



# Policy Procurement Note 06/21 Report 2022

Presented  
to: **Felgains Ltd**

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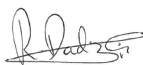
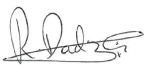
Delta-Simons Project No: 94936.573121

**Protecting people  
and planet**

## Report Details

<b>Client</b>	Felgains Ltd
<b>Report Title</b>	Carbon Footprint Assessment 2022
<b>Report No.</b>	94936.573121
<b>Delta-Simons Contact</b>	Hannah Greenway (hannah.greenway@deltasimons.com)

## Quality Assurance

Issue No.	Status	Issue Date	Comments	Author	Technical Review	Authorised
01	Final	12/09/2023	-			
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## About Us

Delta-Simons is a trusted, multidisciplinary environmental consultancy, focused on delivering the best possible project outcomes for customers. Specialising in Environment, Health & Safety and Sustainability, Delta-Simons provide support and advice within the property development, asset management, corporate and industrial markets. Operating from across the UK we employ over 180 environmental professionals, bringing experience from across the private consultancy and public sector markets.

As part of Lucion Services, our combined team of 500 in the UK has a range of specialist skill sets in over 50 environmental consultancy specialisms including asbestos, hazardous materials, ecology, air and water services, geo-environmental and sustainability amongst others.

Delta-Simons is proud to be a founder member of the Inogen Environmental Alliance, enabling us to efficiently deliver customer projects worldwide by calling upon over 5000 resources in our global network of consultants, each committed to providing superior EH&S and sustainability consulting expertise to our customers. Through Inogen we can offer our Clients more consultants, with more expertise in more countries than traditional multinational consultancy.



Delta-Simons is a 'Beyond Net-Zero' company. We have set a Science-Based Target to reduce our Scope 1 and Scope 2 carbon emissions in line with the Paris Agreement and are committed to reducing Scope 3 emissions from our supply chain. Every year we offset our residual emissions by 150% through verified carbon removal projects linked to the UN Sustainable Development Goals. Our consultancy services to you are climate positive.

If you would like support in understanding your carbon footprint and playing your part in tackling the global climate crisis, please get in touch with your Delta-Simons contact above who will be happy to help.

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# 1.0 Introduction

## 1.1 Appointment

Delta-Simons Limited ("Delta-Simons") was instructed by Felgains Ltd (the "Client") to undertake an assessment of carbon footprint emissions as a result of its 2022 business operations (1<sup>st</sup> January 2022 to 31<sup>st</sup> December 2022).

## 1.2 PPN 06/21 Qualification Status

An organisation will qualify for PPN compliance when procuring a public sector contract with an anticipated contract value above £5 million per annum (excluding VAT) which are subject to the Public Contracts Regulations 2015.

## 1.3 Background Context

Felgains is a provider and retailer of patient care equipment and solutions to multiple environments in the health and care sector, with a focus on handling, hygiene and pressure care equipment. The Client operates from a single office location in Ipswich, with a small number of remote based employees.

The company owns and operates a small fleet of company vehicles and business travel is also undertaken via employee vehicles and public transport. Felgains utilise a range of UK-based suppliers, as well as a small number of European and Australian-based suppliers.

## 1.4 Scope of Works

The scope of works undertaken for this assessment was:

### Task 1 - Baseline Carbon Footprint

- Kick-off online meeting with key personnel from across the business;
- Established appropriate and robust assessment boundaries in line with Procurement Policy Note 06/21 and best practice standards;
- Discussion of included emissions sources, data availability and agreed persons responsible for data provision;
- Review of Client data for all applicable emissions sources;
- Where data was unavailable or impractical to obtain, appropriate assumptions were made by Delta-Simons, in line with best practice standards;
- Calculation of total 2022 carbon dioxide equivalent (CO<sub>2</sub>e) emissions;
- Calculation of appropriate intensity metrics (CO<sub>2</sub>e per £m revenue / employee etc.); and
- Production of a summary carbon footprint report.

### Task 2 - PPN 06/21 Carbon Reduction Plan

- Review of the Client's priority areas for tackling carbon emissions, taking into account business strategy, budgets, external drivers and legislation (current and upcoming) and agree level of ambition (including Net-Zero target year);
- Production of a prioritised action plan for improving policies, procedures and data capture processes;
- High-Level action plan for improving environmental performance, outlining potential measures suitable to achieve Net-Zero carbon position;
- Production of a high-level projection of appropriate carbon reduction targets aligned with 1.5°C decarbonisation pathway;
- Indicative high-level Road Map for Net-Zero status; and

- Production of a summary Carbon Reduction Plan meeting the requirements of PPN 06/21.

The standard limitations associated with this assessment are presented in Appendix A and a PPN 06/21 Carbon Reduction Plan is included in Appendix B.

## 2.0 Report Boundaries

### 2.1 Corporate Structure Information

This assessment relates to Felgains Ltd only.

### 2.2 Organisational Boundaries

GHG emissions have been assessed using the 'operational control' approach, meaning that the Client reports on emissions resulting from its operations, for which the company has full authority to introduce and implement its operating policies.

### 2.3 Reporting Period

The reporting period for this carbon footprint assessment is 1<sup>st</sup> January 2022 to 31<sup>st</sup> December 2022.

### 2.4 Data Completeness

Electricity, gas, water, waste, commuting, business travel and transportation & distribution data during 2022 has been collected.

Whilst good data coverage has been provided, it is the intention of Felgains Ltd to continually improve its data capture processes in the future.

### 2.5 Base Year Calculation

This is the Client's first year of reporting their carbon footprint. Therefore, 2022 will be used as the baseline year for all future assessments to be compared against.

### 2.6 Quantification Methodology

This assessment is produced in line with UK Government Environmental Reporting Guidelines: Including Procurement Policy Note 06/21 in conjunction with UK Government GHG Conversion Factors for Company Reporting.

This assessment has been self-certified to be carried out in general accordance with the GHG Protocol and ISO14064-1:2006 Greenhouse Gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.

Carbon conversion factors have been taken from 'DBEIS/DEFRA - UK Government Conversion Factors for Company Reporting 2022' as the reporting periods fall within the 2022 calendar year. This is in line with environmental reporting guidance.

This assessment measures, where possible, the carbon dioxide equivalent (CO<sub>2</sub>e) emissions associated with business activities. CO<sub>2</sub>e includes the six main GHGs covered by the Kyoto Protocol: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), nitrous oxide (N<sub>2</sub>O), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>). It is considered important to report these GHGs as the global warming potential (GWP) of certain GHGs may be many times greater than that of CO<sub>2</sub>.

### 2.7 Site Information

The Client operates from a single office location at 33 Knightsdale Road, Ipswich, Suffolk, IP1 4JJ. This premises has an incoming electricity and gas supply. No refrigerant top-ups occurred during 2022.

### 2.8 Data Verification

Where possible, data is based on verifiable evidence (invoices, statements, meter readings etc.).

The data has been provided to Delta-Simons via email. Copies of supporting invoices, statements etc. have been provided. Delta-Simons has taken the data provided to it in good faith. Verification of the data used in this report is the responsibility of Felgains Ltd.

## 3.0 Operational Scopes

### 3.1 Definitions

Carbon emissions are categorised into Scopes.

**Scope 1** – Direct emissions resulting from the primary combustion of fuels in organisation-controlled premises, vehicles and plant. Where present, Scope 1 emissions are required to be reported.

**Scope 2** – Indirect emissions resulting from the consumption of purchased electricity that has been generated off-site and supplied by the national grid. It is also mandatory to report Scope 2 emissions.

**Scope 3** – Indirect emissions associated with the consequences of the activities of the organisation but controlled by another entity outside of the corporate structure. Scope 3 emissions are voluntarily reported by organisations who wish to assess the wider impact of their business operations.

### 3.2 Inclusions

Carbon emissions have been calculated for mandatory Scopes 1, 2 & 3, in line with UK Environmental Reporting Guidance and include the following sources:

#### Scope 1 – Direct Combustible Fuels

- **Natural Gas:** Gas is consumed as a heating fuel at the Client's site Ipswich; and
- **Company Vehicles:** The Client operates a fleet of nine diesel vans. Volumes of fuel purchased for each vehicle were provided by the Client.

#### Scope 2 – Indirect Combustible Fuels

- **Purchased Electricity:** Emissions for electricity have been calculated for the electricity supplies serving the Client's Ipswich site.

#### Scope 3 – Other Indirect Emissions

- **Water Consumption:** Emissions associated with water consumption at the Client's site in Ipswich have been calculated.
- **Personal Mileage:** Emissions are based on the distance travelled as recorded on business mileage claims. Emissions factors for an average van are used as it is not practical to determine fuel type or size of vehicle for employee personal vehicles;
- **Employee Commuting:** Emissions associated with employee commuting have been calculated based on an employee commuting survey provided by the Client;
- **Hire Vehicles:** One electric vehicle was hired during the reporting period. Mileage data was provided;
- **Business Travel:** Emissions associated with rail and flight journeys for business purposes have been included in this year's reporting;
- **Hotel Accommodation:** Emissions associated with overnight accommodation for business purposes have been calculated (per night);
- **Upstream T&D:** The Client receives regular deliveries from six main suppliers. The origin, destination, mode of transport, frequency and weight of deliveries has been provided by the Client;
- **Downstream T&D:** The Client sends items via two couriers for business purposes. The frequency, distance and weight of deliveries has been provided by the Client for Anglia Freight, whilst the tonne.km has been provided by the Client for FedEx;
- **Waste:** Emissions associated with general, recycling and metal waste types have been calculated using reports provided by the Client;

- **Electricity Transmission and Distribution:** Emissions from transmission and distribution of electricity are included as the Client takes responsibility for indirect losses arising from its share of purchased electricity; and
- **Well to Tank:** Emissions associated with the extraction, refining and transportation of fuel for both direct combustion and for the generation of electricity are included in the carbon footprint boundary.

### 3.3 Exclusions

No emissions sources required under PPN 06/21 were excluded from this report.

### 3.4 Limitations

The following limitations relating to data completeness have been identified:

- **Upstream T&D:** Transportation and distribution data provided by Invacare appeared incomplete. It appeared as though some packing notes did not contain weight data, therefore, emissions from Invacare could be underestimated.



## 4.0 Results

### 4.1 Summary

Carbon emissions associated with Felgains Ltd's operations during 2022 have been calculated. Table 1, below, summarises total operational emissions by Scope.

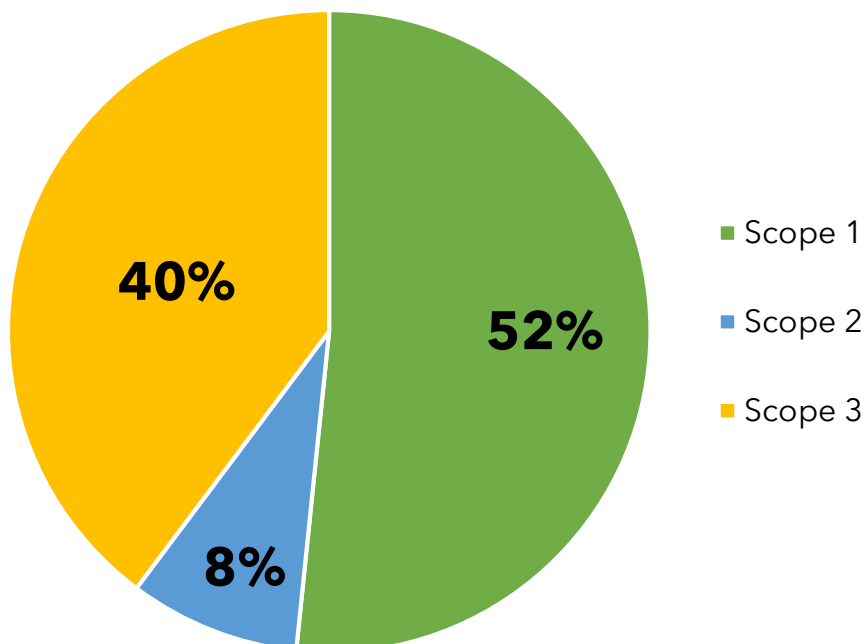
**Table 1 - Summary Carbon Emissions by Scope**

Scope	2022 (tCO <sub>2</sub> e)
Scope 1	60.25
Scope 2	10.03
Scope 3	46.40
<b>Total</b>	<b>116.68</b>

Table 1, above, shows that total emissions for the period 1<sup>st</sup> January 2022 to 31<sup>st</sup> December 2022 was 116.68 tCO<sub>2</sub>e. The Client's annual baseline emissions are therefore 116.68 tCO<sub>2</sub>e.

The breakdown of emissions sources is presented in Figure 1 below. Scope 1 emissions account for 52% of total carbon emissions. Scope 2 emissions, associated with purchased electricity, are responsible for 8% of total emissions. The remaining 40% is attributable to indirect Scope 3 emissions from business travel, employee commuting, transportation & distribution and waste.

**Figure 1: Felgains Ltd's Carbon Emissions by Scope (2022)**



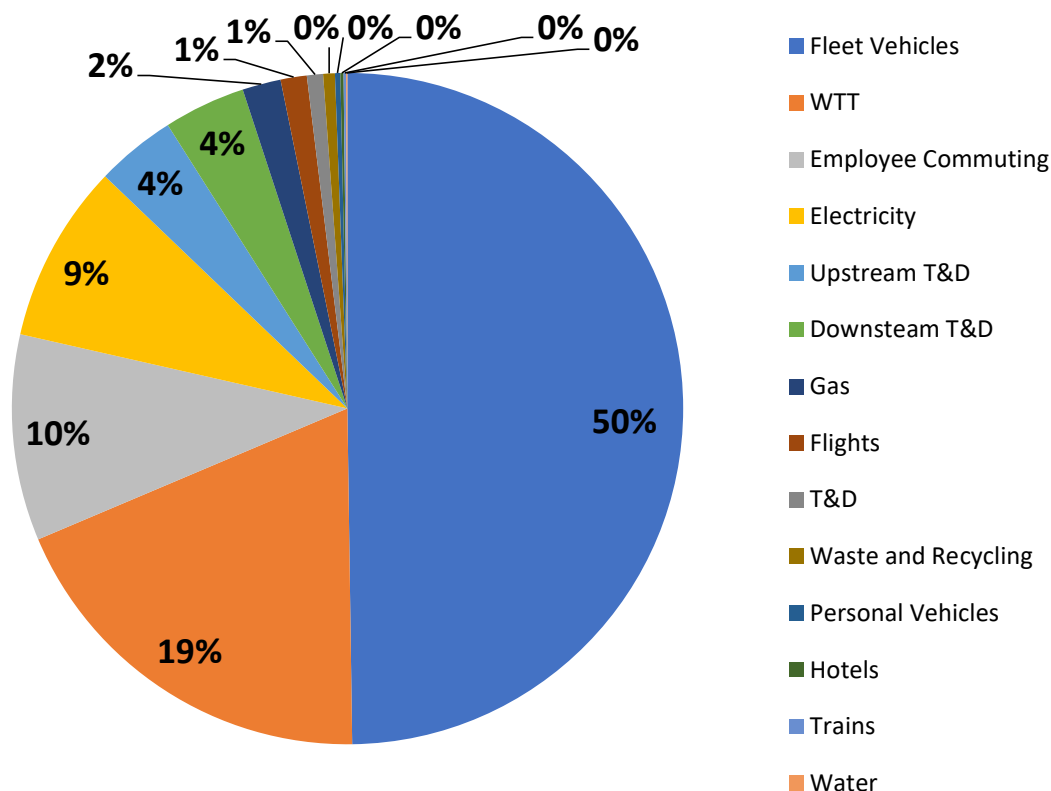
## 4.2 GHG Emissions by Source

GHG emissions associated with each source are set out in Table 2 and represented graphically in Figure 2 below. The figure illustrates how company vehicles (50%), well-to-tank (19%) and employee commuting (10%) are responsible for 79% of Felgains Ltd's emissions over the period. Electricity (9%), upstream transportation and distribution (4%), downstream transportation and distribution (4%), natural gas (2%), flights (1%), transmission and distribution losses from electricity (1%) and waste and recycling (1%) also account for 22% of all emissions. The minimal remaining emissions result from personal vehicles, hotels, trains and water usage.

**Table 2 - Summary Carbon Emissions by Category**

			2022	
Energy Source			Units	tCO <sub>2</sub> e
Offices	Electricity	kWh	51,858	10.03
	Natural Gas	kWh	11,900	2.17
	Water	m <sup>3</sup>	161	0.07
Transport & Travel	Fleet Vehicles	Litres	22,707	58.08
	Personal Vehicles	Miles	810	0.30
	Employee Commuting	Miles	42,604	11.58
	Hire Cars	Miles	250	0
	Trains	Miles	2,629	0.15
	Flights	Miles	6,027	1.46
	Hotels	Nights	17	0.18
US T&D	Supplier Transportation and Distribution	Tonne.km	24,766	4.50
DS T&D	Courier Transportation and Distribution	Tonne.km	24,408	4.60
W&R	Waste and Recycling	kg	19,160	0.65
WTT	Well-to-Tank	Various	-	22.00
T&D	Transmission & Distribution	kWh	51,858	0.92
			<b>TOTAL</b>	<b>116.68</b>

**Figure 2: Felgains Ltd's Carbon Emissions by Source (2022)**



### 4.3 Carbon Emissions - Electricity

The table below summarises emissions associated with the purchase of electricity from the national grid. Conversion factors from UK Government GHG Conversion Factors for Company Reporting for electricity consumption have been used.

**Table 3 - Electricity GHG Emissions Results**

Site	2022	
	kWh	tCO <sub>2e</sub>
Felgains HQ	51,858	10.03

### 4.4 Carbon Emissions - Natural Gas

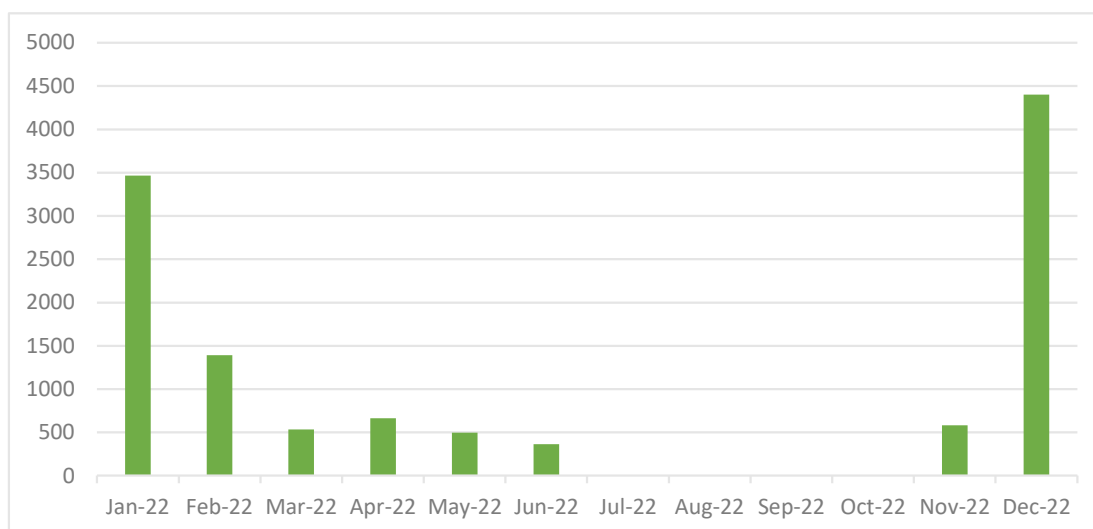
The table below summarises emissions associated with the direct combustion of fuels within business premises. Conversion factors from UK Government GHG Conversion Factors for Company Reporting for natural gas consumption have been used.

**Table 4 - Natural Gas GHG Emissions Results**

Site	2022	
	kWh	tCO <sub>2e</sub>
Felgains HQ	11,900	2.17

Figure 3, below, illustrates a strong seasonal trend in natural gas consumption at Felgains HQ. Greater consumption occurs in the winter months, whilst no natural gas was consumed between July - October due to reduced heating demand.

**Figure 3 - Natural Gas Consumption (2022)**



#### 4.5 Carbon Emissions - Water

The table below summarises emissions associated with the consumption and treatment of water at Felgains HQ. Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting for water consumption. For meters with missing periods of data and at least 6-months of actual data, estimations have been made to complete the data set.

**Table 5 - Water GHG Emissions Results**

Site	2022	
	m <sup>3</sup>	tCO <sub>2</sub> e
Felgains HQ	161	0.02

#### 4.6 Carbon Emissions - Business Travel

The table below shows Scope 1 emissions associated with fleet vehicles and employee vehicles used for business reasons. Fleet vehicle emissions are based on diesel consumed and emissions from personal vehicles are based on distance travelled, recorded by Felgains Ltd. UK Government GHG Conversion Factors for Company Reporting have been applied.

**Table 6 - Business Travel GHG Emissions Results**

Travel Type	2022		
	Litres	Miles	tCO <sub>2</sub> e
Fleet Vehicles	22,707	-	58.08
Personal Vehicles	-	810	0.30
<b>Total Emissions</b>	<b>22,707</b>	<b>810</b>	<b>58.38</b>

#### 4.7 Carbon Emissions - Hire Vehicles

The table shows emissions associated with hire vehicles. One vehicle was hired during the reporting period: this was an electric car, therefore, emissions associated with this are 0 tCO<sub>2</sub>e.

**Table 7 - Hire Vehicle GHG Emissions Results**

Travel Type	2022	
	Miles	tCO <sub>2</sub> e
Hire Vehicles	250	0

## 4.8 Carbon Emissions - Public Transport

The table below summarises emissions associated with Felgains Ltd's public transport during the period. Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting for rail journeys and for short haul flight distances.

**Table 8 - Public Transport GHG Emissions Results**

Travel Type	2022	
	Miles	tCO <sub>2</sub> e
Rail	2,629	0.15
Flight - Short Haul	6,027	1.46
<b>Total Emissions</b>	<b>8,656</b>	<b>1.61</b>

## 4.9 Carbon Emissions - Hotels

The table below summarises emissions associated with Felgains Ltd's hotel stays during the period. Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting for hotel stays per night. Hotels were recorded as UK, non-London stays.

**Table 9 - Hotel GHG Emissions Results**

Location	2022	
	Nights	tCO <sub>2</sub> e
UK (Non-London)	17	0.18

## 4.10 Carbon Emissions - Upstream Transportation & Distribution

The table below shows emissions associated with the transport of goods by supplier to the Client's premises. Transportation and distribution data, including origin, destination, mode of transport, frequency and weight of deliveries has been provided by the Client.

It was assumed that Liftup made their deliveries via ship from Denmark to the UK, rather than by air freight. It appeared as though some packing notes from Invacare did not contain weight data, therefore, emissions from Invacare could be underestimated.

For each supplier and freight type, tonne kilometres were calculated in order to determine emissions. Emissions were calculated using UK Government GHG Conversion Factors for Company Reporting.

**Table 10 - Supplier Transportation and Distribution GHG Emissions Results**

Supplier	2022	
	Tonne.km	tCO <sub>2</sub> e
Liftup	19,045	2.37
Vendlets	2,034	0.33
Invacare	1,370	0.78
Karma	492	0.28
Repose	1,210	0.69
Kingkraft	258	0.15
<b>Total Emissions</b>	<b>24,408</b>	<b>4.60</b>

#### 4.11 Carbon Emissions - Downstream Transportation and Distribution

The table below shows emissions associated with the Client's courier shipping of products. The frequency, distance, mode of transport and average weight of deliveries has been provided by the Client for Anglia Freight, whilst the tonne.km and mode of transport has been provided by the Client for FedEx.

**Table 11 - Courier Transportation and Distribution GHG Emissions Results**

Freight Type	2022	
	Tonne.km	tCO <sub>2</sub> e
FedEx	1,179	0.67
Anglia Freight	23,587	3.82
<b>Total Emissions</b>	<b>24,766</b>	<b>4.50</b>

#### 4.12 Carbon Emissions - Waste and Recycling

The table below summarises emissions associated with Felgains Ltd's waste during the period. Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting for waste.

**Table 12 - Waste GHG Emissions Results**

Waste Type	2022	
	kg	tCO <sub>2</sub> e
General Waste (Incineration)	9,568	0.20
General Waste (Landfill)	736	0.34
Recycling	4,416	0.09
Metal (Landfill)	91	<0.01
Metal (Recycling)	4,349	0.01
<b>Total Emissions</b>	<b>19,160</b>	<b>0.65</b>

#### 4.13 Carbon Intensity Ratios

Carbon intensity ratios have been established to assess the normalised carbon performance of operations, based on floor area and employee headcount.

##### Floor Area

As Felgains Ltd's business operations are largely conducted from office buildings, kgCO<sub>2</sub>e per square foot (sq. ft) of floor area is considered to be best indicator of carbon efficiency. This calculation includes all scope 1 and 2 emissions associated with operations conducted within the Client's sites.

The Client's only site, Felgains HQ, has a floor area of 17,890 sq. ft (1,662 m<sup>2</sup>).

##### No. Employees

Performance is also assessed using a carbon intensity ratio of tCO<sub>2</sub>e per employee. Over the 2022 period, Felgains Ltd had an average of 20 employees. This calculation includes all scope 1, 2 and 3 emissions.

##### Revenue

Performance has been assessed using an intensity ratio of tCO<sub>2</sub>e per £1,000,000 revenue. The Client provided a revenue figure of £5,300,000 for 2022. This calculation includes all emissions resulting from all scopes.

Carbon intensity ratios are detailed in Table 13 below.

**Table 13 - Carbon Intensity Ratios**

<b>Carbon Intensity Ratio Averages</b>	<b>2022</b>
Floor Area ( <b>kgCO<sub>2</sub>e per sq. ft</b> )	3.93
Employees ( <b>tCO<sub>2</sub>e per employee</b> )	5.83
Revenue ( <b>tCO<sub>2</sub>e per £m</b> )	22.01

## 5.0 Carbon Reduction Plan

### 5.1 Summary

Following the PAS2060 standard – there are 3 steps to demonstrate carbon neutrality:

- 1. Measurement** – quantify emissions on an annual basis (or other defined period);
- 2. Reduce** – set S.M.A.R.T targets (specific, measurable, attainable, relevant and time-bound) for carbon emissions reductions; and
- 3. Compensate** – Offset residual emissions which cannot be reduced via verified projects.

In December 2015, The United Nations Framework Convention of Climate Change (UNFCCC) reached a landmark agreement to tackle mankind's contribution toward climate change - known as the Paris Agreement. The aim was to limit a global temperature rise of below 2°C above pre-industrial levels and before the end of this century (2100). The Agreement also includes a commitment to make efforts to limit a global temperature rise to 1.5°C – this is the point at irreversible damage to the environment is predicted to occur. In order to achieve this, we must reduce our absolute carbon emissions by 45% before 2030, and by 80% prior to 2050. The Paris Agreement entered into force on 4th November 2016, with the United Kingdom one of the first nations to ratify the Agreement.

In July 2019, the United Kingdom became the first major economy to pass legislation which commits to ending its contribution to global warming. The target is to achieve 'net-zero' greenhouse gas emissions by 2050. Net-zero means that the country will reduce its emissions so far as is practical. Any residual emissions will be balanced through the use of offset schemes, such as carbon capture and storage, or planting trees. It is expected that the UK government will implement secondary legislation and/or incentive schemes in the coming years in order to encourage businesses to meet these targets.

Businesses and organisations are becoming increasingly aware of their impact on the environment and as such are committing to ambitious science-based carbon reduction targets, with many aiming to become carbon neutral by 2030. In this context, the following section provides a benchmark of the Client's current carbon emissions and sets out an indicative pathway that illustrates how decarbonisation may be achieved by 2030.

### 5.2 Carbon Reductions

This report is the Client's first carbon footprint assessment and will therefore act as the baseline. The following sections update and set out the potential initiatives with the aim of reducing the Client's carbon emissions in line with the Intergovernmental Panel on Climate Change's (IPCC) target of limiting global warming to 1.5°C. The IPCC have estimated that for this to happen, companies should reduce their carbon emissions by 45% by 2030.

This reduction plan is made up of eight key recommendations to reduce the Client's carbon emissions, however it is assumed that small reductions in other areas accompany the larger measures. The timescales of these measures are suggestions and can be tailored to suit the Client's preferences.

#### 5.2.1 Fossil-Fuel Heating Systems

Gas fuelled space heating systems are typically more carbon intensive than electric space heating, therefore it is advised that the gas heating systems at Felgains HQ are replaced with electric heating systems. Alternatively, Felgains Ltd could consider moving to a new site with electric heating systems. Coupled with the switch to renewable electricity tariffs discussed below, the energy consumed to power these new systems will be generated from renewable sources.

If this is not possible, the Client should consider switching their natural gas tariff to a Renewable Gas Guarantees of Origin (RGGO)-certified green gas contract. Green gas is obtained from renewable sources such as agricultural materials, along with food and water waste. Producing and using it results in lower greenhouse gas emissions than the fossil fuels it replaces. Based on supplier fuel mix information, it appears as though RGGO contracts are reliant on biomethane, which has a carbon conversion factor of 0.00000521 tCO<sub>2e</sub> per kg, although the fuel source may differ between tariffs. After switching tariffs, future emissions associated with natural gas consumption are therefore expected to be nominal. It has been assumed that



the tariff can be switched from 2024, however this is dependent on the nature of existing natural gas contracts. This measure could reduce the Client's carbon footprint by c. 2.2 tonnes per year.

### 5.2.2 Renewable Energy Tariffs

Similarly to the natural gas tariff, the Client should consider switching their electricity tariff at Felgains HQ over to a Renewable Energy Guarantees of Origin (REGO)-certified renewable energy tariff. This will ensure that electricity comes from clean sources such as solar or wind power and will eliminate carbon emissions associated with purchased electricity from the national grid. The carbon reduction plan assumes that electricity tariffs can be switched from 2024, however this is dependent on the nature of existing electricity contracts.

The Client may also consider installing on-site renewable technologies at Felgains HQ. Any electricity generated from these sources would have no direct emissions. After an initial investment, this could also be a cost-saving initiative for energy bills.

It is estimated that this measure could reduce the Client's carbon footprint by c. 10 tonnes per year once achieved.

### 5.2.3 Energy Efficiency Programmes

Felgains Ltd should consider the replacement of older building services and controls (heating, ventilation, lighting, etc.) to more efficient models with automatic controls.

Submetering of energy loads (lighting, HVAC, servers) can allow for more detailed analysis of energy use which subsequently leads to identification and elimination of unnecessary energy use.

Where not already installed, LED lighting can replace fluorescent and incandescent lighting to achieve significant energy savings. Where financially feasible, further implementation of automated controls should also be combined with LED technology to achieve full optimisation. The installation of technology such as PIR motion and daylight sensors for lighting, CO<sub>2</sub> sensors for ventilation and temperature sensors can help to ensure environmental parameters in the office are kept to the most efficient levels.

Making use of energy efficient modes on devices such as computers (hibernation, reducing brightness etc.) and photocopiers (standby modes) can help to reduce unnecessary consumption outside operating hours.

A 5% increase in energy efficiency per year is considered to an appropriate target to set, which is in line with the IPCC target of achieving a 45% reduction by 2030. A 5% increase in energy efficiency would reduce electricity consumption by approximately 2,600 kWh annually.

### 5.2.4 Electrification of Vehicle Fleet

It is understood that the Client operated nine diesel vans over the 2022 period. By switching these diesel vans to electric, Felgains Ltd can eliminate all carbon emissions related to their fleet. Electric alternatives should be considered when purchasing or leasing any new vehicles. After switching to electric alternatives, the Client should ensure all journeys are completed using their fleet, rather than employee's personal vehicles.

If electric vehicle (EV) charging points are installed at Felgains HQ, the electricity used to charge these vehicles will originate from procured green energy with a REGO-backed renewable energy tariff. The reduction plan assumes a period of 5 years to replace all company vehicles with electric alternatives: it is assumed the vehicles will be replaced incrementally. Therefore, the move to electric could be achieved by 2028 and is estimated to reduce emissions by 58 tCO<sub>2</sub>e in total.

### 5.2.5 Business Travel

The Client should consider setting a target to reduce air and rail travel by 5% year on year. By embracing web conferencing technology, the need to travel for meetings could be significantly reduced. Where there is a requirement to travel internationally, the Client may consider airlines that offer carbon offsetting within the price of the airfare, or as an optional extra. These carbon offsets may be utilised to demonstrate carbon removals as part of future assessments.

When selecting overnight accommodation, the Client could consider hotels that offer carbon offsetting. Also, look for eco-friendly hotels which promote eco-friendly initiatives and can demonstrate that they are achieving tangible results.

### 5.2.6 Employee Commuting

The majority of miles spent travelling to work by employees was via petrol or diesel vehicles. The following initiatives would decrease the carbon footprint associated with the employee commute:

- Implementing / expanding a cycle-to-work scheme;
- Encouraging walking or public transport where possible;
- Sustaining working from home practices and utilising video calling technologies where feasible;
- Engaging with apps such as LiftShare and providing incentives to employees who car share on their commute; and
- Installing EV charging points at the workplace to encourage employees to purchase electric vehicles and make it more practical to charge up whilst at work.

It is recommended that the Client continues to conduct an annual employee commuting survey, in line with annual carbon emissions assessment, to assess and verify savings from the initiatives put in place over the previous 12 months. A greater return on the employee commuting survey would also improve accuracy and potentially decrease emissions.

A 7% annual reduction in emissions associated with employee commuting is considered achievable, which would have resulted in a saving of approximately 0.8 tCO<sub>2</sub>e across the 2022 reporting period.

### 5.2.7 Waste

The Client should aim to reduce all waste types. A 5% annual reduction in waste generation is considered achievable.

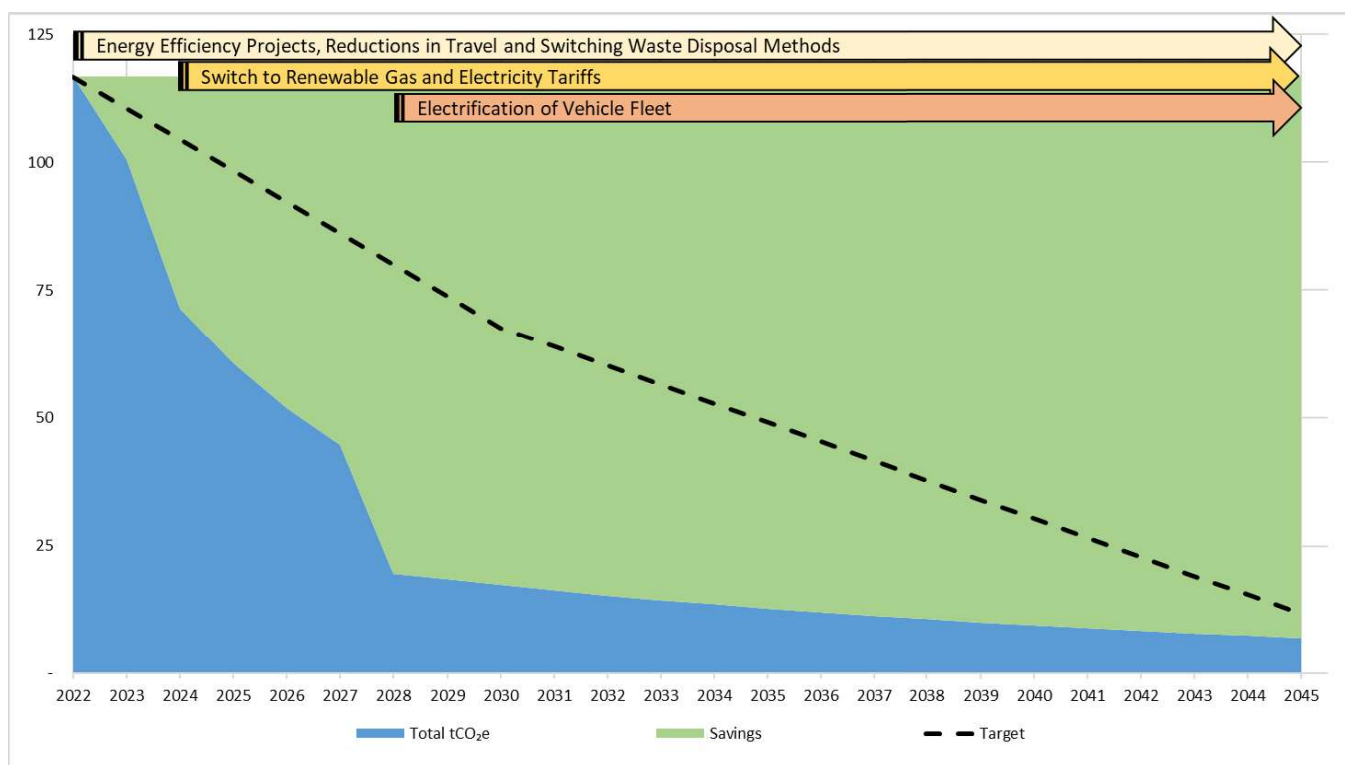
Felgains Ltd should also commit to zero waste to landfill in the office by recycling or incinerating waste as an alternative. If the Client was to achieve this, a saving of circa 0.03 tCO<sub>2</sub>e per year could be accomplished.

### 5.2.8 Upstream and Downstream Transportation & Distribution

Upstream and downstream transportation and distribution emissions have been calculated based on estimated data provided by the Client. It is advisable to improve data collection processes over time to ensure emissions from these categories are accurate.

Where possible, Felgains Ltd should liaise with their suppliers and couriers to ensure that transport is conducted in low-carbon alternatives, such as electric vehicles. Reducing the weights of deliveries will also reduce the associated emissions.

### 5.3 Indicative Carbon Reduction Plan



It is recommended that the Client continues to conduct annual carbon emissions assessments, to assess and verify savings from the initiatives put in place over the previous 12 months; and to constantly re-assess potential savings from future opportunities.

This net-zero plan could help the Client to reduce residual CO<sub>2</sub>e emissions by up to 85% by 2030, which is significantly greater than the current IPCC target of reducing emissions by 45%.

This plan illustrates how the residual CO<sub>2</sub>e emitted by Felgains Ltd decreases each year, therefore, if the Client chooses to invest in offsetting projects, the costs of these will decrease each year. If the Client were to achieve the reductions outlined above, a total of approximately 17 tCO<sub>2</sub>e would be emitted by Felgains Ltd in 2030 and 7 tCO<sub>2</sub>e in 2045.

### 5.4 Carbon Offsetting and Sequestration

'Net-Zero' and 'Beyond Net-Zero' are the Delta-Simons seals of approval awarded to products, services, events, departments or whole organisations that:

- Measure their emissions;
- Commit to achieving carbon reductions;
- Offset at least 100% of residual emissions (Net-Zero); and
- Remove an extra 50% of emissions (Beyond Net-Zero).

It works by firstly offsetting emissions by 100% via verified Gold Standard carbon offsets (as defined by the United Nations (UN) and the Kyoto Protocol), and then removing an additional 50% via forestry and habitat conservation projects. This ensures that not only does your organisation mitigate its negative impact, but it also has a long-lasting positive impact on the environment.



Most verified carbon offset projects go beyond the removal of carbon, as they can be often linked to the UN’s Sustainable Development Goals (SDGs). These SDGs highlight how a certain project addresses the global challenges we face, including but not limited to poverty, inequality, climate change, environmental degradation, peace and justice.

Delta-Simons can source a variety of carbon offsets and sequestration projects to suit your ambitions and corporate values (solar, wind, carbon capture, rainforest conservation, tree-planting etc.). Carbon offsets are typically priced at £8-£15 per tonne, whilst forestry projects are typically priced at £15-£25 per tonne.

Table 14, below, provides an indication on the potential cost of offsetting and sequestering Felgains Ltd’s operational carbon emissions for 2022.

**Table 14 - Carbon Offsetting and Sequestration**

2022 Financial Year (117 tCO <sub>2</sub> e - rounded up to nearest whole number)	Lower Budget	Higher Budget
100% Offset (Typically £8 - £15 per tonne)	£936.00	£1,755.00
50% Additional Offset (Typically £15 - £25 per tonne)	£877.50	£1,462.50
<b>Beyond Net Zero Cost Range</b>	<b>£1,813.50</b>	<b>£3,217.50</b>

# Appendix A - Limitations

## Limitations

The recommendations contained in this Report represent Delta-Simons professional opinions, based upon the information listed in the Report, exercising the duty of care required of an experienced Sustainability Consultant.

Delta-Simons obtained, reviewed and evaluated information in preparing this Report from the Client and others. Delta-Simons conclusions, opinions and recommendations has been determined using this information. Delta-Simons does not warrant the accuracy of the information provided to it and will not be responsible for any opinions which Delta-Simons has expressed, or conclusions which it has reached in reliance upon information which is subsequently proven to be inaccurate.

This Report was prepared by Delta-Simons for the sole and exclusive use of the Client and for the specific purpose for which Delta-Simons was instructed. Nothing contained in this Report shall be construed to give any rights or benefits to anyone other than the Client and Delta-Simons, and all duties and responsibilities undertaken are for the sole and exclusive benefit of the Client and not for the benefit of any other party. In particular, Delta-Simons does not intend, without its written consent, for this Report to be disseminated to anyone other than the Client or to be used or relied upon by anyone other than the Client. Use of the Report by any other person is unauthorised and such use is at the sole risk of the user. Anyone using or relying upon this Report, other than the Client, agrees by virtue of its use to indemnify and hold harmless Delta-Simons from and against all claims, losses and damages (of whatsoever nature and howsoever or whensoever arising), arising out of or resulting from the performance of the work by the Consultant.

## Appendix B - PPN 06/21 Carbon Reduction Plan

## Commitment To Achieving Net Zero

Felgains Ltd has appointed Delta-Simons Ltd to support in the development of a baseline carbon emissions footprint, and the production of a meaningful strategy for reduction of operational emissions to achieve Net-Zero as early as possible.

Felgains Ltd is committed to achieving Net Zero emissions for Scope 1, 2 and relevant Scope 3 sources no later than 2045.

## 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.

<b>Baseline Year: 1<sup>st</sup> January 2022 to 31<sup>st</sup> December 2022</b>	
<b>Additional Details relating to the Baseline Emissions calculations.</b>	
Historic baseline which originates from the requirements under this measure. There has been no previous carbon reporting related to PPN 06/21 or otherwise.	
This assessment is the first carbon reporting undertaken by Felgains Ltd, therefore, this assessment will act as the baseline year.	
<b>Baseline year emissions:</b>	
<b>Emissions</b>	<b>Total (tCO<sub>2</sub>e)</b>
<b>Scope 1</b>	<b>60.25 tCO<sub>2</sub>e</b>
<b>Scope 2</b>	<b>10.03 tCO<sub>2</sub>e</b>
<b>Scope 3 (Included Sources)</b>	<b>46.40 tCO<sub>2</sub>e</b>
<b>Total Emissions</b>	<b>116.68 tCO<sub>2</sub>e</b>

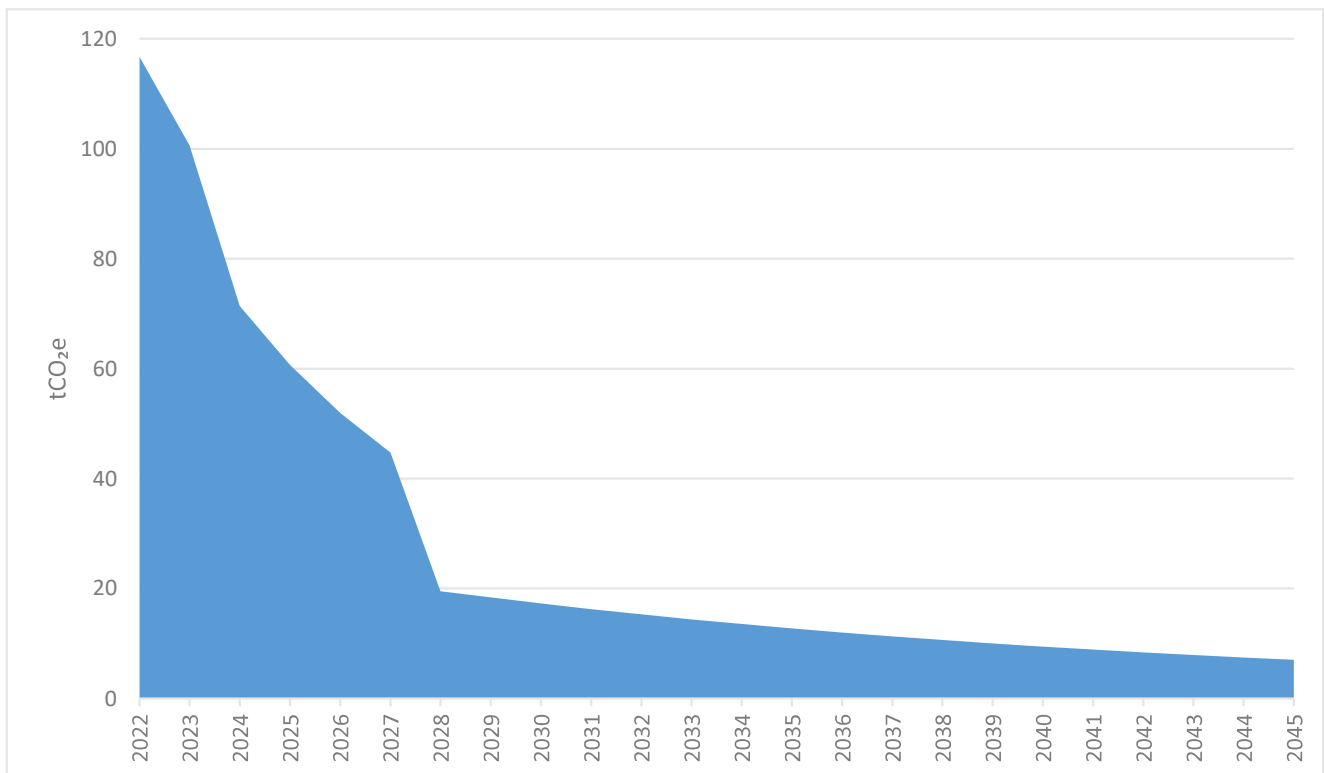


## Current Emissions Reporting

Reporting Year: 1 <sup>st</sup> January 2022 to 31 <sup>st</sup> December 2022	
Emissions	Total (tCO <sub>2</sub> e)
Scope 1	60.25 tCO <sub>2</sub> e
Scope 2	10.03 tCO <sub>2</sub> e
Scope 3 (Included Sources)	46.40 tCO <sub>2</sub> e
<b>Total Emissions</b>	<b>116.68 tCO<sub>2</sub>e</b>

## Emissions Reduction Targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets. We project that carbon emissions will decrease over the next 23no. years to c. 7 tCO<sub>2</sub>e by 2045. This is a reduction of 94% from baseline. Progress against these targets can be seen in the graph below:



## Carbon Reduction Projects

Felgains Ltd operates in a way that is considerate of its environmental impact. Felgains Ltd is considering the following options to meet Net Zero goals: switching natural gas to electric alternatives or renewable gas contracts, switching to renewable electricity tariffs, implementing energy efficiency measures, electrifying vehicle fleet, reducing business travel, encouraging more sustainable employee commuting alternatives and encouraging working from home, reducing landfilled waste and engaging with suppliers / couriers to lower emissions from transportation and distribution.

**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 and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.

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.

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

**Signed on behalf of the Supplier:**

Name: .....

Position: .....

Signature: .....

Date: .....

# Our carbon reduction commitments

Caring is one of our core values and this extends beyond the people we interact with to the planet we all share. We're committed to achieving net zero by 2045, by meeting or exceeding [Greener NHS targets](#). Our Carbon Reduction Plan conforms to the requirements of Procurement Policy Note (PPN) 06/21: *Taking account of CRPs in the procurement of major government contracts*, published in June 2021 and the supporting "Technical standard for the Completion of Carbon Reduction Plans".

The 2015 Paris Climate Agreement aims to limit global warming temperatures to well below 2°C, preferably 1.5°C. Our Plan also aligns with IPCC targets, which demonstrates our efforts to support targets set for [Greener NHS's Carbon Footprint Plus](#).

## By 2030

- **Switch to renewable gas**
- **Switch all company vehicles to electric**

These actions will achieve a 100% reduction in our Scope 1 direct emissions. When taken together with the actions outlined below, these measures will achieve a 52% reduction in our total carbon emissions, exceeding the IPCC target of 45%.

## By 2032

- **Send zero waste to landfill**
- **Switch all energy to renewable sources**

When taken together with the actions outlined below, these measures will achieve a 85% reduction in our carbon emissions, exceeding the NHS ambition of an 80% reduction by 2028-2032.

We will embed carbon reduction into our decision making processes, taking actions including:

- **Improve energy efficiency by 5% per year** e.g. through installation of LED lighting
- **Reduce waste generation by 5% per year** e.g. through digitalisation of all paper processes
- **Reduce business travel by air and rail by 5% per year** e.g. through using video conferencing as an alternative
- **Reduce emissions from employee commuting by 7% per year** e.g. through cycle-to-work schemes and installation of EV charging points at our offices

We will update our Plan annually and we are committed to go further and faster, where we can.



Samuel Webber,  
Managing Director

30th October 2023