

# Carbon Reduction Plan & Greenhouse Gas Inventory

Cisilion Limited

Last Amended: January 2024

## CARBON REDUCTION PLAN & GREENHOUSE GAS INVENTORY

Name and address of establishment:

Cisilion Limited

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Tel: 0870 1525750



## 1. Introduction

Cisillon Limited is an IT business, operating from three sites across London and Leatherhead, Surrey. Our main products are Network Routing, Switching, Data Centre, WAN optimisation, Wireless, Network Load Balancing, Cisco Collaboration suite, Microsoft Teams, Azure and Enterprise Mobility Services installed and supported by our highly skilled work force. We recognise that our operations result in emissions to air and water, and the generation of waste.

We all have a responsibility to act, and take decisions that will support a sustainable, low carbon future. Scientists state that we need to halve global greenhouse gas emissions by 2030, and get to net zero by 2050 to avoid the worst impacts on the environment.

During talks at the COP 26 summit in 2021, targets for government bodies were set to reduce their carbon. However, it is also businesses who have a vital role to play by understanding their own impact on the environment, as well as influencing those organisations within their supply chain.

We continually strive to reduce our carbon impact year on year, initiating additional projects and activities that will further reduce our impact locally and globally, and contribute towards global UN carbon offsetting initiatives. Our commitment to the environment extends to our customers, our communities, our employees, our suppliers and other countries in which we operate.

Our Carbon Reduction Plan is based upon the following principles:

1. Comply with, and exceed where practicable, all applicable legislation, regulations and codes of practice;
2. Integrate environmental and sustainability considerations into all our business decisions;
3. Endeavor to reduce our environmental impact year on year;
4. Ensure that all employees are fully aware of our Environmental and Sustainability Policy;
5. Ensure all employees are committed to implementing and improving our policy;
6. Ensure clients and suppliers are aware of our Environmental and Sustainability Policy, and encourage them to adopt sound sustainable management practices;
7. To review, annually report, and to continually strive to improve our environmental and sustainability performance.

## 2. Commitment

- Cisillon are committed to reducing our impact on the environment and to achieving our goal of becoming net zero by 2050.
- We will partner with Ecologi, a Carbon Avoidance organization.
- We will plant 7,500 trees throughout Financial Year 2024 ("FY24").

## 3. Emissions Reporting

Cisillon Limited have partnered with Blue Marble to calculate and publish our Green House Gas Inventory. The reporting year covers emissions from 01 June 2021 to 31 May 2022 (FY22) and using the GHG Reporting Protocol. The full report has been included at the rear of this document.

## 4. Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions.

Baseline emissions are the reference point against which emissions reduction can be measured. The reporting year (FY23), is the first year in which Cisillon has assessed and reported emissions and therefore, our baseline



and reporting year figures are identical as illustrated below.

	Total (kgCO <sub>2</sub> e)	Scope 1 (kgCO <sub>2</sub> e)	Scope 2 (kgCO <sub>2</sub> e)	Scope 3 (kgCO <sub>2</sub> e)
Original Base Year GHG Footprint (tCO <sub>2</sub> e)	129752	0	33333	96419
Updated Base Year GHG Footprint	118535	0	33333	85202

## 5. Intensity Metrics

Cisillon Limited have also included intensity metrics to further analyse the carbon impact of the organization relating to the business's turnover and number of employees as illustrated below.

	Total	Scope 1	Scope 2	Scope 3
Base Year - tCO <sub>2</sub> e / £ Million Turnover	2.469	0	0.694	1.775
Current Year - tCO <sub>2</sub> e / £ Million Turnover	1.77	0	0.6	1.17
Base Year - tCO <sub>2</sub> e / Employee	0.859	0	0.242	0.617
Current Year - tCO <sub>2</sub> e / Employee	0.77	0	0.26	0.51

## 6. Emission Reduction Targets

We have implemented the following targets to achieve over the next five years:

- We project that our total carbon emissions will decrease over the next five years to 116.77 tCO<sub>2</sub>e by 2029.

## 7. Carbon Reduction Projects

This Reduction Plan covers our second year of carbon accounting. We have identified the following carbon reduction projects and will be measuring the reduction impact against our baseline figures on an annual basis.

- Obtaining ISO14001 by December 2024.
- Increasing the uptake of our company-wide electric vehicle leasing scheme.
- Introduce our second carbon offsetting scheme.
- Continued reduction of business air travel.
- Provide our employees with sufficient equipment to continue work from home in a carbon efficient manner.
- Continue to support Microsoft by signing the [Partner Pledge\(microsoft.com\)](https://microsoft.com/partnerpledge).

## 8. Environmental Responsibility

We are committed to providing a quality service in a manner that ensures a safe and healthy workplace for our employees and minimises our potential impact on the environment. We will operate in compliance with all relevant environmental legislation and we will strive to use pollution prevention and environmental best practices in all we do.

We will:-

- integrate the consideration of environmental concerns and impacts into all of our decision making and activities,
- promote environmental awareness among our employees and encourage them to work in an environmentally responsible manner,



- train, educate and inform our employees about environmental issues that may affect their work,
- reduce waste through re-use and recycling and by purchasing recycled, recyclable or re-furnished products and materials where these alternatives are available, economical and suitable,
- promote efficient use of materials and resources throughout our facility including water, electricity, raw materials and other resources, particularly those that are non-renewable,
- avoid unnecessary use of hazardous materials and products, seek substitutions when feasible, and take all reasonable steps to protect human health and the environment when such materials must be used, stored and disposed of,
- purchase and use environmentally responsible products accordingly,
- where required by legislation or where significant health, safety or environmental hazards exist, develop and maintain appropriate emergency and spill response programmes,
- communicate our environmental commitment to clients, customers and the public and encourage them to support it,
- strive to continually improve our environmental performance and minimise the social impact and damage of activities by periodically reviewing our environmental policy in light of our current and planned future activities.

## 9. Sustainable Meetings and Travel

Since the COVID-19 pandemic, Cisilion have offered a hybrid working environment for all employees, while employing purely home based members of the team. This has enabled us to lower our gas emissions, reduce air pollution and lower our per employee carbon footprint contribution.

As a cloud-first organisation, we support digital transformation and innovation for our clients through the migration to and adoption of cloud services. The COVID-19 pandemic has changed workplace culture for good, accelerating hybrid and remote working. This has seen the biggest ever shift and up-take of cloud-based services, further helping to reduce the consumption of energy through the reduced use of traditional data centres across our customer base.

Our commercial teams include the full costs of more sustainable forms of transport in our financial proposals, rather than the least cost option which may involve travelling by car or air. Where the only practical alternative is to fly, we will include costs for full air fares rather than budget airlines in our financial proposals.

We will avoid physically travelling to meetings where alternatives are available and practical, such as using teleconferencing, video conferencing or web cams, and efficient timing of meetings to avoid multiple trips. These options are also often more time efficient, while not sacrificing the benefits of regular contact with clients and partners. Cisilion sell the technology to enable us and our clients to be environmentally aware and will endeavor to promote such practices within our proposals.

Cisilion operate two cycle schemes which offer tax relief to those who choose to purchase a bicycle through the scheme. To monitor our impact, we will record and monitor emissions created from business travel. In addition, as of fiscal year 24/25, Cisilion offer an electric vehicle leasing scheme which again, is processed via a salary sacrifice scheme, allowing employees to make a 40-60% saving. Due to this incentive, uptake has already been high.

## 10. Office Sustainability

As far as possible, we will arrange for the reuse or recycling of office waste, including paper, computer supplies and redundant equipment. We also aim to reduce the energy consumption of office equipment by purchasing energy efficient equipment and good housekeeping.

Cisilion have an aim to seek to purchase electricity from a supplier committed to renewable energy. We will also seek to maximise the proportion from renewable energy sources, whilst also supporting investment in new renewable energy schemes.



Cisilion ensure that our timber furniture, and any other timber products, are recycled or from well-managed, sustainable sources and are Forest Stewardship Council (FSC) certified. All tea and coffee purchases are that of fair trade organisations.

We have witnessed 80% reduction in Cisilion office use as we have adopted a hybrid working model. This has in turn meant that we have reduced our overall footprint and office supplies usage. We have also updated our own internal systems and client offerings, meaning that very minimal travel is required to communicate with both our employees and our clients.

Within the office, we have removed all single use cups and water bottles, replacing them with permanent crockery and glassware.

Since the global pandemic hit, Cisilion have ensured that all of our cleaning services are robust and effective. We have ensured that our cleaning products are free of carcinogens.

## 11. Working Practices and Advice to Clients

Cisilion aim to undertake voluntary work with the local community and / or environmental organisations and make donations to seek to offset carbon emissions from our activities. We also ensure that any associates that we employ take account of sustainability issues in their advice to clients.

## 12. Employee Resources

We will ensure that resources are available to enable us to achieve our objectives and targets. LearnAmp, Cisilion's new Learning Management Platform supports the organisation with the ongoing training of environmental matters.

## 13. Useful Contact Telephone Numbers

Rachel Ward-Miller, People & Talent Director	01372 201131
Max Smith, People Operations Executive	01372 201132

## 14. Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard<sup>1</sup> and uses the appropriate Government emission conversion factors for greenhouse gas company reporting<sup>2</sup>.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard<sup>3</sup>.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors (or equivalent management body).

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Signed on Behalf of Cisilion Limited:

A handwritten signature in black ink, appearing to read 'R Ward-Miller', with a stylized, cursive script.

Rachel Ward-Miller  
People & Talent Director  
Cisilion Limited

19 January 2024



# Cisilion Ltd.

## Green House Gas Inventory

Revision	0001
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Period Start	1/06/22
Period End	31/05/23

Issued	January 24
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# 1. Non-Technical Summary

Name of the Entity making the declaration	Cisilion Ltd
Subject of the Declaration	Cisilion Ltd. global operations, Scope 1, Scope 2, Selected Scope 3 emissions. Operational control.
Function of Subject	Cisilion's mission is to transform and connect business with next-generation IT infrastructure. Complemented by strategic relationships with some of the world's leading technology partners, Cisilion now serves a global client base across more than seventy countries.
Rationale for Selection of Subject	Subject selected based on the requirements under WRI Green House Gas Protocol Corporate Reporting and Accounting Standard to include all Scope 1 and 2 emissions and additional ambition to include Scope 3 emissions over which the company has the potential to influence, and measurement is feasible.
Process	Cisilion has retained Blue Marble to compile and develop the GHG Inventory and corresponding GHG Report. The inventory has been compiled taking into account the requirements the Green House Gas Protocol Corporate Reporting and Accounting Standard. Emissions factors utilised within the report have been supplied by the UK Government Department for Environment, Food and Rural Affairs unless otherwise specified.
Total Emissions	<p>Blue Marble has determined that Cisilion has directly or indirectly emitted the following GHGs:</p> <p>Total Scope 1 emissions were calculated to be 0tCO<sub>2</sub></p> <p>Scope 2 emissions were 41.3 tCO<sub>2</sub>e. The major Scope 2 emission was from the use of energy provided to business premises.</p> <p>Scope 3 Emissions were 80.7 tCO<sub>2</sub>e. The majority of scope 3 emissions were from employees working from home.</p> <p>Total included emissions for the subject were 122.04 tonnes.</p>
Reporting period start	1 <sup>st</sup> June 2022
Reporting period end	31 <sup>st</sup> May 2023
Individual responsible for the evaluation and provision of data necessary for the Green House Gas Inventory	Max Smith

## 2. Quality Control

Authored	Tim Kemp
Approved	Henry Waite
Report Date	January 2024
Report Revision	Rev 01
Prepared by	Blue Marble Environmental Partnerships Ltd, Odhams Wharf Exeter EX3 0PD  <a href="http://www.blue-marble.co.uk">www.blue-marble.co.uk</a>
Prepared for	Cisilion Ltd, Heron Tower, 110 Bishopsgate, London EC2N 4AY  <a href="https://www.cisilion.com/">https://www.cisilion.com/</a>

## 4. Glossary & Abbreviations

### 4.1. Glossary

Term	Explanation	Source
Anthropogenic Biogenic Green House Gas Emission	GHG Emission from biogenic material as a result of human activities e.g. burning wood, biodiesel, or fugitive emissions from anaerobic digestion facilities.	ISO 14064-1
Base Year	Specific historical period identified for the purpose of comparing GHG emissions, GHG removals or other GHG related information over time.	ISO 14064-1
Biogenic Carbon	Carbon derived from materials of biological origin, excluding material embedded in geological formations and material transformed to fossilized material.	ISO 14064-1
Biogenic Carbon Dioxide (CO <sub>2</sub> )	CO <sub>2</sub> derived from oxidation of biogenic carbon.	ISO 14064-1
Carbon footprint	The absolute sum of all emissions and removals of greenhouse gases caused directly and indirectly by a subject either over a defined period or in relation to a specified unit of product or instance of service and calculated in accordance with a recognized methodology.	BSI PAS 2060
Carbon Neutral	The condition in which during a specified period there has been no net increase in the global emission of greenhouse gases to the atmosphere as a result of the greenhouse gas emissions associated with the subject during the same period.	BSI PAS 2060
Global Warming Potential (GWP)	<p>The Global Warming Potential is defined "as the time-integrated radiative forcing due to a pulse emission of a given component, relative to a pulse emission of an equal mass of CO<sub>2</sub>".</p> <p>These values are reported as a unit of CO<sub>2</sub> equivalent (CO<sub>2</sub>e), which compensates for the greater impact of some non CO<sub>2</sub> GHGs.</p> <p>The GWP values used in this report are from IPCC Assessment Report 5, 2007.</p>	IPPC, 2013
Greenhouse Gas Inventory	A list of GHG Sources, GHG Sinks, and their quantified GHG emissions and GHG removals.	ISO 14064-1
Greenhouse Gas Report	A standalone document intended to communicate an organization's or GHG Project's GHG related information to its intended users.	ISO 14064-1
Green House Gas Projects	Activities or activity that alter the conditions of the GHG baseline and which cause GHG emission reductions or GHG removal enhancements.	ISO 14064-1
Intended Users	Individual or organization identified by those reporting GHG related information as being the persons who rely on that information to make decisions.	ISO 14064-1
Non-Anthropogenic Biogenic GHG Emission	GHG emission from biogenic material caused by natural disasters (e.g. wildfire or insect infestation), or natural evolution (e.g. growth and decomposition).	ISO 14064-1

## 4.2. Abbreviations

AC	Air Conditioning
BA	Biogenic Anthropogenic
BEIS	UK Government Department for Business Energy & Industrial Strategy
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2e</sub>	Carbon Dioxide Equivalent
Defra	UK Government Department for Environment, Food and Rural Affairs.
EU	European Union
EV	Electric Vehicle
GHG	Greenhouse Gas
HGV	Heavy Goods Vehicle
IPCC	Intergovernmental Panel on Climate Change
ISO	International Standards Organisation
km	Kilometres
kWh	Kilowatt Hours
NB	Non-Biogenic
NBA	Non-Biogenic Anthropogenic
PR	Public Relations
tCO <sub>2e</sub>	Tonnes of Carbon Dioxide Equivalent

## 5. Introduction




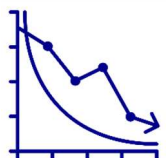


### 5.1. Climate Change Action

Over the past two decades the effects of climate change have accelerated. Considerable evidence exists that climate change has been exacerbated by human activity. Changes in our post-industrial lifestyles have altered the chemical composition of the atmosphere, generating a build-up of greenhouse gases – primarily carbon dioxide, methane, and nitrous oxide levels – raising the average global temperature.

Climate change is a global threat which will impact the lives of everyone on the planet. Hence, it is vital that all individuals, businesses, organisations, and governments work towards the common goal of reducing greenhouse gas emissions.

Carbon management within organisations brings with it challenges but also opportunities as customers, employees, investors, and regulators increasingly look towards the triple bottom line of environmental, social as well as financial governance in their decision making.

### 5.2. The Journey

	Aim – Secure resources and management approval for the concept of carbon management and achieving Carbon Neutrality.
	Measure – Quantify emissions for a historical 12 month period using approved methods such as the GHG Protocol.
	Reduce – Using information from the GHG Inventory and advice from Blue Marble identify high impact opportunities for GHG Emissions Reduction.
	Remove – Offset GHG emissions for the reporting period using appropriate offset schemes to achieve Carbon Neutrality. Blue Marble focus on schemes which actively remove carbon dioxide from the atmosphere.
	Certification – Become Carbon Neutral Company.
	Communicate – Broadcast your targets, objectives and achievements in the area of GHG Management. Be part of the Carbon Neutral certified company directory to establish links with like-minded enterprises.

## 6. Organisation Information

Description of the reporting organisation	Cisilion's mission is to transform and connect business with next-generation IT infrastructure. Complemented by strategic relationships with some of the world's leading technology partners, Cisilion now serves a global client base across more than seventy countries.
Mergers or acquisitions during the reporting period	There have been no mergers or acquisitions within the reporting period.
Reporting period start	June 1st 2022
Reporting period end	May 31st 2023



## 7. Establishing Organisational Boundaries

### 7.1. Background

Organisational boundaries are used to determine how GHGs are accounted for. Organisations can choose between three different boundary conceptions – Equity Share or Control Approaches. Control Approaches are then divided into Operational or Financial.

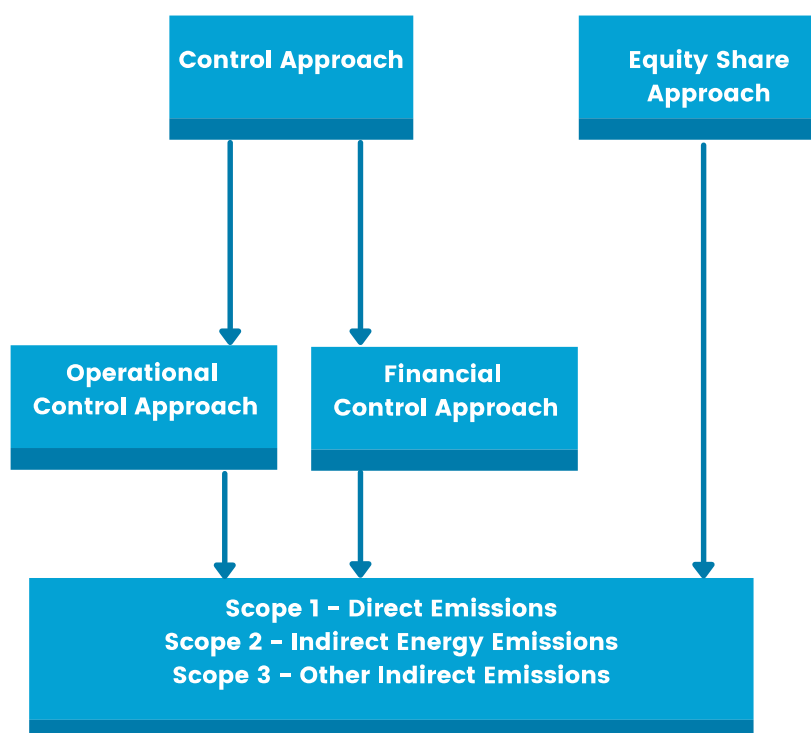


Figure 2. Graphic representation of the available organisational boundaries

### 7.2. Selected Organisational Boundary Methodology

Selected Organisational Boundary	<p>Following discussions with Cisilion the <b>Operational Control</b> approach has been selected as being the most appropriate for the organisational boundaries</p> <p>There are no legal or contractual obligations to perform an alternative consolidation approach.</p>

## 8. Establishing Reporting (Operational) Boundaries

### 8.1. Background

Having established the organizational boundaries in terms of the operations that Cisilion owns or controls the reporting boundaries were established.

This involved identifying emissions associated with the entity's operations and categorizing by Scope. The screening process involved selection of relevant emissions to be included within the inventory.

Scopes 1 and 2 are specifically defined to ensure that two or more companies will not account for emissions in the same scope. The relationship between all 3 scopes is shown below.

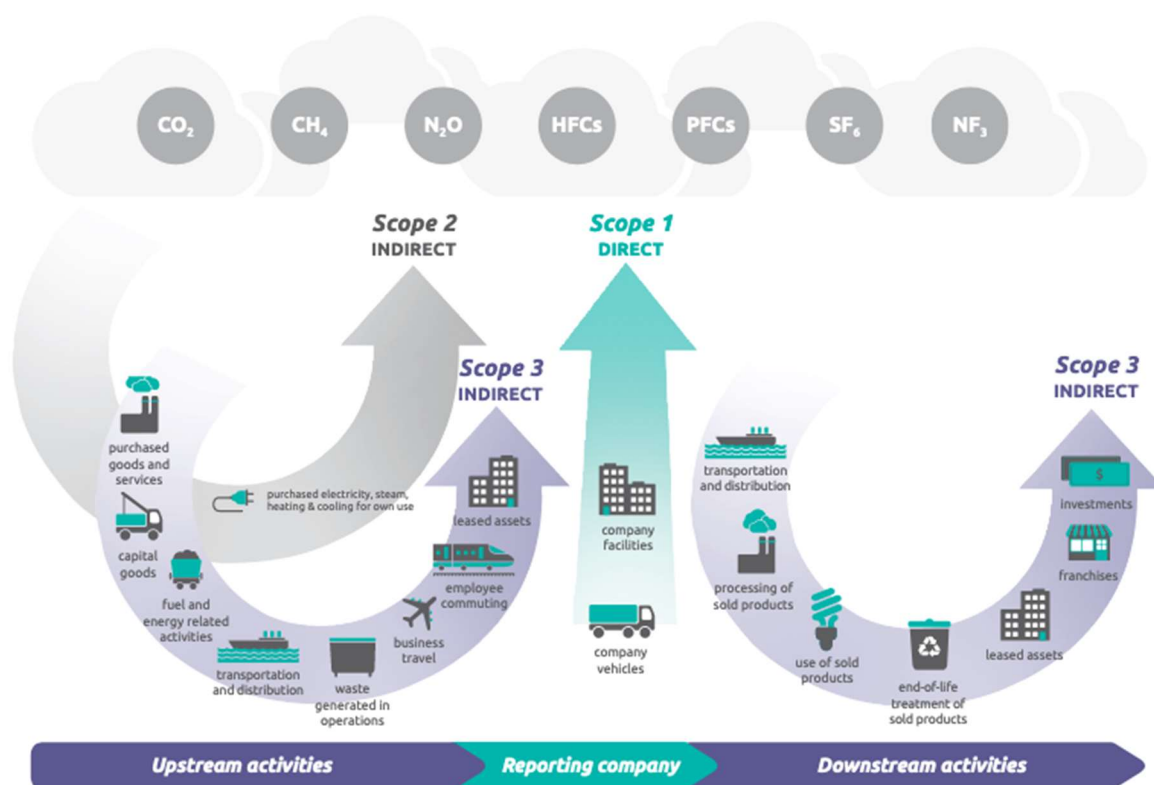


Figure 3: Green House Gas Protocol Scoping Diagram, (GHG Protocol 2013)

### 8.2. Scope 1 – Direct Emissions Description

Direct emissions and removals are those generated by organisational operations. They are normally owned or controlled by the organisation. Some examples include fuel consumption in heating / cooling, transportation, self-electricity production, process emissions from manufacture, and fugitive emissions.

Direct GHG emissions and removals are quantified separately for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, NF<sub>3</sub>, SF<sub>6</sub>, and other appropriate groups where they have been identified. They are presented as an equivalent figure for CO<sub>2</sub> based on the Global Warming Potential values provided by IPPC in the 5<sup>th</sup> Annual

Report (AR5, 2014) – this is represented as CO<sub>2</sub>e

Biogenic emissions are those caused by combustion of biomass. They are recorded and reported separately.

### 8.3. Scope 2 – Indirect Energy Emissions Description

These are emissions generated through the provision of energy by a third party. This could be in the form of compressed air, heating, steam, or electrical energy.

### 8.4. Scope 3 – Other Indirect Emissions Description

Scope 3 emissions are, according to the Green House Gas Protocol Corporate Standard, optional for inclusion within a GHG Inventory. It does however provide an opportunity for an entity to be innovative in GHG management. They can elect to focus on accounting for and reporting those activities which are relevant to their business goals, which they are able to effectively influence and for which they have reliable information.

ISO 14064-1 and the Green House Gas Corporate Standard both suggest the following criteria be used when making decisions in regard to indirect emissions

- Magnitude – The indirect emissions or removals that are assumed to be substantial
- Level of Influence – The extent to which the organisation has the ability to monitor and reduce emissions and removals
- Risk or Opportunity – The indirect emissions that contribute to an organisation's exposure to risk e.g. financial, regulatory, supply chain, reputational risks, or alternatively its opportunity for business such as new markets, new business models, or increased client base
- Sector Specific Guidance – GHG emissions deemed as significant by the business sector as provided for by sector specific guidance
- Outsourcing – Activities which were previously performed in house, or activities which are performed by a third party which are generally undertaken in house by other reporting companies within the market sector
- Employee Engagement – How important are particular Scope 3 emissions to the engagement of the company workforce
- Data Availability – There is a recognition that within the value chain both up and downstream data accuracy is likely to be reduced and estimated emissions are acceptable as long as there is transparency in the approach

### 8.5. Screening to Establish Reporting Boundaries

Using the standards explained above, and based on information supplied from the organisation, Blue Marble performs a screening process to establish the boundaries of the report.

Screening takes account of the categories within the Green House Gas Protocol Scoping Diagram in Figure 3, and aims to select from the overall list the main activities

Based on conversations with the client about their operations, as well as using the criteria presented in Section 8.4 on Scope 3 emissions, activities are classified and the results presented within the following categories:

- Scope 1
- Scope 2
- Scope 3
- Outside of Scopes – This is where the GHG Protocol captures anthropogenic biogenic emissions.
- Outside of the Reporting Boundary – not considered further within this report. This is either because they were not found to occur, or are excluded using the rationale described in Section 8.4

## 8.6. Activities of the Entity

Scope 1	Included
Scope 2	Electricity and Energy provision – Included
Scope 3	
1 - Purchased Goods and Services	Data center now fully in house so included within Scope 2.
2 - Capital goods	No significant capital good purchases have been identified and this activity has been scoped out
3 - Fuel and Energy Related Activities	Energy related activities for Scope 1, 2, & 3 are included. Well to tank (WTT) is separated for fuel used in Scope 1. WTT, transmission and distribution, and the (WTT) for the fuel used in transmission and distribution are all considered and included within the figure for the relevant Scope 3 activity
4 - Upstream Transportation, distribution & storage	Included
5 - Waste Generated in Operations	Included
6 - Business Travel	Included – flights, taxi, train, hotels & grey fleet
7 - Employee Commuting & Home Working	Home working included
8 - Leased Assets	None identified
9 - Transportation and Distribution of sold Products	Included did not occur. Logistics generally procured by subject therefore included in upstream logistics
10 - Processing of Sold Products	No sold products requiring processing
11 - Use of Sold Products	Sold products are not directly responsible for emissions
12 - End of Life Treatment of Sold Products	Waste treatment beyond the control of the subject organisation
13 - Leased Assets	No leased assets identified
14 - Franchises	Company does not operate a franchise model
15 - Investments	No investments into 3 <sup>rd</sup> parties as part of business activities have been identified

## 9. Calculations

### 9.1. Selection of Quantification Approach

Having identified the sources, the next step is to select the calculation approach. Direct measurement of GHG emissions by monitoring concentration and flow rate is not common. On occasion they may be calculated based on a mass balance or stoichiometric basis specific to a facility or process. The most common approach however is through the application of documented emission factors. These factors are calculated ratios relating GHG emissions to a proxy measure of activity at an emissions source.

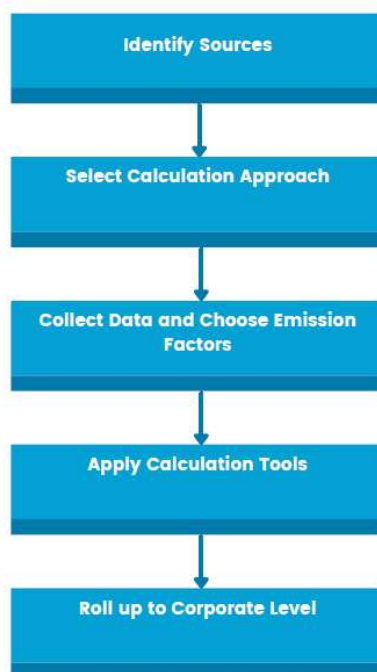


Figure 4: Quantification Approach Diagram

### 9.2. Activity Data Collection and Emission Factors

Calculation methods use activity data and emission factors to estimate GHG emissions. Activity data is a measure of the processes that result in GHG emissions e.g. miles travelled, litres of fuel used, or kWh of electricity consumed. Emission factors reflect the average GHG intensity per unit of activity data for a given source.

The GHG emissions data within this report are derived from a combination of client activity information and computation by Blue Marble. Cisilion GHG Inventory has been calculated using the 2021 conversion factors developed by the UK Department for Environment, Food and Rural Affairs (Defra) and the Department for Business, Energy & Industrial Strategy (BEIS).

Blue Marble has selected this as the preferred method of calculation as a government recognised approach which uses data realistically available from the client.

### 9.3. Global Warming Potentials

There are many GHGs, and some are considerably more potent in their action than CO<sub>2</sub>. The major ones are specified in the GHG protocol, and include CO<sub>2</sub>, Methane, N<sub>2</sub>O, as well as several other groups of chemicals covered by the Kyoto Agreement.

As an example of this effect; over a period of 100 years, 1kg of Sulphur Hexafluoride has the same effect as 23,900kg of CO<sub>2</sub>.

Global Warming Potentials (GWPs) are included within the Blue Marble calculations to normalise data to the approved units of mass of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) over 100 years. These emissions are based on the GWP values provided in the IPPC 5<sup>th</sup> Annual Report (AR5 2014)

In the most recent data which are shown in Figure 6, it can be seen that methane has an anticipated GHG effect 28 times that of CO<sub>2</sub>.

Chemical Common Name	Chemical Formula	GWP for a 100 Year Time Horizon (AR5)
Carbon Dioxide	CO <sub>2</sub>	1
Methane	CH <sub>4</sub>	28
Nitrous Oxide	N <sub>2</sub> O	265

Figure 5: Global Warming Potential Examples (AR5 2014)

## 10. Emissions Calculation for Cisilion

### 10.1. Deriving Relevant Activity Data

In order to calculate the CO<sub>2</sub>e footprint values, it is necessary to have a measure of activity which can be combined with the relevant emissions factor.

In some cases, information is available from entities in a format which can be used directly, in others pre-processing or combination with secondary data is required to develop a measure of activity data. Section 10.1 explains any preprocessing, secondary data, or assumptions made to develop that activity data.

All data is then consolidated and presented in Section 10.2.

#### 10.1.1. Office and Warehouse Energy Usage

Cisilion has three main facilities – a Leatherhead office, a warehouse, and a London office. None of the facilities has a mains gas supply. Electricity bills are available for the first two locations, but proxy figures are used for the London office as no data is available beyond the rented area footprint.

To develop reasonable estimates for the emissions from London office use, secondary data was employed from the CIBSE Guide F – Energy Efficiency in Buildings. This provides energy usage on a m<sup>2</sup> of treated area.

Table 20.4 of the guide provides data for electric only buildings such as the London office which uses no gas or oil. However, the figures are based on a relatively limited sample size and has no option for airconditioned offices. Table 20.9 breaks down the individual office components e.g. heating / cooling / lighting. Cooling an airconditioned office of typical practice is 31kWh/m<sup>2</sup>/yr.

In order to develop a reasonable data point for the Cisilion office in London, the general figure for an all electric building is added to the air conditioning consumption to generate an appropriate value. A typical open plan office has a value of 104kWh/m<sup>2</sup> + 31kw/m<sup>2</sup>/yr = 135kWh/m<sup>2</sup>/yr.

The area of the London office is 2400ft<sup>2</sup> = 223m<sup>2</sup>.  
135kWh x 223m<sup>2</sup> = 30105kWh

London office = 30105 kWh

Leatherhead Office = 173,373kWh

Warehouse = 10149kWh

#### 10.1.2. Working from Home

No data was provided for working from home by DEFRA until the 2022 set of emissions values was released mid-year 2022. These emissions values are used for this calculation.

Cisilion reported 136 days per member of staff of which there were 158=21488 days. Each day is assumed to be 8 Hours.

#### 10.1.3. Logistics

Goods are transported by Rigid Freight and Vehicle and Van. Reportedly rigid vehicles are used if the package goods are above 30kg, so this factor is used to segregate between the vehicles types. They are contracted on a courier type basis rather than procurement of an entire vehicle



therefore tonne.km values are used.

Activity	Tonne.km
Van Transport	494
Rigid HGV Transport	2047

#### 10.1.4. Waste

Waste transfer information was provided for the Leatherhead site and the warehouse by the waste management contractor.

Location	Tonnes
<b>Leatherhead Office - Cisilion House, Guildford Road</b>	<b>0.958</b>
General Mixed Recyclables IC	0.294
General Non-Hazardous Waste IC	0.664
<b>Warehouse - Unit 6, Randalls Road</b>	<b>1.024</b>
General Mixed Recyclables IC	0.521
General Non-Hazardous Waste IC	0.503

Information for the London office was not available. In order to generate some secondary data the waste produced by the leatherhead office was divided by the number of employees working there, and multiplied by the number of staff working in the London office.

Total tonnage for the year was 0.958 tonnes, of which 0.294 was recyclable, and the remainder was not. It is assumed that the non-recyclable waste was taken for combustion. The total therefore is:

$(0.294 \text{ tonnes recyclable waste} / 35 \text{ workers}) \times 20 \text{ workers} = 0.168 \text{ tonnes}$

$(0.664 \text{ tonnes non-recyclable} / 35 \text{ workers}) \times 20 \text{ workers} = 0.379 \text{ tonnes}$

When added to the Leatherhead and Warehouse values the total are as per the below table

Waste Type	Tonnes
General Mixed Recyclables IC	0.815
General Non-Hazardous Waste IC	1.167

## 10.2. 2022 Complete Activity Data For Comparison with 2023

Activity	Units	Value
Total Electricity Use	kWh	156986
Business Travel - Hotel Rooms	Nights	33
Business Travel - Grey Fleet - Average Car	Miles	13508
Business Travel - International Flights - Economy	Passenger.km	4322
Business Travel - International Flights - Business	Passenger.km	1109
Business Travel - UK Rail	Passenger.km	14030
Upstream Logistics - Average Rigid HGV	Tonne.km	297
Upstream Logistics - Average Van	Tonn.km	411
Waste - Recyclables	Tonnes	1.52
Waste - Non-recyclables	Tonnes	2.38
Working from Home	Days	24012

## 10.3. 2023 Complete Activity Data

Activity	Units	Value
Total Electricity Use	kWh	213,627
Business Travel - Hotel Rooms	Nights	125
Business Travel - Grey Fleet - Med Car Unknown Fuel	Miles	8,628
Business Travel - International Flights - Short Haul to and from UK Economy	Passenger.km	9,036
Business Travel - UK Rail	Passenger.km	16,883
Upstream Logistics - Average Laden Rigid	Tonne.km	2,047
Upstream Logistics - Average Van	Tonne.km	494
General Mixed Recyclables IC	Tonnes	0.815
General Non-Hazardous Waste IC - combustion	Tonnes	1.167
Working from Home	Days	21488

## 11. Results

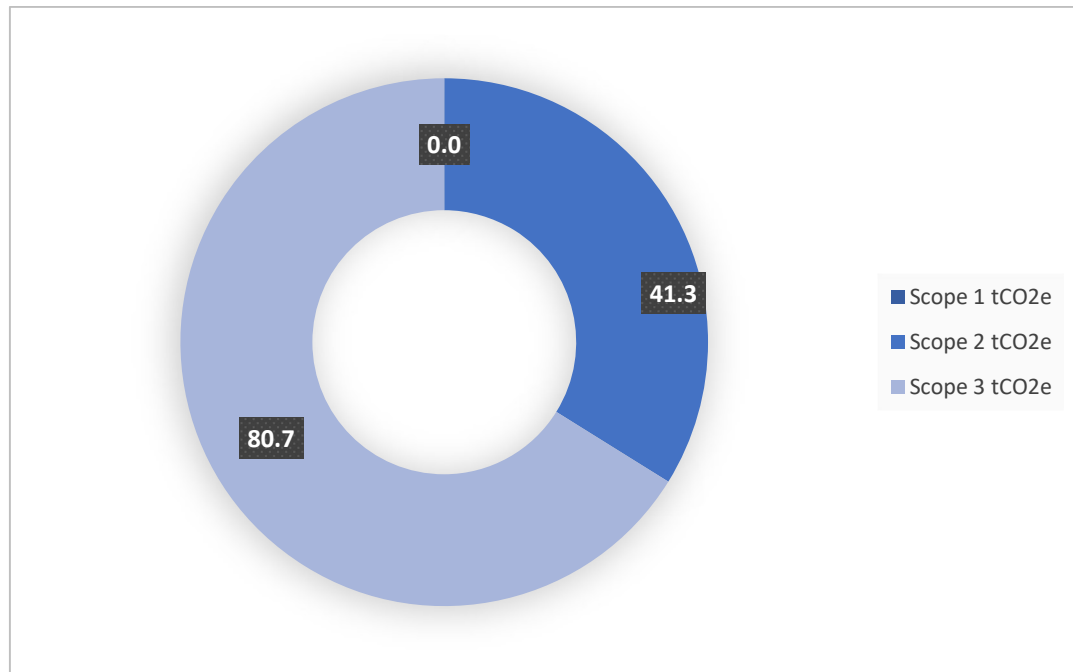
### 11.1. Summary of Results in Green House Gas Protocol Format

	Activity	Scope 1				Scope 2				Scope 3	Outside of Scopes
		kg CO <sub>2</sub> e	kg CO <sub>2</sub>	kg CH <sub>4</sub>	kg N <sub>2</sub> O	kg CO <sub>2</sub> e	kg CO <sub>2</sub>	kg CH <sub>4</sub>	kg N <sub>2</sub> O	kg CO <sub>2</sub> e	kg CO <sub>2</sub> e
Supplied Energy	Provided Electrical, Heat or Cooling Energy					41311	40848	171	293	14563.0	
	Hotels									1300.0	
Business Travel	Public Transport									2263.8	
	Personal Car Mileage									3080.9	0
Freight and Logistics	Upstream Delivery and Freight									0.0	
	Sold Product Delivery and Freight									898.8	
Waste	Waste Disposal									42.2	
	Employee / Contractor Working from Home									58576.9	
Homeworking & Commuting											
	<b>TOTAL GHG EMISSIONS kg CO<sub>2</sub>e</b>	<b>0</b>	0	0	0	<b>41311</b>	40848	171	293	<b>80725.5</b>	<b>0</b>
	<b>TOTAL GHG EMISSIONS tonnes CO<sub>2</sub>e</b>	<b>0.0</b>	0.00	0.00	0.00	<b>41.3</b>	40.85	0.17	0.29	<b>80.7</b>	<b>0.00</b>
	<b>TOTAL tCO<sub>2</sub>e</b>	<b>122.04</b>									

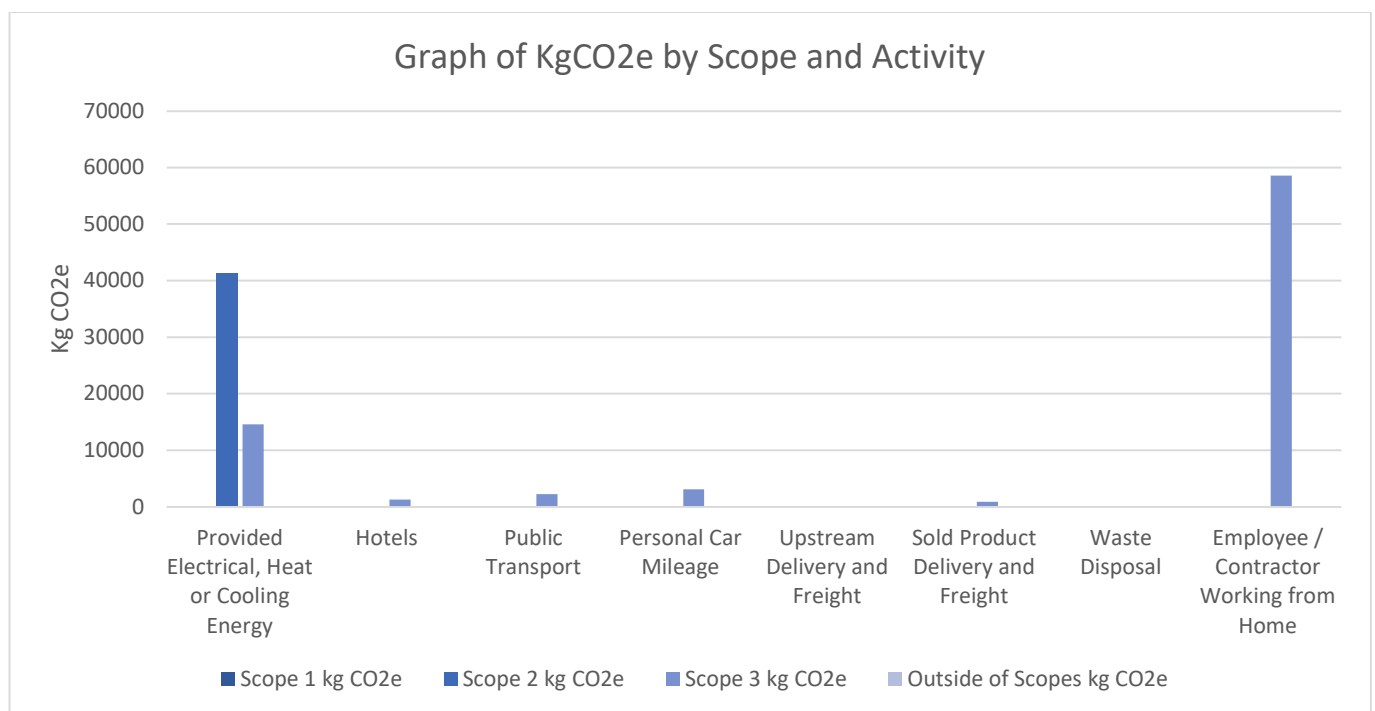
## 11.2. Carbon Footprint by Activity

Activity	Scope 1 (kgCO <sub>2</sub> e)	Scope 2 (kgCO <sub>2</sub> e)	Scope 3 (kgCO <sub>2</sub> e)
Total Electricity Use		41311	14563
Business Travel - Hotel Rooms			1300
Business Travel - Grey Fleet - Average Car			3081
Business Travel - International Flights - Economy			1514
Business Travel - UK Rail			750
Upstream Logistics - Average Laden Rigid			540
Upstream Logistics - Average Van			359
General Mixed Recyclables IC			17
General Non-Hazardous Waste IC			25
Working from Home			58578

### 11.3. Carbon Footprint by Scope



### 11.4. Carbon Footprint by Scope and Activity



## 12. Base Year & Intensity Metrics

### 12.1. Base Year Background

Entities may elect to track emissions over time in response to a variety of business goals including public reporting, establishing GHG targets, managing risks and opportunities. This is done using a base year which is a specific historical period identified for the purpose of comparing GHG emissions, GHG removals, or other GHG related information over time.

Where possible, the base year should remain constant however it may need to be occasionally revisited to ensure transparency over time while allowing for “significant changes”. Significant changes include:

- Structural alterations including:  
Acquisitions, divestments, and mergers.  
Out-sourcing and in-sourcing of emitting activities
- Changes in calculation methodology or improvements in accuracy of emissions factors or activity data that result in a significant impact on the base year emissions data
- Discovery of significant errors or a number of cumulative errors which are collectively significant.

A commonly used significance threshold is a 5% change in total Scope 1 and Scope 2 emissions due to relevant “significant changes”.

### 12.2. Base Year Recalculation

Within the base year data information with improved accuracy in relation to logistics has become available.

Activity	Units	Previously Reported Value	Updated Value	Carbon Change (tCO <sub>2</sub> e)
Upstream Logistics - Average Articulated HGV	Tonne.km	115110	0	-11601
Upstream Logistics - Average Rigid HGV	Tonne.km	0	297	+76.7
Upstream Logistics - Average Van	Tonn.km	0	411	+308

The resulting change to the base year is as follows

	Total (kgCO <sub>2</sub> e)	Scope 1 (kgCO <sub>2</sub> e)	Scope 2 (kgCO <sub>2</sub> e)	Scope 3 (kgCO <sub>2</sub> e)
Original Base Year GHG Footprint (tCO <sub>2</sub> e)	129752	0	33333	96419
Updated Base Year GHG Footprint	118535	0	33333	85202

## 12.3. Intensity Metrics Background

The base year comparative values provided in this report reflect the GHG footprint for the organisation and how it compares to that point in time.

Although the base year can be revisited according to the criteria presented above, this does not account for factors such as organic business development, an increase in production, or in the number of staff. It is therefore helpful to consider how the GHG footprint has altered in relation to an appropriate metric. These are known as intensity metrics and are a good indicator of performance on a per unit basis.

Examples of intensity metrics include CO<sub>2</sub>e per unit produced, per £ earned, or per employee.

The GHG Protocol allows for intensity metrics to be included in the report in addition to the total GHG values but not instead of them. The rationale is that organizations should strive to decouple their GHG emissions from their productivity as part of their carbon management strategy. Simply put, the aim is for production, employees and revenue to increase whilst GHG emissions decrease overall.

## 12.4. Base Year Comparison Results

	Total (tCO <sub>2</sub> e)	Scope 1 (tCO <sub>2</sub> e)	Scope 2 (tCO <sub>2</sub> e)	Scope 3 (tCO <sub>2</sub> e)
Base Year GHG Footprint (tCO <sub>2</sub> e)	118.5	0	33333	85202
Current Year GHG Footprint (tCO <sub>2</sub> e)	122.04	0	41.3	80.7

## 12.5. Intensity Metrics Results

	Total	Scope 1	Scope 2	Scope 3
Base Year - tCO <sub>2</sub> e / £ Million Turnover	2.469	0	0.694	1.775
Current Year - tCO <sub>2</sub> e / £ Million Turnover	1.77	0	0.6	1.17
Base Year - tCO <sub>2</sub> e / Employee	0.859	0	0.242	0.617
Current Year - tCO <sub>2</sub> e / Employee	0.77	0	0.26	0.51

# 13. Carbon Management Projects

## 13.1. Purpose

Some of the key benefits to Carbon Neutrality are related to the financial savings and business risk reduction conferred by a reduced reliance on fossil fuels. Entirely managing an organization's footprint through offsetting programs negates these benefits and is not consistent with Carbon Neutrality standards. Therefore, it is important that businesses strive to implement practical solutions. Cisilion is committed to identifying and implementing carbon saving projects.

Cisilion recognises that successful attainment of its carbon reduction targets is contingent upon the following key elements being in place:

- An organisational framework within the entity that is sufficiently robust to support the financing, delivery and monitoring of carbon reduction projects.

- Clearly identified responsibility and accountability for delivery of carbon reduction projects.
- Identification of a realistic suite of carbon reduction projects across a range of areas relevant to the carbon footprint; this list should be regularly reviewed and flexible to adapt to emerging needs and opportunities for funding.
- A data collection and collation system that is integrated sufficiently to inform an annual progress update on the Carbon Footprint.

## 13.2. Existing Projects

The following initiatives and projects have already been completed or implemented:

- Increased use of remote meetings to reduce business travel
- DocuSign has been implemented to reduce printing and physical signing.
- Introduction of electric vehicle scheme during 2023
- Considering including commuting emissions into Scope 3 for subsequent years.
- Tree Planning Scheme implemented
- Senior level ESG Committee in place



## 14. Marketing

### 14.1. Marketing Suggestions

Consider communicating your actions and achievements both within your organisation, to help develop your culture, and externally to further improve your brand image.

- Use the Blue Marble Certification Logo to show the Carbon status of your organisation.
- Present the history of your sustainability journey and why it is important to your organisation
- Explain where you plan to go in the future – provide targets and measures you are going to implement
- Always be accurate and transparent about what your organisation has achieved. Blue Marble will support you on your messaging if you are in any doubt as to the applicability of a claim.
- Use the Blue Marble branding, certificates, images of any offset projects you are supporting and graphs of your carbon performance to help communicate your point in a clear and enticing manner.
- Visit the Blue Marble Marketplace and Directory to find opportunities for your company, or to utilise the products and services of other Carbon Neutral Companies. In this way, value chain emissions are driven down.

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