint. Go Green Experts have measured the carbon footprint of Cashflows carbon emissions including direct and selected indirect emissions, i.e. Scope 1, Scope 2 and selected Scope 3 emissions.

This was undertaken for the 1st Jan 2022 to 31st Dec 2022 period, which is the baseline period for the organisation.

An annual carbon reduction plan then shows how we will reduce carbon emissions between the 2022 baseline period and 2040, with the plan being more detailed in nature between 2022 and the 2030 interim target.

The targets set have been set using the market-based methodology of electricity carbon accounting rather than the location-based methodology. Cashflows will report on both the market based and location-based carbon footprint in future and aim to become net zero by 2040 under both measures.



2. Introduction

Go Green Experts Ltd has reviewed the following data sets submitted by Cashflows, including:

1. Energy, Electricity, Gas and Water usage from statements and information provided by the landlord of the office properties
2. Business travel by Air and Land from submitted expenses
3. Employee Commuting Survey Data
4. Air Conditioning usage from reports submitted by the AirCon contractor
5. Waste data from the waste outsource company
6. Purchased goods and services from company accounts
7. A virtual tour of the main offices

The data was used to calculate the carbon footprint of Cashflows as described in section 3.



3. Calculations

The carbon emissions for each category of consumption were calculated using the methodology defined in the Greenhouse Gas Protocol and the Carbon Conversion Factors published annually by DEFRA on behalf of the UK Government.

Emissions consist of several atmospheric greenhouse gases which include Carbon Dioxide (CO₂), Sulphur Hexafluoride (SF₆), Methane (CH₄), Nitrous Oxide (N₂O), Ozone O₃, Hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs). For simplicity of comparison, the global warming potential of all these gases is combined into a Carbon Dioxide Equivalent (CO₂e). All 'carbon emissions' quoted in this report are in CO₂e units.

For the period 1st Jan 2022 to 31st Dec 2022 the carbon footprint (scopes 1,2 and 3) for Cashflows was calculated to be:

Total:
473.3 Tonnes CO₂e

Carbon intensity metric:
15.3 tCO₂e per £M Turnover



This carbon footprint and intensity metric is considered to be about average for a U.K. based service company of the size of Cashflow's in the baseline year.

To enable a clear understanding of the carbon footprint that Cashflows has control over, versus the element where the company has influence, but not control, the carbon reduction plan has also been categorised into Scope 1, Scope 2, and Scope 3 elements.

The carbon footprint is estimated to be the same under the market-based approach and location-based approach to electricity consumption.

4.

Climate Change and Net Zero

Since the Industrial Revolution, the average temperature of the planet has risen by around 1°C. This is a rapid change in terms of our global climate system and the temperature rise is continuing. Governments and businesses globally are taking action to minimise this rise and minimise the most severe impacts of climate change.

The Paris Agreement of 2015 committed member countries to reduce their carbon output “as soon as possible” and to do their best to keep global warming “to well below 2°C”. To achieve this, greenhouse gases (GHG) must be halved by 2030 and brought to net zero by 2050 in order to limit warming to 1.5°C.

Definition of Net-Zero

Net zero means cutting greenhouse gas emissions to as close to zero as possible, with companies then obliged to ensure that any remaining remissions that cannot be avoided by the company activity are removed from the atmosphere, for example via Direct air Capture technology (DAC) – per SBTi guidance.



Science Based Targets

The Science Based Targets initiative (SBTi) is a collaboration between the CDP (was Carbon Disclosure Project), the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF).

The SBTi's goal is to provide companies worldwide with the confidence that their climate targets are supporting the global economy to achieve net-zero before 2050.

Individual Business Contribution

Whilst National and Local Governments are setting targets and policies, including legislation, individual businesses can contribute to the process. Thousands of businesses around the world of all types and sizes are committing to measure and reduce their emissions by:

- **Measuring**, understanding, and taking steps to reduce their own greenhouse gas emissions, (Carbon Footprint).
- **Reducing** emissions across all aspects of their operations, including energy use, transport and travel, supply chain, finance and waste.

- **Influencing** stakeholders including suppliers, customers, staff, and the public to take steps to reduce emissions in parallel.
- **Reporting** and publicising progress.

Individual Business Benefits

By taking following this route, a company can benefit from:

- **Cost-saving:** Where most carbon is emitted is almost certainly where spend is highest.
- **Winning Business:** More and more companies and government agencies are making sustainability a factor in requests for proposals.
- **Funding and Investment:** Banks and investors are increasingly seeing sustainability as a risk.
- **Public Relations & Marketing:** Publicising sustainability goals and reporting achievements.
- **Social and Environmental:** Helping to Reduce Society's Carbon Emissions and Waste.

5. Carbon Footprint

Commentary

The total Carbon Footprint for Cashflows has been calculated using the methodology defined in the World Resources Institute (WRI) Greenhouse Gas (GHG) Protocol and The Carbon Conversion Factors published annually by Defra on behalf of the UK Government.

This chart shows the total emissions for the period 1st Jan 2022 to 31st Dec 2022

The chart includes all scope emissions (Scope 1, Scope 2 and significant Scope 3).

Home working emissions were estimated using the principles outlined in the 2020 Ecoact

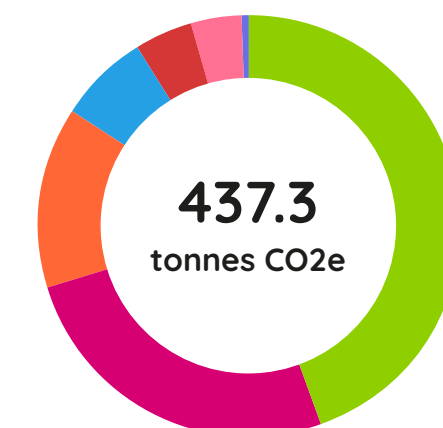
whitepaper prepared in conjunction with Lloyds Bank and Natwest: <https://info.eco-act.com/en/homeworking-emissions-whitepaper-2020>

Categorisation: Gas and electricity are reported in Scopes 1, 2 & 3, where the Scope 3 element covers upstream distribution losses.

Staff commuting and business travel account for 52% of overall emissions, and therefore will be a key area to focus on in the carbon reduction plan, both in the short term and longer term.

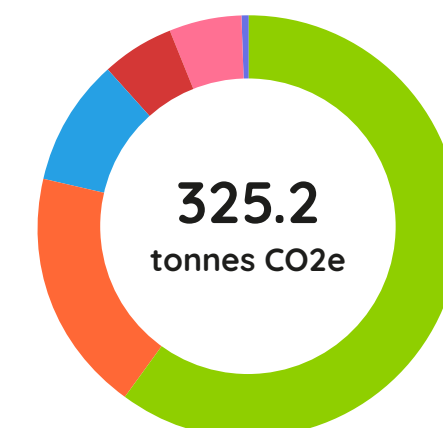
Total Carbon Emissions for the period 1st Jan 2022 to 31st Dec 2022

Aspect	Tonnes CO2e				
	Total	Scope 1	Scope 2	Scope 3	%
Mains Gas	18.60	15.89		2.71	4.3%
Electricity	17.85		13.19	4.65	4.1%
Business Travel	30.84	0.00	0.00	30.84	7.1%
Staff Commuting	195.46			195.46	44.7%
Work From Home	60.97			60.97	13.9%
Waste	1.42			1.42	0.3%
Water & Sewerage	0.10			0.10	0.0%
Air Con Cooling	0.00			0.00	0.0%
Purchases	112.07			112.07	25.6%
Total	437.32	15.89	13.19	408.23	100%



Total Emissions – Less Purchases

Aspect	Tonnes CO2e				
	Total	Scope 1	Scope 2	Scope 3	%
Mains Gas	18.60	15.89		2.71	5.7%
Electricity	17.85		13.19	4.65	5.5%
Business Travel	30.84	0.00	0.00	30.84	9.5%
Staff Commuting	195.46			195.46	60.1%
Work From Home	60.97			60.97	18.7%
Waste	1.42			1.42	0.4%
Water & Sewerage	0.10			0.10	0.0%
Air Con Cooling	0.00			0.00	0.0%
Total	352.24	15.89	13.19	296.16	100%



6. Carbon Intensity

Carbon Intensity is a metric that allows a company to compare its emissions year on year as the size and activity of the business increases or decreases. This is calculated by measuring emissions per £ Revenue or staff or product.

The metrics also allow comparison to industry averages and similar organisations that are also publishing their carbon intensity metrics.

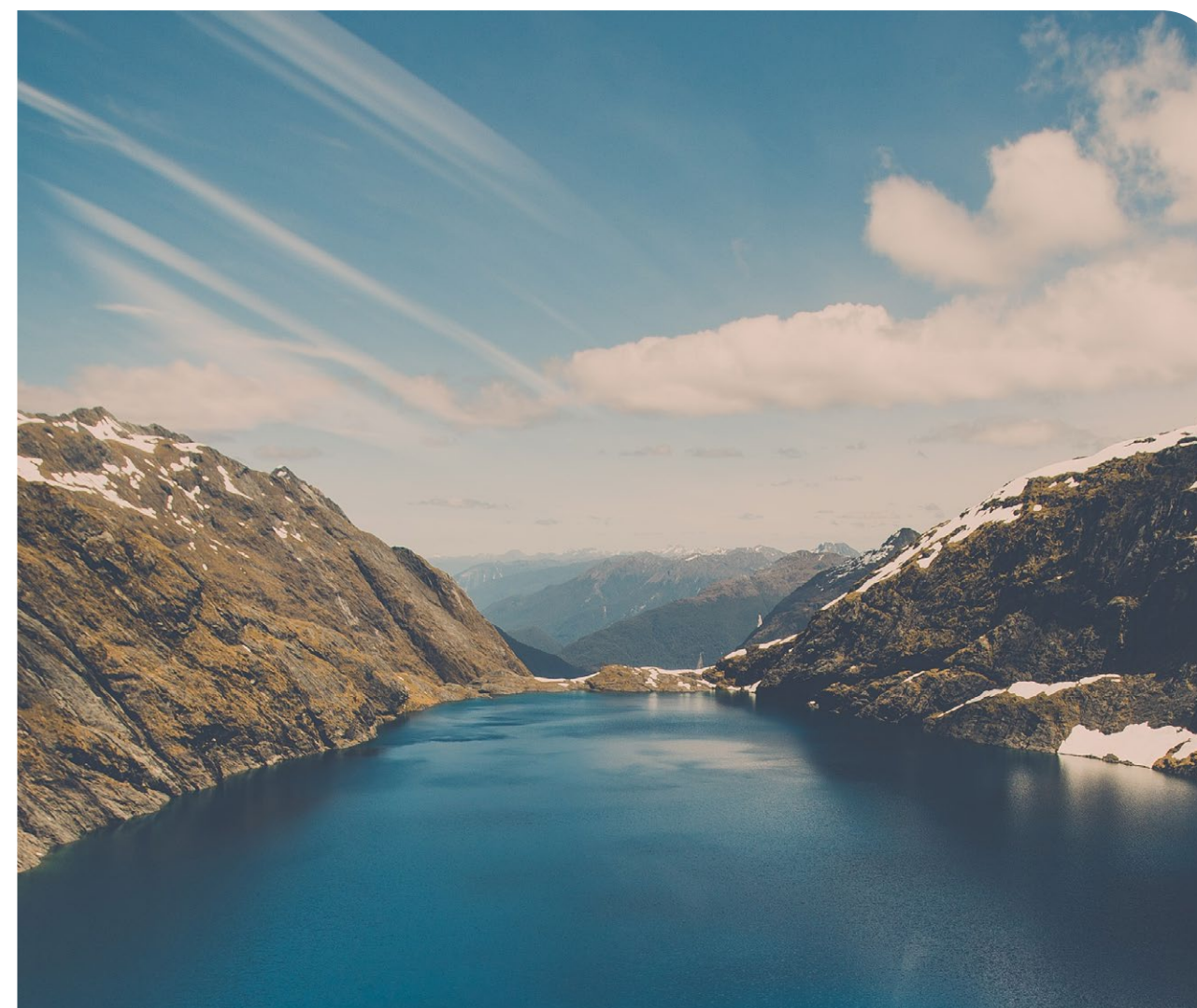
Finally, the metric also allows Cashflows’ customers to estimate their own carbon footprint from doing business with Cashflows by using the revenue intensity metric of Cashflows multiplied by the customer expenditure with Cashflows.

Cashflows’ key carbon intensity metric selected for the base year is company £m turnover.

The intensity for this is shown opposite:

Cashflows Carbon Intensity Metrics

Carbon intensity		Carbon intensity by scope			
Employee FTE Count	136				
Turnover	£28,500,000	Scope 1	Scope 2	Scope 1+2	Scope 3
Tonnes CO2e	437	15.89	13.19	29.08	408.23
Tonnes CO2e per FTE	3.22	0.12	0.10	0.21	3.00
Tonnes per £m turnover	15.34	0.56	0.46	1.02	14.32



7.

Business Travel Emissions

Commentary

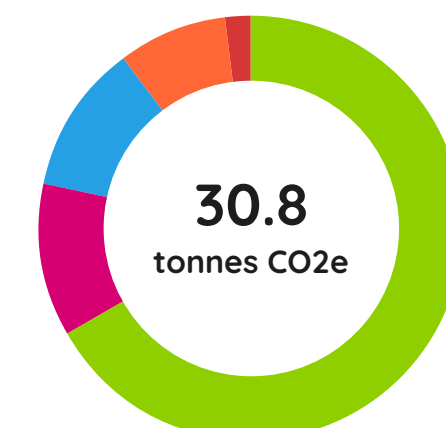
This chart shows a breakdown of business travel.

The GHG conversion factor used was kg CO₂e per mile travelled plus the “Well to Tank” factor for each type of travel.

Well-to-tank (WTT) conversion factors for transport relate to the upstream Scope 3 emissions associated with extraction, refining and transportation of the raw fuels before they are used to power the transport mode. These are included in accordance with GHG protocol principles.

Cashflows Carbon footprint emissions from Business Travel

Mode of Travel	Tonnes CO ₂ e				
	Total	Scope 1	Scope 2	Scope 3	%
Vehicles	20.58			20.58	66.7%
Bus	0.00			0.00	0.0%
Taxi (regular)	0.54			0.54	1.8%
Train	3.55			3.55	11.5%
Light rail & tram	0.00			0.00	0.0%
Underground	0.00			0.00	0.0%
Air - domestic (within nation)	0.00			0.00	0.0%
Air - short haul (under 2,000km)	2.55			2.55	8.3%
Air - long haul (over 2,000km)	3.61			3.61	11.7%
Total	30.84	0.00	0.00	30.84	100%



8. CO2e Emissions – Breakdown of Purchases

Commentary

This chart breaks down the total emissions from purchases made by Cashflows for the period.

Emissions from purchases are not as significant as staff commuting or electricity usage for Cashflows. However, suppliers still need to play a part in helping Cashflows to reach our net zero target.

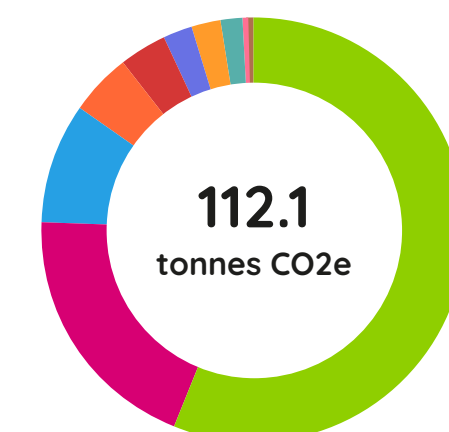
The supply chain calculation is based on the amount spent in the period with each supplier. The emissions were calculated using generic

sector-specific carbon intensity (kg CO2e pound £ pound) figures provided by the UK Office for National Statistics.

The factors used are generic figures for specific industries. For example, a self-employed lawyer is analysed using the same factor as a leading law firm. Increased granularity will be achieved by carrying out a survey of suppliers to establish their carbon footprint and influence the reduction of emissions within the supply chain and by collaborating closely with the highest emitting suppliers.

Cashflows Carbon footprint emissions from purchases

Aspect	tCO ₂ e	Scope 3	%
Leasing / estate costs	63.08	63.08	56.3
Accounting	2.46	2.46	2.2%
Administrative and support services	21.81	21.81	19.5%
Advertising and market research	1.88	1.88	1.7%
Employment services	0.33	0.33	0.3%
Employee benefits	2.74	2.74	2.4%
Information and communication	3.83	3.83	3.4%
Legal activities	0.29	0.29	0.3%
Other service activities	5.54	5.54	4.9%
Courier services	10.13	10.13	9.0%
Total	112.07	112.07	100%



9. CO2e Emissions – Scopes 1, 2 & 3 and data quality

Emission Scopes are defined by the internationally accepted Greenhouse Gas Protocol. The protocol has been developed through many years' cooperation with The World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

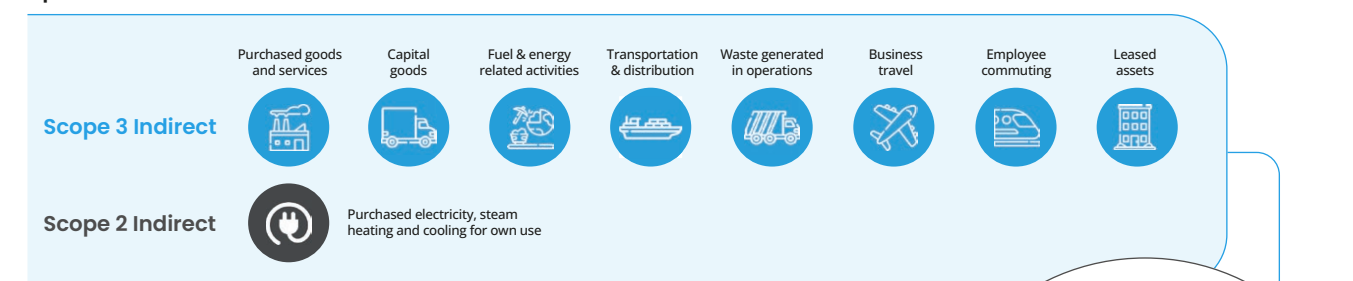
They are based on an assessment of which emissions from operations the organisation can directly control versus those which the organisation can merely influence.

Cashflows

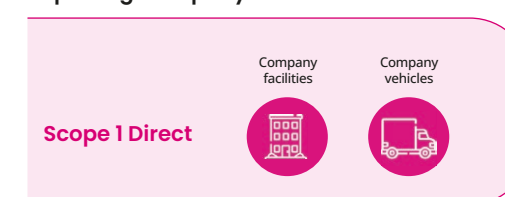
The below diagram summarises the categories of emissions that are classified into each scope.

Depiction of Scope 1, Scope 2 and Scope 3 emission categories

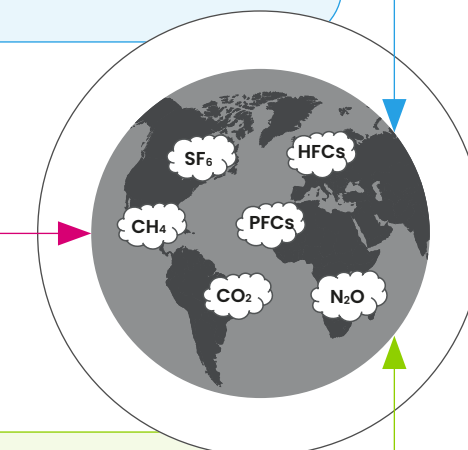
Upstream Activities



Reporting Company

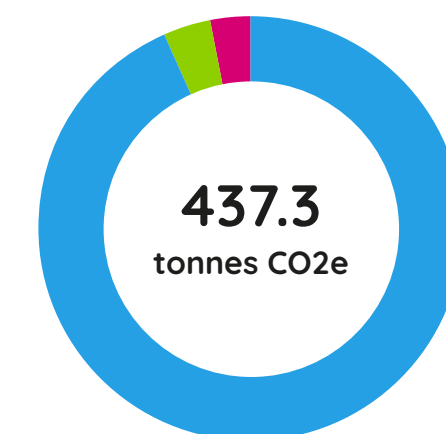


Downstream Activities



Cashflows Carbon footprint by Scope

Scope	Tonnes CO ₂ e	%
Scope 1	15.89	3.6%
Scope 2	13.19	3.0%
Scope 3	408.23	93.3
Total	437.32	100%



Scope 3 is further broken down into 15 subcategories. The below table summarises how each data category has been treated and the quality of the data provided when calculating the carbon footprint.

Carbon footprint by Scope

Scope	Category		Data					Comments
	ID	Description	Applicable?	In Scope?	Included?	Available?	Quality	
Scope 1	Direct emissions from owned/controlled operations							
Scope 1		Company Facilities	Yes	Yes	Yes	Yes	Fair	Data at building level
Scope 1		Company Vehicles	Yes	Yes	No	No	N/A	No company vehicles listed
Scope 1		Fugitive Emissions	Yes	Yes	Yes	Yes	Good	From Air Con service records
Scope 2	Indirect emissions from the use of purchased electricity, steam, heating, and cooling							
Scope 2		Purchased electricity	Yes	Yes	Yes	Yes	Fair	Data at building level
Scope 2		Steam	No	No	No	No	N/A	Not relevant
Scope 2		Heating	Yes	Yes	Yes	Yes	Good	See company facilities for gas data
Scope 2		Cooling	Yes	Yes	Yes	Yes	Good	From Air Con service records
Scope 3	Upstream Scope 3 emissions (Supply Chain)							
Scope 3	1	Purchased goods and services	Yes	Yes	Yes	Yes	Good	From data supplied
Scope 3	2	Capital goods	Yes	Yes	No	No	N/A	No capital purchases listed
Scope 3	3	Fuel- and energy-related activities (not included in Scope 1 or Scope 2)	Yes	Yes	Yes	Yes	Fair	Distribution losses
Scope 3	4	Upstream transportation and distribution	No	No	No	No	N/A	Not relevant
Scope 3	5	Waste generated in operations	Yes	Yes	Yes	Yes	Good	From data supplied
Scope 3	6	Business travel	Yes	Yes	Yes	Yes	Good	From data supplied
Scope 3	7	Employee commuting	Yes	Yes	Yes	Yes	Good	From employee survey
Scope 3	8	Upstream leased assets	Yes	Yes	Yes	Yes	Good	Included in purchases
Scope 3	Downstream Scope 3 emissions							
Scope 3	9	Downstream transportation and distribution	No	No	No	No	N/A	Not relevant
Scope 3	10	Processing of sold products	No	No	No	No	N/A	Not relevant
Scope 3	11	Use of sold products	No	No	No	No	N/A	Not relevant
Scope 3	12	End-of-life treatment of sold products	No	No	No	No	N/A	Not relevant
Scope 3	13	Downstream leased assets	No	No	No	No	N/A	Not relevant
Scope 3	14	Franchises	No	No	No	No	N/A	Not relevant
Scope 3	15	Investments	No	No	No	No	N/A	Not relevant

Key assumptions when calculating the carbon footprint:

- **Scopes 1 and 2 – Gas & Electricity:** As the office space is rented as part of a wider office block then gas and electricity usage for the whole office was measured, and then a proportion of the usage was allocated to Cashflows based on the proportion of the office floor coverage rented by Cashflows.
- **Scopes 2 – Air Conditioning:** The office Air Conditioning Contractor confirmed no gas top up was required in the period, implying no gas leakage.
- **Scope 3.1 - Purchases:** Based on spend by purchase type and average carbon intensity by industry sector per the UK Office for National Statistics (ONS)
- **Scope 3.7: Commuting and WFH:** Based on an employee survey that received a 65% employee response rate.
 - For respondents the commuting emissions were calculated for each respondent based on travel type or vehicle type, commuting distance and days on the office.
 - Work from home emissions were calculated for each respondent based on days working from home (WFH) and the average WFH carbon emissions per the principles outlined in the 2020 Ecoact whitepaper prepared in conjunction with Lloyds Bank and NatWest.
 - For employees that did not respond to the survey the average respondent commuting and WFH emissions were assumed to be consistent with an average employee that did not respond to the survey



10. Cashflows Carbon Reduction Target

Following the measurement of Cashflows carbon footprint, a detailed analysis has been undertaken to ascertain where our carbon reductions could be made in the short-term, medium-term and long-term.

This has then formed the basis of Cashflows ambitious net-zero 2040 target. A summary of the annual carbon reduction forecast by category to achieve this target is shown in figure 11.1 opposite.

This includes reducing emissions to 9% of the baseline 2022 period, which equates to 17 tonnes of CO₂e residual emissions by 2040. The equivalent amount of emissions will be removed from the atmosphere using direct carbon capture technology, in line with the Science-Based Target Initiative (SBTi) guidance, to enable Cashflows to be a Net-Zero organisation.

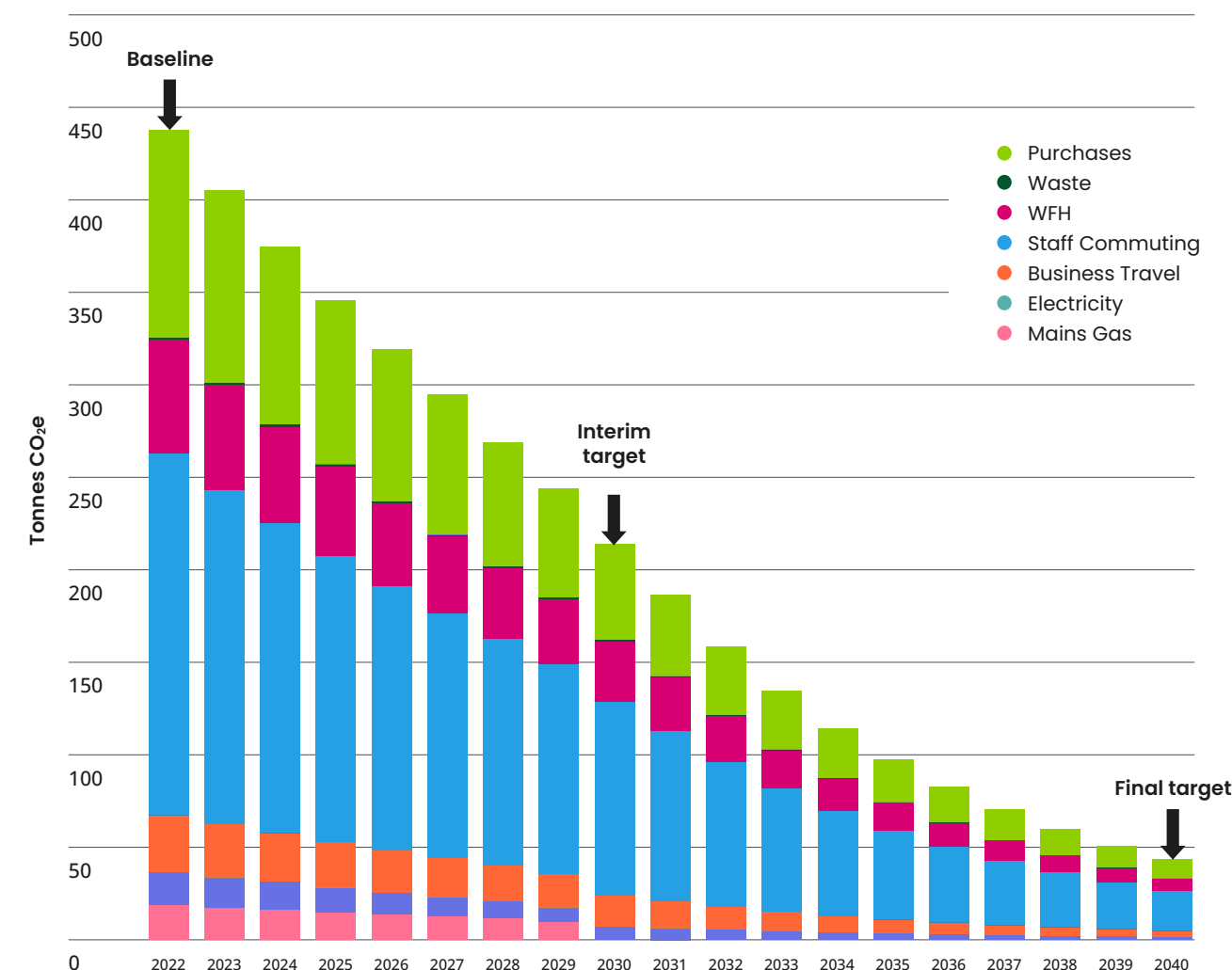
SBTi for SMEs guidance requires that an interim target is set for 2030. For Cashflows to achieve Net Zero by 2040 this means achieving a target of 51% carbon emissions reduction by 2030.

As part of the glide path to net zero informed assumptions on the wider UK economy decarbonisation milestones. For example, it is assumed that electricity will become increasingly renewable resulting in a lower greenhouse gas conversion factor. Further, over time, the usage of electric vehicles will increase dramatically, as will

the usage of alternative, lower-carbon forms of transport – including cycling, trains, zero-emissions buses, and EV car share – facilitated by improvements in the UK's low-carbon transportation infrastructure and active travel commitment.

The supply chain, both nationally and internationally will also become less carbon-intensive over time, with more options for very low-carbon products and services, thus supporting a reduction in Cashflows' Scope 3 emissions.

Cashflows carbon reduction plan summary: 2022 to 2040: graph



Cashflows carbon reduction plan summary: 2022 to 2040: table

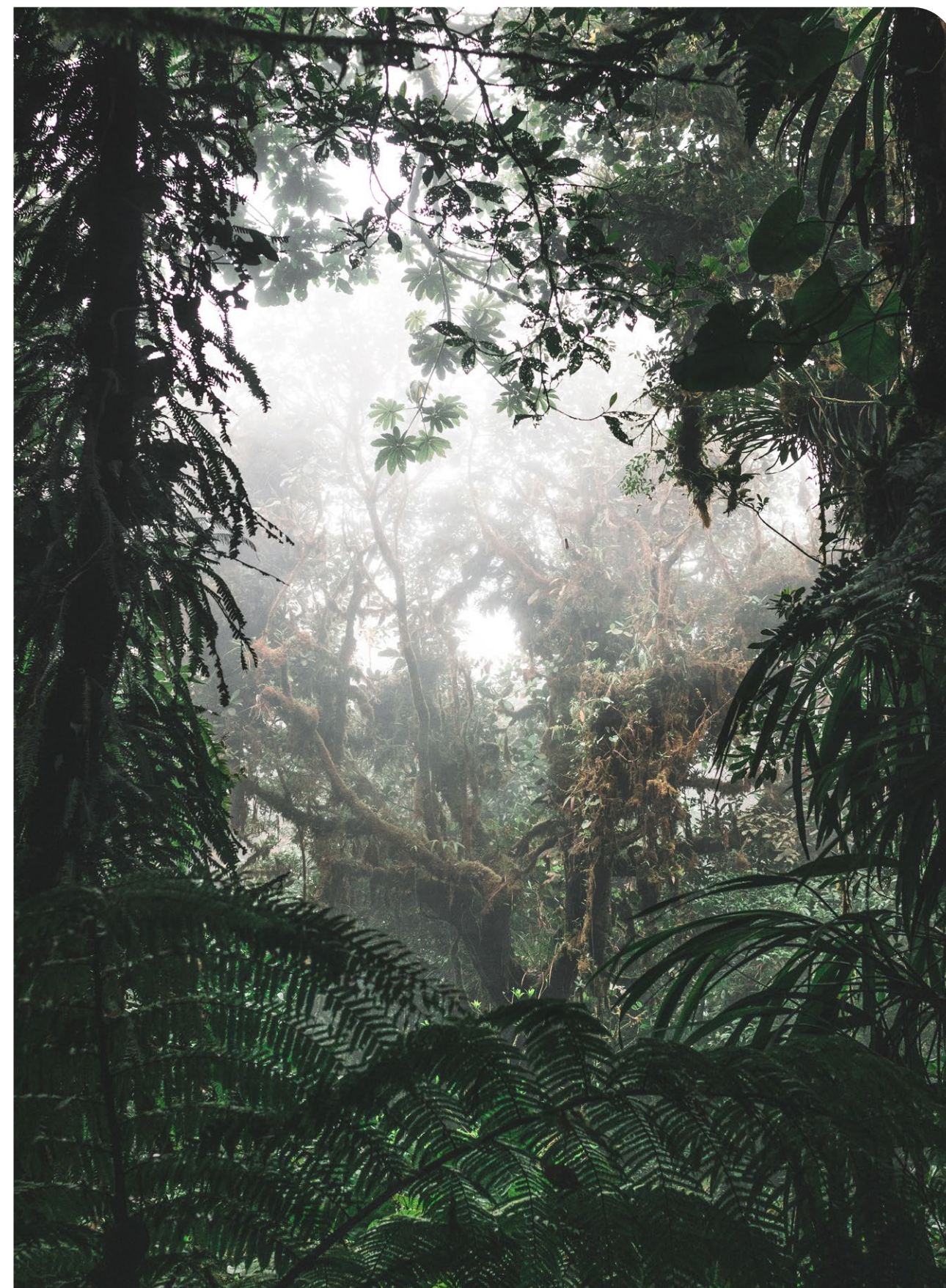
Aspect	2022	2023	2024	2025	2026	2027	2028	2029	2030	Aspect	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Mains Gas	18.6	17.2	15.9	14.7	13.6	12.6	11.6	9.3	0	Mains Gas	0	0	0	0	0	0	0	0	0	0
Electricity	17.8	16.5	15.3	13.4	11.8	10.4	9.2	8.1	7.1	Electricity	6.2	5.3	4.5	3.8	3.3	2.8	2.4	2	1.7	1.4
Fuel Oil	0	0	0	0	0	0	0	0	0	Fuel Oil	0	0	0	0	0	0	0	0	0	0
LPG	0	0	0	0	0	0	0	0	0	LPG	0	0	0	0	0	0	0	0	0	0
Business Travel	30.8	28.5	26.4	24.4	22.6	20.9	19.3	17.9	16.5	Business Travel	14.5	12.4	10.5	8.9	7.6	6.5	5.5	4.7	4	3.4
Transport	0	0	0	0	0	0	0	0	0	Transport	0	0	0	0	0	0	0	0	0	0
Staff Commuting	195.5	180.8	167.2	154.7	143.1	132.4	122.4	113.3	104.8	Staff Commuting	92.2	78.4	66.6	56.6	48.1	40.9	34.8	29.6	25.1	21.4
WFH	61	56.4	52.2	48.3	44.6	41.3	38.2	35.3	32.7	WFH	28.8	24.4	20.8	17.7	15	12.8	10.8	9.2	7.8	6.7
Waste	1.4	1.3	1.2	1.1	1	1	0.9	0.8	0.8	Waste	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2
Water & Sewerage	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Water & Sewerage	0	0	0	0	0	0	0	0	0	0
Air Con Cooling	0	0	0	0	0	0	0	0	0	Air Con Cooling	0	0	0	0	0	0	0	0	0	0
Purchases	112.1	103.7	95.9	88.7	82	75.9	66.8	58.8	51.7	Purchases	44	37.4	31.8	27	22.9	19.5	16.6	14.1	12	10.2
Target	437.3	404.5	374.2	345.4	318.9	294.5	268.5	243.5	213.6	Target	186.4	158.5	134.7	114.5	97.3	82.7	70.3	59.8	50.8	43.2
Actual	437									Actual										
% of Base Year	100%	93%	86%	79%	73%	67%	61%	56%	49%	% of Base Year	43%	36%	31%	26%	22%	19%	16%	14%	12%	10%
% Reduction		8%	14%	21%	27%	33%	39%	44%	51%	% Reduction	57%	64%	69%	74%	78%	81%	84%	86%	88%	90%
Reduction	0	33	30	29	27	24	26	25	30	Reduction	27	28	24	20	17	15	12	11	9	8
Reduction Cumulative	0	33	63	92	118	143	169	194	224	Reduction Cumulative	251	279	303	323	340	355	367	378	387	394

11.

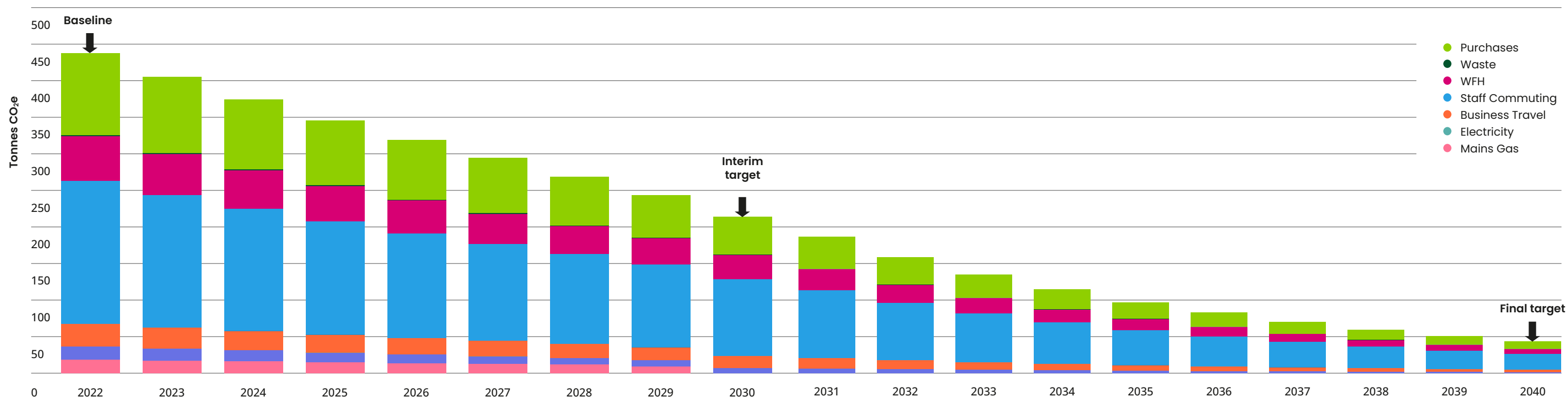
Cashflows Carbon Reduction Plan

Cashflows have committed to being Net Zero Carbon by 2040. In order to achieve this ambition, a mixture of measures is available to gradually reduce Cashflows carbon emissions over time. In section 11 of this report, the necessary annual carbon reductions were highlighted by category and scope. This section aims to illustrate all targeted opportunities in the short, medium, and long-term. The options are presented using a hierarchy of consumption avoidance and usage optimisation followed by decarbonising energy consumption by moving away from fossil fuels.

As the timing of the plan is starting from the baselined carbon footprint period, particular focus has been on the short-term initiatives which represent the 'low hanging fruit' for Cashflows.



Cashflows carbon reduction plan summary: 2023 to 2040



Short Term Initiatives:

- Supplier engagement to enable Scope 3 reduction.
- Facilities carbon management project workstream.
- Roll out Employee Commuting programme
- 80% renewable electricity procurement by 2025.

Medium Term Initiatives:

- Improve buildings energy efficiency.
- Reduce emissions from Cloud software usage.
- 100% renewable electricity procurement by 2030.
- Invest in Electric Vehicle infrastructure and incentives.

Long Term Initiatives:

- Ensure office energy usage is minimised and relocate offices if necessary to a Passivhaus standard office space.
- Only work with low carbon suppliers

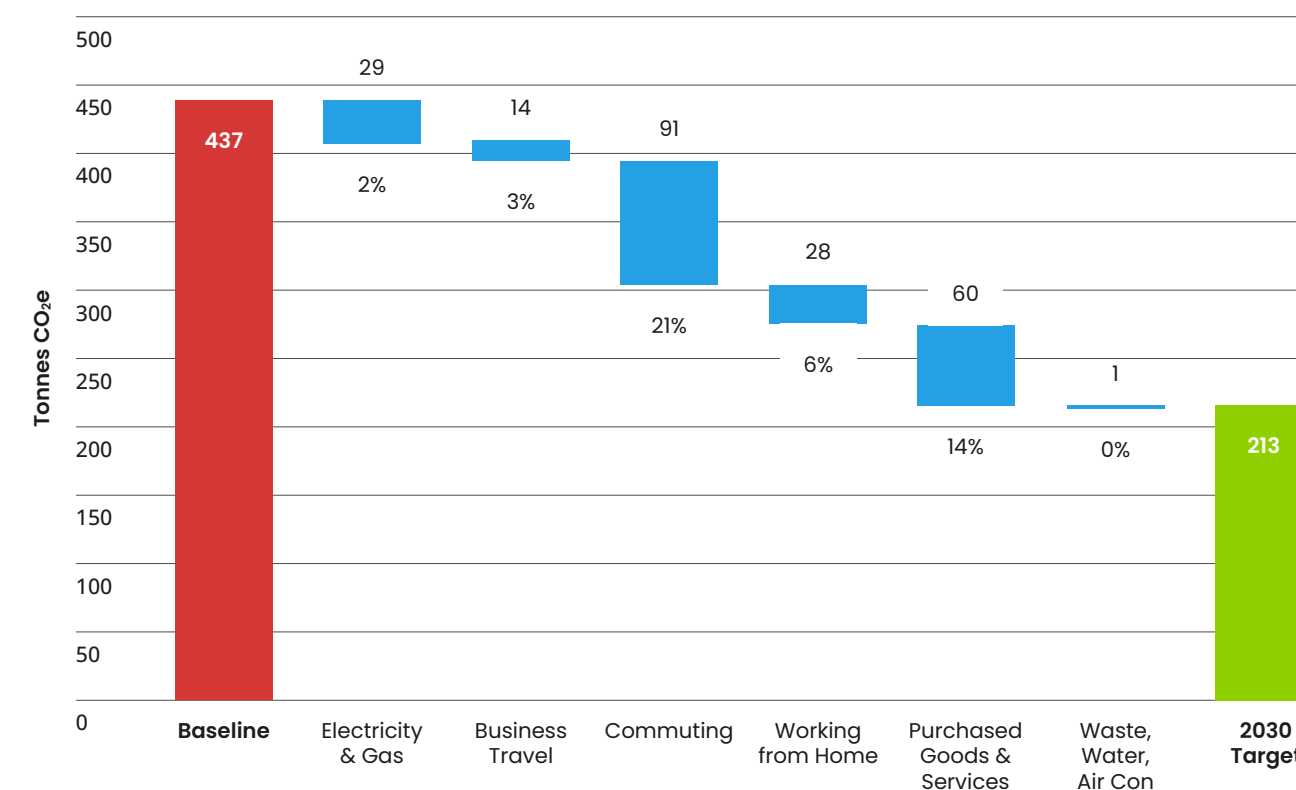
12.

Cashflows Key Action Areas and Assumptions to deliver 51% emissions reduction by 2030

There are a variety of opportunities available that lead to a reduction of carbon emissions. These opportunities are dependent on the wider decarbonisation of the UK economy that Cashflows operates in, with key examples provided in the graph opposite:



Key Action Areas and Assumptions to deliver 64% emissions reduction by 2030



Key Action Areas and Assumptions to deliver 64% emissions reduction by 2030

CO ₂ e Aspect	Opportunities	Baseline emissions	Potential carbon savings in Year 1 (Tonnes CO2e)	Potential carbon savings by 2030 (Tonnes CO2e)	% of total footprint	Comment
Background UK Government Decarbonisation – Relevant Activity						
Electric Vehicles & associated EV infrastructure	The UK Government has committed to new car sales to all be zero emission by 2035, and the associated required electrical infrastructure will be in place by that date.	Background policy and infrastructure required to unlock the business travel and Commuting carbon savings below.			UK Government <ul style="list-style-type: none">• End the sales of new petrol and diesel vehicles by 2030.• All new cars and vans to be fully zero emission by 2035. The UK Government also needs to deliver it’s commitment to the rollout of electric vehicle charging infrastructure in the UK ahead of the above phase out dates.	
Aviation Industry decarbonisation	Aircraft are becoming more efficient. Older Aircraft are being retired. Development of sustainable aviation fuel is increasing.	Sustainable aviation fuel and/or electric planes is in early stages but results are expected within the 2040 Net Zero timeframe.			Significant research and development is underway globally.	
Electricity Grid	Estimated decarbonisation of UK electricity grid – supports office and travel savings.	18	1	11	2%	Estimate based on historic annual reduction in UK grid emissions from recent years. Dependent on continuation at current rate which is in line with government objectives.
Potential Actions						
Electricity Grid	Reduce electricity use in office through increased efficiency. Achieve 80% renewable energy by 2035.	18	1	11	2%	Office efficiency improvements, plus switch to renewables.
Gas	Move to electricity for heating only in offices.	19	1	19	4%	Switch away from gas heating by 2032.
Business Travel	Review air travel plus Electric Vehicle employee travel.	31	2	14	3%	Reduce air travel where possible. Travel with lower emissions airlines. Fly economy. Switch to EVs.
Commuting	Encourage commuting behaviour and significant % electric vehicles.	195	15	91	21%	Encourage large employee switch to EVs by 2032.
Working from Home	Support employees with WFH energy saving.	61	5	28	6%	Support employees with WFH energy saving.
Purchased Goods & Services	Work with suppliers to jointly reduce emissions.	112	8	60	14%	Carry out supplier survey and work influence carbon reduction.
Waste, Water, Air Con	Work with waste and air con contractors.	2	0	1	0%	Waste contractor tasked with measuring and lowering waste emissions.
Total		437	33	224	51%	

13.

Energy Reduction Strategy

Short-Term and Medium-Term Milestones:

- Achieve 80% renewable energy use by 2025 and 100% by 2035.

Employee & Stakeholder Engagement:

- Engage key stakeholders.
- Engage employees.
- Appoint green champions to assist with energy and resource management.
- Discuss ideas with staff to secure engagement.
- Develop a structured training and CO2 awareness plan for staff.

Manage energy use:

- Track energy at all levels and investigate submetering as a way to receive more granular, actionable data.
- Shift to Renewables and Other Advanced Energy Technologies.
- Ensure computers, copiers and display screens are set to optimum efficiency.
- Review the energy consumption of the servers.
- Ensure electrical equipment is switched off when not in use.
- Review the office and other equipment energy consumption.
- Review energy consumption and embodied CO2 as a criterion for future purchases.
- Review green energy tariffs to ensure they are the industry-leading options.
- Review installation of solar panels to reduce reliance on grid energy.



High quality, UK based Renewable Energy Guarantees of Origin (REGO)

- As targets are set using the market based methodology, Cashflows will investigate investing in high quality UK based REGO certificates to ensure that its grid electricity usage is matched to renewable energy generation. Cashflows recognises that there has been some controversy using REGOs in this way historically, but the UK REGO price has now increased significantly, enough to incentivise new renewables development, and as such it is considered that the REGO market is now working as intended.

14.

Cashflows Detailed Carbon Reduction Plan

Cashflows 's detailed carbon reduction plan provides clear initiatives to undertake over time, with short-term initiatives being tackled first. In the longer term as new technology is developed and Government policy changes then the plan can flex to accommodate these changes.

Carbon footprint and EMS ongoing management

Aspect	Short/ Medium/ Long Term	Observations / Actions	Responsible Person	Target Date
Carbon footprint and EMS ongoing management, review and target setting.	Control			
	Short	1.1 Implement environmental policy and action plan.		
	Short	1.2 Raise awareness and consult with staff regarding CO2 emissions, energy consumption, and other environmental aspects.		
	Long	1.3 Embed CO2 reduction target setting into all processes within the business.		
	Short	1.4 Appoint green champions/ ambassadors to assist with energy and resource management on a day-to-day basis.		
	Short	1.5 Discuss ideas with senior staff to secure manager and other key staff engagement.		
	Short	1.6 Carry out CO2-related Toolbox talks for all staff and contractors at all sites.		
	Short	1.7 Develop a structured training and CO2 awareness plan for staff.		
	Short	1.8 Ensure staff are aware of sustainability objectives, train procurement staff.		
	Influence			
	Short	1.9 Raise awareness with contractors and suppliers.		
	Short	1.10 Review contractor competence and their ability to implement and install new technologies.		
	Medium	1.11 Include a review of all suppliers and contractors' carbon intensity.		
	Ongoing			
	Long	1.12 Continually review the action plan and include carbon footprint considerations.		
	Long	1.13 Continually identify relevant training and implement a training plan throughout the organisation.		

Energy

Aspect	Short/ Medium/ Long Term	Observations / Actions	Responsible Person	Target Date
Energy reduction	Control			
	Short	2.1 Regularly check and record accurate energy consumption data on an ongoing basis in order to measure changes.		
	Medium	2.2 Review energy consumption and embodied CO2 as a criterion for future purchases.		
	Short	2.3 Monitor energy use when facilities and offices are not in use e.g., weekends and at night.		
	Short	2.4 Ensure computers, copiers and display screens are set to optimum efficiency.		
	Medium	2.5 Track energy at all levels and investigate submetering as a way to receive more granular, actionable data.		
	Medium	2.6 Fit LED Lighting.		
	Influence			
	Medium	2.7 Develop a structured training and CO2 awareness plan for staff.		
	Ongoing			
	Long	2.8 Consider building energy efficiency when acquiring new premises in the future.		
Energy suppliers	Control			
	Short	2.9 Review green energy tariffs to ensure they are the industry-leading options.		
	Influence			
	Short	2.10 Review energy suppliers.		
	Short	2.11 Review supply chain energy supply contracts. Share learning with staff and other interested parties.		
	Ongoing			
	Medium	2.12 Continually review energy procurement.		
	Medium	2.13 Continually review the market to ensure that renewable energy claims are valid.		



Building facilities	Control			
	Short	2.14 Conduct an energy audit for the building infrastructure.		
	Short	2.15 Review the EPC reports in conjunction with the carbon footprint.		
	Short	2.16 Consider actions highlighted in the published EPC report including:		
	Short	2.17 Replace older lighting.		
	Short	2.18 Provide guidance notices to staff on the general use of the system controllers and the environment.		
	Short	2.19 Install sub-metering to enable the accurate recording of electricity consumption.		
Renewable energy	Control			
	Medium	2.20 Achieve 80% renewable energy use by 2025.		
	Long	2.21 Achieve 100% renewable energy use by 2025.		
	Medium	2.22 Investigate installation of onsite renewable energy sources such as photovoltaic cells or heat pumps.		
	Medium	2.23 A survey and feasibility report will be required to establish the structural requirements, regulatory requirements, and financial feasibility of any proposed project.		

Financial and Commercial

Aspect	Short/ Medium/ Long Term	Observations / Actions	Responsible Person	Target Date
Financial and commercial	Control			
	Short	3.1 Review commercial service supply chain, banks, insurance, accountancy, website, cloud hosting, training providers, software subscriptions, legal services, and other relevant suppliers.		
	Influence			
	Short	3.2 Raise awareness with procurement staff when reviewing or renewing contracts.		
	Short	3.3 Review sustainability of pension investments.		
	Short	3.4 Raise awareness with procurement staff when reviewing or renewing contracts		
	Ongoing			
	Long	3.5 Continually review the supply chain and consider using suppliers offering the lowest CO2 options.		



Facilities and Office

Aspect	Short/ Medium/ Long Term	Observations / Actions	Responsible Person	Target Date
Office equipment	Control			
	Short	5.1 Ensure computers, copiers and display screens are set to optimum efficiency. Review the energy consumption of the servers.		
	Short	5.2 Review the office and other equipment energy consumption.		
	Medium	5.3 Consider recycling and re-use options for office equipment when it is disposed of.		
	Influence			
	Short	5.4 Conduct a survey of staff working from home in order to establish more accurate data. Advise staff on energy-saving opportunities.		
	Ongoing			
	Long	5.5 Consider IT lifecycle for future projects, can equipment be repaired and re-used?		
Waste	Control			
	Short	5.6 Conduct a waste audit in order to establish the volumes, types and final destination of waste generated. Contact the waste contractors, in many cases they will be able to supply a full breakdown of the waste removed and their recycling rates.		
IT	Control			
	Medium	5.7 Review the volume of Emails and cloud working versus video chats.		
	Influence			
	Medium	5.8 Review IT systems and complete a carbon intensity audit.		
	Ongoing			
	Medium	5.9 Generic count on e-mails, review the requirement for a large number of e-mails.		
	Medium	5.10 Create an IT asset list in order to determine the current levels of equipment.		
	Medium	5.11 Review the list and plan to purchase low-energy alternatives in the future.		

Procurement

Aspect	Short/ Medium/ Long Term	Observations / Actions	Responsible Person	Target Date
Procurement	Control			
	Short	5.12 Engage with the suppliers. The first step will be a survey sent to all Suppliers requesting information on Net Zero commitments, current carbon emissions and plans to reduce carbon emissions.		
	Medium	5.13 Ensure new contracts require suppliers to state their carbon footprint and have an action plan.		
	Influence			
	Medium	5.14 Complete a supplier survey to determine the current status of their carbon awareness.		
	Medium	5.15 Support supply chain in order to help them manage footprint.		
	Ongoing			
	Long	5.16 Develop a consistent approach to data gathering throughout the supply chain.		
	Medium	5.17 Review the options to raise client awareness.		
	Medium	5.18 Continually review best practice.		

Travel & Homeworking

Aspect	Short/ Medium/ Long Term	Observations / Actions	Responsible Person	Target Date
Business travel	Control			
	Short	6.1 Gather specific data on grey fleet. Vehicle type, size and fuel.		
	Short	6.2 Reduce Air Travel.		
	Medium	6.3 If flying is necessary, fly economy.		
	Short	6.4 Reduce unnecessary travel.		

Business travel	Influence			
	Medium	6.5 Encourage use of train travel if possible.		
	Medium	6.6 Switch to electric company vehicles.		
	Ongoing			
	Short	6.7 Gather specific data on grey fleet. Vehicle type, size and fuel.		
Commuting	Control			
	Short	6.8 Gather specific data on grey fleet. Vehicle type, size and fuel.		
	Influence			
	Short	6.9 Carry out an employee survey.		
	Medium	6.10 Encourage use of train travel if possible.		
	Medium	6.11 Engage with staff to reduce home emissions.		
	Medium	6.12 Encourage consideration of electric vehicles.		
	Ongoing			
	Medium	6.13 Continually review new vehicle technologies.		
	Control			
Homeworking	Short	6.14 Engage with staff to reduce home emissions.		
	Short	6.15 Carry out an employee survey.		
	Medium	6.16 Invest in more energy-efficient technology for WFH. Set green procurement requirements for all new laptops, monitors, printers and other technology.		
	Medium	6.17 Set green procurement requirements for all new laptops, monitors printers and other technology.		
	Short	6.18 Provide energy efficiency training & or personal carbon footprint analysis and advice.		
	Influence			
	Medium	6.19 Encourage move to LEDs,		
	Medium	6.20 Encourage switching to renewable energy tariffs for home energy.		
	Medium	6.21 Incentivise move to more energy-efficient heating and cooling systems.		
	Control			

Appendix A.

Documents and References used in Calculation

The calculations were carried out using mathematical models and the methodology defined in the Greenhouse Gas Protocol in particular.

GHG Corporate Accounting and Reporting Standard and Scope 2 Guidance

GHG Scope 2 Guidance

GHG Technical Guidance for Calculating Scope 3 Emissions

The Carbon Conversion Factors published annually by DEFRA on behalf of the UK government.

<https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2021>

<https://www.ons.gov.uk/economy/environmentalaccounts/datasets/ukenvironmentalaccountsatmosphericemissionsgreenhousegasemissionsbyeconomicsectorandgasunitedkingdom>

The Greenhouse Gas Protocol has been developed between The World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

Greenhouse Gas Protocol | (ghgprotocol.org)

The calculations were performed using Go Green Experts’ specialist emission calculation tool (DataCollator) aligned with the above protocols.

Appendix B.

Glossary

Term	Description
Absolute Reduction	The actual reduction in emissions
Base Year	A historical datum (e.g., year) against which a company’s emissions are tracked over time.
Base Year Emissions	GHG emissions in the base year.
Baseline	A hypothetical scenario for what GHG emissions would have been in the absence of a GHG project or reduction activity.
Business Travel	Transportation of employees for business-related activities.
Capital Goods	Final goods that have an extended life and are used by the company to manufacture a product, provide a service, or sell, store, and deliver merchandise. In financial accounting, examples of capital goods include equipment, machinery, buildings, facilities, and vehicles.
Carbon Footprint	The total greenhouse gas (GHG) emissions caused by an individual, event, organization, service, place or product, expressed as carbon dioxide equivalent (CO2e).
Carbon Intensity	A measure of carbon emission against a variable of business operations such as turnover, output or staff.
Carbon Neutral	A measure of the carbon emissions that are emitted over the full life cycle of a product or service and usually expressed as grams of CO2-e.
Circular Economy	A circular economy tries to break that cycle of make-use-dispose with adaptive reuse
CO2e CO2 Equivalent	The universal unit of measurement to indicate the global warming potential (GWP) of each greenhouse gas, expressed in terms of the GWP of one unit of CO2.
Direct Emissions	Emissions from sources that are owned or controlled by the reporting company.
Downstream Emissions	Indirect GHG emissions from sold goods and services.
Embodied Carbon	The emissions that result from the entire project
Emission Factor	A factor that converts activity data into GHG emissions data (e.g., kg CO2e emitted per litre of fuel consumed, kg CO2e emitted per Kilometre travelled, etc.).
Employee Commuting	Transportation of employees between their homes and their worksites.
Environmental Product Declaration (EPD)	A document that quantifiably demonstrates the environmental impacts of a product.
Equity Share Approach	A consolidation approach whereby a company accounts for GHG emissions from operations according to its share of equity in the operation.

Extrapolated Data	Data from a similar process or activity that is used as a stand-in for the given process or activity and has been customized to be more representative of the given process or activity.
Global Warming Potential	A factor describing the radiative forcing impact (degree of harm to the atmosphere) of (GWP) one unit of a given GHG relative to one unit of CO2
Greenhouse Gas	Gasses contributing to global warming. Seven gases, Carbon Dioxide (CO2); Methane (CH4); Nitrous Oxide (N2O); Hydrofluorocarbons (HFCs); Perfluorocarbons (PFCs); Sulphur Hexafluoride (SF6), and Nitrogen Trifluoride (NF3).
Greenhouse Gas Inventory	A quantified list of an organization's GHG emissions and sources.
Greenwashing	PR tactic used to make a company or product appear environmentally friendly, without meaningfully reducing its environmental impact.
Indirect Emissions	Emissions that are a consequence of the activities of the reporting company but occur at sources owned or controlled by another company.
Indirect GHG Emissions	Emissions that are a consequence of the operations of the reporting company, but occur at sources owned or controlled by another company. This includes Scope 2 and Scope 3.
Life Cycle Assessment (LCA)	Total emissions from the inputs and outputs throughout a product's life cycle. From the moment it was created to the moment it has decayed.
Location-Based Method	A method to quantify Scope 2 GHG emissions based on average energy generation emission factors for defined locations.
Market-Based	A method to quantify Scope 2 GHG emissions based on GHG emissions emitted by the generators from which the reporter contractually purchases electricity.
Net Zero	A state in which the greenhouse gases going into the atmosphere are balanced by removal from the atmosphere.
Offsetting	The action or process of compensating for carbon dioxide emissions arising from industrial or other human activity, by participating in schemes designed to make equivalent reductions of carbon dioxide in the atmosphere.
Proxy Data	Data from a similar process or activity that is used as a stand-in for the given process or activity without being customized to be more representative of the given process or activity.
Reporting Year	The year for which emissions are reported.
Scope 1 Emissions	Emissions from operations that are owned or controlled by the reporting company.
Scope 2 Emissions	Indirect emissions from the generation of purchased or acquired electricity,
Scope 3 Emissions	All indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions.
Secondary Data	Data that is not from specific activities within a company's value chain.
Supply Chain	A network of organizations (e.g., manufacturers, wholesalers, distributors, and retailers) involved in the production, delivery, and sale of a product to the consumer.
Upstream Emissions	Indirect GHG emissions from purchased or acquired goods and services.
Value Chain	All of the upstream and downstream activities associated with the operations of the reporting company, including the use of sold products by consumers and the end-of-life treatment of sold products after consumer use.
Value Chain Emissions	Emissions from the upstream and downstream activities associated with the operations of the reporting company.
Waste	An output of a process that has no market value.



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