

# PPN06/21 - Carbon **Footprint Assessment and Carbon Reduction Plan Felgains Ltd**

Presented to: Felgains Ltd

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Lucion Contract Reference 94936.648849

# **Report Details**

Client	Felgains Ltd
Report Title	PPN06/21 - Carbon Footprint Assessment and Carbon Reduction Plan
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# **Quality Assurance**

Issue No.	Status	Issue Date	Comments	Author	Technical Review	Authorised
01	Final	21/04/2025		Oluwafemi Ojo Senior Consultant	Robert Dadzie Associate	Robert Dadzie Associate

### **About Us**

Lucion Delta-Simons is part of Lucion, a technology-led environmental services company dedicated to protecting people and the planet. With expert advice, guidance, and a comprehensive array of services, we support you at every stage of your asset lifecycle, helping you mitigate regulatory impact, improve business practices, and ensure safety and environmental protection

As part of Lucion's group of companies, we can support you with a broader range of holistic services. Through our pool of multidisciplinary experts, we help you navigate complex regulatory frameworks, saving you time and money.

Being part of your sustainable supply chain is a key goal for our team. As a member of the UN Global Compact and a commitment to sustainability, we are the partner of choice for businesses looking to make informed decisions and mitigate risks across your portfolio.

Lucion is carbon neutral. We annually measure and report our Scope 1, Scope 2 and specified Scope 3 carbon emissions, and offset 100% of residual emissions through verified carbon credits, supporting carbon reduction and prevention projects overseas. We are taking steps to reduce our carbon emissions and have committed to setting and achieving near-term and Net Zero Science-Based carbon reduction targets in line with the goals of the Paris Agreement to limit global warming to 1.5°C above pre-industrial levels. Lucion is a signatory of Pledge to Net Zero and Members of the United Nations Global Compact.

If you would like support in understanding your carbon emissions, or those of your supply chain, please get in touch with your Lucion contact above who will be happy to help.



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### 1.0 Introduction

### 1.1 Appointment

Lucion Delta-Simons Ltd ('Lucion') has been instructed by Felgains Ltd ('The Client') to undertake an assessment of greenhouse gas emissions for their business operations during the 2023 and 2024 financial year (1st January 2023 -30th December 2023 and 1st January 2024 -30th December 2024) in line with the Procurement Policy Note 06/21.

The report has been undertaken in line with the Procurement Policy Note 06/21 (PPN) Framework and the Companies Act 2006 (Strategic and Directors' Reports) Regulations 2013 as well as PAS2050:2001 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services' and the 'GHG Protocol'. Carbon conversion factors are taken from the '2023 and 2024 UK Government GHG Conversion Factors for Company Reporting'.

### 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 Context & Purpose

Lucion has been requested by the Client to undertake a carbon footprint assessment of their annual business operations in line with the PPN06/21 framework. It is understood that the Client, through the carbon assessment, wishes to further produce a carbon assessment for the year 2023 and 2024, also to update the carbon reduction plan produced in 2022 to aid a smooth drive towards NetZero.

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. Felgains presently serve the NHS, care providers and private individuals across the UK through our Clinical and Mobility divisions.

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.

The Client is required to produce a Carbon Reduction Plan in accordance with the requirements of PPN06/21 for its UK based operations only. This includes confirmation of their commitment to Net Zero for their operations, details of their UK emissions and an indication of the environmental management measures they will be able to apply when performing the contract.

The carbon footprint shall assess the impact from key consumables, such as energy, transport, refrigerants, upstream and downstream distribution, commuting and the waste and recycling generated in the office and on-site.

The Client intends to produce both the 2023 and 2024 to further support the company's baseline emissions produced for the year 2022.

The following key drivers underpin the Client's requirement to conduct this Carbon footprint Assessment:

- IPCC target As outlined by the 2015 Paris Climate Agreement and which aims to limit global warming temperatures to well below 2°C or preferably 1.5°C;
- As part of the NHS supply chain the Client must demonstrate efforts to support targets set by Greener NHS for their Carbon Footprint. These aim to achieve an 80% reduction of supply chain emissions by 2028 to 2032 and Net zero by 2045; and
- Public Procurement Note (PPN) 06/21 requires contracting organisations to publish Carbon Reduction Plans to be eligible to be awarded public sector contracts above £5million per annum.

### 1.4 Scope of Works

The Scope of works undertaken for this assessment were:



### Task 1 - Corporate Carbon Footprint (GHG) Assessment in line with the PPN 06/21

- The assessment shall be completed in accordance with the Greenhouse Gas (GHG) Protocol Corporate
  Accounting and Reporting Standard, to include Scope 1, Scope 2 and a defined and agreed sub-set of Scope 3
  emissions in line with PPN06/21; and
- The project shall be approached as a single assessment for operations in line with the business operations as outlined in Item 14 of the PPN 06/211.

### Task 2 - Carbon Reduction Plan

- The production of a summary Net-Zero Strategy report meeting the requirements of PPN06/21; and
- The works shall include the updating the developed carbon reduction target to align with the requirements of a Science Based Target, so as to support attainment of a verified SBTi commitment target in future if required, and the development of a high-level outline carbon reduction plan\*.

### Notes:

\* To obtain a formal, verified SBT via SBTi it will be required to extend the scope of the assessment to include at least 67% of Scope 3 emissions in any near-term target, and at least 90% of Scope 3 emissions in any long-term target.

While this report includes the assessment of Client's emissions in accordance with the legal requirements of PPN 06/21, this does not in itself represent compliance with the requirements of the Regulations. The Client shall complete their own PPN 06/21 compliance reporting based on the emissions calculations included within this report and upload their statement to the relevant company webpages by any deadline imposed upon them. The standard limitations associated with this assessment are presented in Appendix A and the PPN 06/21 Compliance Statement is presented in Appendix B.

### 1.5 Methodology and Assurance

This assessment has been self-certified to be carried out in general accordance with 'ISO14064-1:2006 Greenhouse Gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals' and 'PAS2050:2001 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services' and the 'GHG Protocol'.

Wherever possible, 'DBEIS/DEFRA - UK Government Conversion Factors for Company Reporting' has been used in line with environmental reporting guidance for the United Kingdom. Where 'DBEIS/DEFRA - UK Government Conversion Factors for Company Reporting' could not be used due to lack of information, an alternative approach has been applied using spend based conversion factors from 'DEFRA Table 13 - Indirect emissions from the supply chain' in line with environmental reporting guidance.

This report has been produced in general accordance with "ISO 14064: Greenhouse Gases – Carbon Footprint" and "PAS 2050 – Specification for the assessment of the life cycle greenhouse gas emissions of goods and services".

The carbon conversion factors have been taken from the 2023 and 2024 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting, produced by the Department for Business, Energy & Industrial Strategy.

This assessment measures, where possible, the carbon dioxide equivalent (CO<sub>2</sub>e) emissions associated with business activities. Carbon dioxide equivalent includes the six main GHG covered by the Kyoto Protocol: carbon dioxide (CO<sub>2</sub>), methane (CH4), hydrofluorocarbons (HFCs), nitrous oxide (N2O), perfluorocarbons (PFCs) and sulphur hexafluoride (SF6). 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>.

### 1.6 Limitations

Majority of data has been provided for the full reporting periods. Where exact data has not been made available, figures have been extrapolated using best methodological approach.



# 2.0 Reporting Boundaries

### 2.1 Corporate Structure

This Carbon Footprint Assessment and PPN 06/21 Carbon Reduction Plan has been prepared for Felgains Ltd only

### 2.2 Reporting Period

The reporting period for this PPN06/21 GHG Assessment is in line with the Client's 2023 and 2024 financial year:

- 1st January 2023 30th December 2023, and
- 1st January 2024 30th December 2024

### 2.3 Organisational Boundaries

GHG emissions have been assessed using the 'operational control' approach, meaning that the Client reports on emissions resulting from its operations, within its direct or indirect operational control.

### 2.4 Base Year Calculation

The Client's baseline year of their carbon footprint was produced in the year 2022.

### 2.5 Data Completeness

Electricity data (annual kWh) has been reported for both years in kWh. Natural gas consumption data for both 2023 and 2024 has been provided for the period;

Natural gas consumption data has been reported for both years in kWh. Natural gas consumption data for both 2023 and 2024 has been provided for the period;

Transport data in form of company cars, business travels, employee commuting, and both upstream and downstream transportation and distribution were both provided. Waste data has been provided.

The Client does not have any emissions from onsite refrigeration; therefore, this category has been excluded.

Details of exclusions and assumptions are set out in Section 3.3 and Section 3.4 respectively.

### 2.6 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 have been reported for the years 2023 and 2024.

### 2.7 Data Verification

Only spreadsheet data has been provided. In such cases, data verification cannot be conducted on the data with no evidence. Lucion 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

GHG Emissions are categorised into Scopes:

**Scope 1** – Direct emissions resulting from the primary combustion of fuels in organisation-controlled premises, vehicles and plant. Furthermore, fugitive emissions (gases which are not combusted but are released into the atmosphere) are also included. It is mandatory to report Scope 1 emissions.

**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.

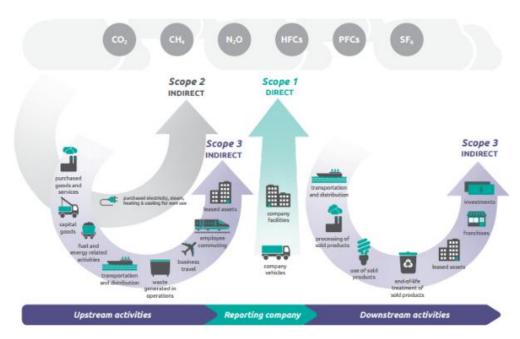


Figure 1: GHG Protocol – Carbon Scopes

### 3.2 Inclusions

GHG Emissions have been calculated for Scopes 1, 2 & 3, in line with UK Environmental Reporting Guidance within the scope of PPN 06/21 and include the following sources:

**Scope 1** – Direct Combustible Fuels

- Fleet Vehicles: The Client has in operation diesel vans as company vehicles.
- Natural Gas: Building fuel in the form of natural gas is utilised the Client's Ipswich site.

Scope 2 – Indirect Combustible Fuels

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

Scope 3 - Indirect Emissions

### **Category 3.4 Upstream Transportation and Distribution**

• **Upstream Transportation and Distribution:** The Client imports health equipment's from the across the UK, Europe and Australia for distribution to the UK market, and the data has been provided.

### **Category 3.5 Waste Generated in Operations**



• Waste & Recycling: Emissions from waste has been calculated using Client's supplied data and appropriate emission factors.

### **Category 3.6 Business Travel**

- **3.6.1 Personal Vehicles:** The Client reimburses employees for business mileage conducted in personal vehicles. Mileage data has been provided.
- 3.6.2 Trains: The Client conducts regular rail travel for business purposes. Data on origin and destination data has been made available.
- **3.6.3 Flights:** The Client conducts regular air travel for business purposes. Data on origin and destination data has been provided.
- **3.6.4 Hotels:** Employees are occasionally required to stay in hotels when travelling for business purposes. Number of nights and locations data has been provided.

### **Category 3.7 Employee Commuting**

- 3.7.1 Employee Commuting: Emissions for all internal staff have been included under this category; and
- 3.7.2 Homeworking: Emissions for homeworking remote working employees have been accounted for.

### **Category 3.9 Downstream Transportation and Distribution**

• **Downstream Transportation and Distribution:** The Client moves goods and services from Ipswich office for distribution to the UK market, and the data has been provided.

### 3.3 Exlusions

Within the scope of PPN 06/21, the following exclusions were considered:

### Scope 3

### Category 1.2 On-site refrigeration

- Onsite refrigeration data does not explain any refrigerant refill and this has been excluded
- Other Categories: All other Scope 3 categories are outside the scope of PPN 06/21 and have not been reported.



### 4.0 Results

### 4.1 Summary

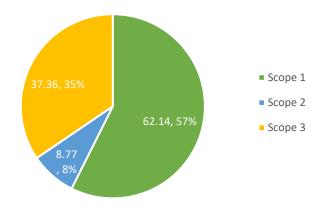
The GHG emissions associated with the Client's operations during the 2023 and 2024 Reporting Year (RY) have been calculated. Table 1 summarises total operational emissions by Scope.

Table 1 shows that total emissions for the period 1<sup>st</sup> January 2023 – 30<sup>th</sup> December 2024 benchmarked against the baseline emission. The emissions from the 2024 reporting year amounts to 108.27 tCO<sub>2</sub>e. As reported by Figure 2, Scope 1 emissions (building fuel in the form on natural gas and company fleet) accounts for 57% of total carbon emissions. Scope 2 emissions associated with purchased electricity accounts for 8% of total emissions. The remaining 35% is attributable to indirect Scope 3 emissions from category 4: upstream transportation and distribution, category 5: waste, category 6: business travel (hotel stays and personal vehicle use), category 7: employee commuting (commuting and homeworking), and category 9: downstream transportation and distribution in line with PPN06/21 framework.

Scope	2022 tCO₂e - Baseline	2023 tCO₂e	2024 tCO₂e	% Var. from Baseline
Scope 1	60.25	79.42	62.14	3.14%
Scope 2	10.03	11.10	8.77	-12.57%
Scope 3	23.42	37.55	37.36	59.53%
Total	93.70	128.07	108.27	15.55%

**Table 1: Summary of GHG Emissions Results** 





### 4.2 GHG Emissions by Source and Scope

Table 2 below illustrates the breakdown of the total emissions by Scope. These are then sub-divided to show the contribution of each source. The largest proportion of emissions are produced by Scope 1 sources within the scope of PPN06/21 framework. GHG emissions associated with each source during the 2024 reporting period are presented in Table 2 below. UK Gov. conversion factors for the 2024 reporting year were used.

Table 2 illustrates emissions from each of the distribution. For the 2024 reporting year, company fleet account for the largest share of emissions accounting for 54.26% of the total emissions reported, upstream transportation and distribution accounts for 18.77%, electricity (8.10%), employee commuting (6.01%), downstream transportation and distribution (4.92%) business travels (4.85%) of the total emissions.

For the reporting year, there is a slight increase of 15.55% emissions when compared to emissions from the baseline year. This would due largely to the impact of COVID 19 for the baseline year which does not represent largely business as usual for the Client, as such, it would be recommended that the Client consider setting another baseline by making a choice of 2023 reporting year the baseline.

Overall, there is an increase in emissions from hotels, flights and upstream transportation & distribution emissions when compared with the baseline emissions. On the other hand, there is a significant decrease in the emission attributed to personal vehicle usage for business travel and waste generated in operations.



Table 2: Summary of Total Emissions by Source and Scope

Scope & Category	Source	Unit	2022 - Baseline	2023		2024		% Var from
category			tCO₂e	tCO₂e	Unit	tCO₂e	%	baseline
1.10	Fleet Vehicle	Litres - Diesel	58.08	77.46	23,718.52	59.83	55.26%	3.01%
1.20	Natural Gas	kWh	2.17	1.96	12,663.00	2.32	2.14%	6.73%
2.10	Grid Electricity	kWh	10.03	11.10	42,353.00	8.77	8.10%	-12.57%
3.40	Upstream T and D	tonnes.km	4.50	20.04	28,347.86	20.32	18.77%	351.61%
3.50	Waste	Tonnes	0.65	0.56	9.52	0.25	0.23%	-61.04%
	Flights	km	1.46	2.36	13,932.00	4.26	3.93%	191.44%
3.60	Rail	km	0.15	0.19	1,467.72	0.05	0.05%	-65.30%
3.00	Hotel	No. rooms	0.18	0.25	35.00	0.52	0.48%	189.17%
	Personal Vehicles	km	0.30	0.12	110.00	0.02	0.02%	-93.77%
2.70	Franksia Communica	- km	11.58	8.14	41,811.36	6.00	5.54%	-48.22%
3.70	Employee Commuting	WFH - Hours		0.65	1,837.50	0.61	0.57%	100.00%
3.90	Downstream T and D	Tonnes.km	4.60	5.24	3,542.00	5.33	4.92%	15.87%
	Total	-	93.70	128.07		108.27	100.00%	15.55%



# 5.0 Scope 1 Results

Figure 3 below summarises emissions associated with the direct combustion of natural gas and company fleets consumption associated operations at the Client's sites. Company fleet account for 96.27% of Scope 1 emissions while the remaining 3.73% is associated with natural gas consumption emissions. Natural gas is only utilised for office heating during the winter months.

2.32 , 3.73%

■ Fleet Vehicle
■ Natural Gas

Figure 3: Scope 1 Emissions Distribution

### 5.1 Natural Gas

Natural gas accounts for 2.14% of total GHG emissions of Client's for the reporting year within the scope of PPN06/21. Natural gas is only used for heating at Ipswich office.

2022 - Baseline 2023 2024 % Var from Office Baseline  $tCO_2e$ tCO<sub>2</sub>e kWh tCO<sub>2</sub>e % **Ipswich** 2.17 1.96 12,663.00 2.32 100.00% 6.73% Total 2.17 1.96 12,663.00 2.32 100.00% 6.73%

**Table 3: Natural Gas Emissions According** 

### 5.2 Company Vehicles

The Client has diesel vehicles in operation as company vehicles. The total litres consumed by the Client and associated emissions are presented in Table 4 below. A total of 23,718.52 litres were used by the company vehicles which amount to  $59.83 \text{ tCO}_2\text{e}$  from the 10 vehicles for the 2024 reporting year. There represents an increase of 3.01% in emissions when compared to the 2022 baseline emissions. However, when compared with the 2023 consumption, there is a significant reduction in emissions from  $77.46 \text{ tCO}_2\text{e}$  in the year 2023 to  $59.83 \text{ tCO}_2\text{e}$  for the reporting year.

**Table 4: Summary of Emissions from Company Vehicles** 

Fuel	2022 – Baseline	2023	20	24	% Var from
ruei	tCO₂e		Litres	tCO₂e	Baseline
Diesel (average biofuel blend)	58.08	77.46	23,718.52	59.83	3.01%
Total	58.08	77.46	23,718.52	59.83	3.01%



# 6.0 Scope 2 Results

### 6.1 Electricity

Scope 2 emissions account for 8.10% of total GHG emissions from the Client operations for the 2024 reporting year. As reported in Table 5 and Figure 4, emissions from electricity are at the peak in January of the reporting year across the years from 2022 to 2024 reporting year.

The Client has not reported any green electricity purchase on onsite electricity generation. Overall, there is a reduction in the total emissions from electricity consumption for the 2024 reporting year when compared to the baseline year. The reduction is generally influenced by a greener grid for the 2024 reporting year when compared with the baseline.

Table 5: Summary of Emissions from Electricity According to Building Types

D.C. and b. a	2022 - Baseline	2023		2024		% Var from
Months	tCO₂e	tCO₂e	kWh	tCO₂e	%	Baseline
Jan	1.13	1.27	4,911.00	1.02	11.60%	-10.19%
Feb	0.96	0.98	3,820.00	0.79	9.02%	-17.70%
Mar	0.97	1.15	4,344.00	0.90	10.26%	-7.62%
Apr	0.82	0.86	2,632.00	0.54	6.21%	-33.68%
May	0.73	0.67	3,182.00	0.66	7.51%	-10.06%
Jun	0.76	0.92	3,704.00	0.77	8.75%	1.05%
Jul	0.93	0.82	2,981.00	0.62	7.04%	-33.92%
Aug	0.72	0.85	3,568.00	0.74	8.42%	2.75%
Sep	0.69	0.92	2,962.00	0.61	6.99%	-10.97%
Oct	0.66	0.80	3,320.00	0.69	7.84%	3.68%
Nov	0.82	0.96	3,630.00	0.75	8.57%	-8.00%
Dec	0.83	0.89	3,299.00	0.68	7.79%	-17.36%
Total	10.03	11.10	42,353.00	8.77	100.00%	-12.56%

1.4 1.2 0.8 0.6 0.4 0.2 0 Feb May Oct Dec Jan Mar Apr Jun Jul Aug Sep Nov **■** 2022 **■** 2023 **■** 2024

Figure 4: Electricity Emissions by office location



# 7.0 Scope 3 Results

The results as illustrated in Table 1 and Figure 5 demonstrate that Scope 3 accounts for 35% of total GHG emissions for the Client's 2024 reporting year. A percentage breakdown of Scope 3 emissions is presented in Figure 5 showing that upstream transportation and distribution (54.39%) contributes the most to Scope 3 emissions followed by employee commuting (16.05%), downstream transportation and distribution (14.27%), flight from business travels accounts 11.39%, waste (1.64%) and business travel – hotel (1.39%), and the rest have less than 1% each from the emission distribution.

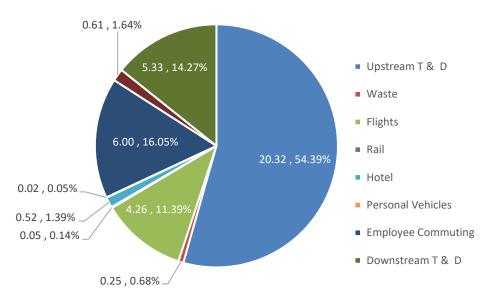


Figure 5: Scope 3 Emission Sources

### 7.1 Category 4 – Upstream Transportation and Distribution

Table 6 below summarises emissions associated with all upstream transportation and distribution activity for importation of goods and services related activities from the Client's suppliers to the Ipswich office in the UK. Emissions for this category accounts for the largest scope 3 emissions (54.39%) as reported in Figure 5. There is a significant increase in emissions reported for the 2024 reporting year when compared with baseline. This increase would have been as a result of the normalised operational activities as against the reduced activities during the baseline year as a result of the COVID 19 restrictions.

Carres	2022 - Baseline	2023	2	024	% Var from
Source	tCO₂e	tCO₂e	tonnes.km	tCO₂e	Baseline
Upstream Transport and Distribution	4.50	20.04	28,347.86	20.32	351.61%
Total	4.50	20.04	28,347.86	20.32	351.61%

Table 6: Emission from Upstream Transportation and Distribution

### 7.2 Category 5 – Waste Generated in Operation

Waste data has been provided. In total 9.52 tonnes of waste is generated by the Client for the 2024 reporting year. As detailed in Table 7 below, overall, there is a reduction 60% emissions from the base year emissions from waste.

Emissions from landfilled commercial and industrial waste accounts for the largest share of emissions for the 2024 reporting year, while there is a significant increase in emissions from metal recycled and landfilled when compared with emissions from same source in the base year.



**Table 7: Summary of Emissions from Waste** 

Waste Type	Disposal	2022 - Baseline	2023		2024		% Var from 2022
	Method	tCO₂e	tCO₂e	Tonnes	tCO₂e	% of tCO₂e	- Baseline
Metal	Recycled	0.00	0.04	1.38	0.01	3.50%	420.36%
Metal	Landfilled	0.00	0.00	0.06	0.00	0.20%	347.85%
Refuse - Commercial & Industrial Waste	Energy from Waste	0.20	0.18	5.25	0.03	13.29%	-83.46%
Refuse - Commercial & Industrial Waste	Landfill	0.34	0.30	0.40	0.21	83.00%	-38.84%
Refuse - Commercial & Industrial Waste	Recycle	0.09	0.00	2.42	0.00	0.00%	-100.00%
WEEE - small	Recycle	0.00	0.05	0.00	0.00	0.00%	-100.00%
Total		0.65	0.56	9.52	0.25	100.00%	-60.82%

### 7.3 Category 6 – Business Travel

As illustrated in Table 8 below, a total of  $4.85\ tCO_2e$  emission was calculated for business travel for the reported period, The largest share of the emissions was attributed to emissions from flights for the reporting year. Hotel stay accounted for 10.74%, 1.07% for rail travel and the remining 0.39% emissions from personal vehicle use. Overall, there is an increase of 131.88% emission when the current reporting year emissions was compared with the 2022 emissions.

**Table 8: Emissions from Business Travel** 

		2022 - Baseline	2023		2024		Var. tCO2e
Business Travel Mode	Unit	tCO₂ <b>e</b>	tCO₂ <b>e</b>	Value	tCO2e	% tCO₂e	from Baseline
Flights	Km	1.46	2.36	13,932.00	4.26	87.80%	191.44%
Rail Travel	Rooms Booked	0.15	0.19	1467.72	0.05	1.07%	-65.30%
Hotel Stay	Km	0.18	0.25	35.00	0.52	10.74%	189.17%
Personal Vehicle Use	Km	0.30	0.12	110.00	0.02	0.39%	-93.77%
Total	-	2.09	2.92	-	4.85	100.00%	131.88%

### 7.4 Category 7 – Employee Commuting

The results as illustrated in Table 9 show emissions associated with the distance travelled by employee's home to office locations within the reporting period. For the reporting year, majority of the employees work from office for the whole 5 days of the week. Total emissions from employee commuting for the 2024 reporting year equals  $6.00 \text{ tCO}_2e$ , and with  $0.61 \text{ tCO}_2e$  for work from home emissions.

**Table 9: Employee Commuting Emissions** 

Travel Mode	2022 - Baseline	2023		2024	
Travel Wode	tCO₂e	tCO₂e	Annual Dist (km)	tCO₂ <b>e</b>	% tCO₂e
Walking		0.00	480.00	=	0.00%
Bike		0.00	=	=	0.00%
Car - Petrol - Medium		1.67	5,424.00	0.96	14.55%
Car - Petrol - Small	44.50	1.07	6,268.80	0.90	13.63%
Car - Diesel - Average	11.58	2.64	15,411.36	2.62	39.60%
Car - Diesel - Medium		1.79	1,584.00	0.27	4.03%
Car - Diesel - Small		0.98	7,027.20	0.98	14.88%
Car - Electric - Average		0.00	5,616.00	0.27	4.03%
Sub - Total	11.58	8.14		6.00	90.72%
		WHF			
	Value	tCO₂ <b>e</b>	Value - Hours	tCO₂ <b>e</b>	% tCO₂e
Home Working	-	0.65	1,837.50	0.61	9.28%
Total	11.58	8.79		6.61	100.00%



### 7.5 Category 7 – Downstream Transportation and Distribution

Table 10 below summarises emissions associated with all downstream transportation and distribution activity for movement of goods and services related activities from the Client's office to end users using external suppliers. Emissions for this category accounts for 4.92% of the 2024 reporting year emission within the scope of PPN06/21. There is an increase of 15.87% in emissions reported for the 2024 reporting year when compared with baseline.

Table 10: Emissions from Downstream Transportation and Distribution

Source	2022 - Baseline	2023	202	4	% Var from
Source	tCO₂e	tCO₂e	tonnes.km	tCO₂e	Baseline
Downstream Transportation and Distribution	4.60	5.24	564.89	5.33	15.87%
Total	4.60	5.24	564.89	5.33	15.87%



### 8.0 Carbon Intensities

Carbon intensity ratios have been established to assess the normalised carbon performance of operations, based on employee headcount and square foot of the Client's operations. These metrics allow for the business to compare future performance when factoring in growth or changes in business operations on a like for like basis.

### Floor Area (sqm)

Performance has been assessed using an intensity ratio of kgCO<sub>2</sub>e per sq.ft of floor area where the Clients operates. This is detailed in Table 11 below. The calculation includes all emissions resulting from scopes 1 and 2.

The floor area occupancy for the Client's office in Ipswich has been reported as 17,890 sq.ft

### **Number of Employee**

Performance is also assessed using a carbon intensity ratio of tCO<sub>2</sub>e per employee. Over the 2024 reporting period, the Client had an average of 13.33 employees. This calculation includes all scope 1, 2 and 3 emissions.

**Table 11: Carbon Intensity** 

Carbon Intensity	2022 - Baseline	2023	2024	% Var from baseline
Building (kgCO2e- Scope 1 and 2 per Sq.ft)	3.93	5.06	3.96	0.90%
Employees (tCO2e per employee)	4.69	9.61	8.12	73.37%



# 9.0 Carbon Reduction Pathway

### 9.1 Summary

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 absolute carbon emissions by 45% before 2030, and by 90% 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 line with the Paris Agreement and the SBTi long term target, the United Kingdom in 2019 became the first major economy to pass legislation which commits to ending its contribution to global warming. The target to is achieve 'netzero' 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.

To complement the 2050 NetZero commitment of the UK government, the UK Government Commercial Function has developed a new commercial policy measure for all central government departments and arm's length bodies. This measure requires suppliers bidding for major government contracts to commit to achieving Net Zero by 2050 and publish a 'Carbon Reduction Plan'.

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 2050 in line with the SBTi target.

### 9.2 Carbon Reductions

Prior to the 2024 reporting year's emission analysis, the carbon has initiated the development of carbon reduction strategies during the 2022 baseline assessment. However, no implementation has been reported for emission reduction strategy.

### 9.3 Emissions Reduction Targets

The following section sets out 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 by 2100. To adhere to this, emissions reduction targets for 2030 and 2050 have been aligned to the Science Based Targets Initiative (SBTi) using the SBTi's Target Setting Tool and Net Zero Tool. To stay aligned with limiting global warming to 1.5°C by 2100, the following SBTi-aligned reductions should be met (Scopes 1, 2 and 3 reductions are compared to the baseline year.

In order to reach Net Zero by 2050, all 3 Scopes must be considered with an overall carbon reduction of 90-95% by 2050 and the intention of offsetting any residual emissions. Emissions must be halved by 2030, and no Net Zero claims can be made until all long-terms targets have been met.

The following targets are only suggestions based on the Science Based Target Initiative criteria. They are considered 'Science Based' because they have been calculated using a target setting tool published by the Science Based Target Initiative, and therefore contribute to a 1.5°C decarbonisation pathway. The targets are as follows and based on a base year of financial year 2023/24 for Scope 1 and 2, and financial year 2023/24 for Scope 3:

### 2030:

- 100% renewable energy by 2030;
- Reduce Scope 1 emissions by 42% by 2030;
- Reduce Scope 2 emissions by 44% by 2030; and
- Reduce Scope 3 emissions by 42% by 2030.

### 2045 (Net Zero)

Operational Net Zero by 2050 (reduce total emissions by at least 90%).



After achieving an emissions reduction of at least 90% by 2045, carbon offsets should be purchased to account for the remaining residual emissions.

This reduction plan sets out three key recommendations to reduce 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.

### 9.4 Carbon Reduction Initiatives

The Client has decided to engage in establishing a baseline as this would provide an opportunity to know what plans are underway towards the implementation of some carbon reduction initiatives particularly on emissions that are directly under the control of the organisation. However, identifiable reduction opportunities are recommended and have been listed below.

### 9.4.1 Renewable Energy Tariff

Electricity from 2024 reporting year account for 8.77 tCO<sub>2</sub>e of the total emissions for the reporting year. In order to drive a NetZero emission through electricity usage, the Client should consider the option to source electricity tariffs from 100% renewable energy tariffs. This tariff should be Renewable Energy Guarantees of Origin-certified (REGO-certified) to ensure the electricity tariff is provided by 100% renewable energy sources. 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. It is assumed that electricity tariffs can be switched prior to the 2027 assessment period, however, this is dependent on the nature of existing electricity contracts.

The adoption of the above recommendation would see a potential savings of  $8.77 \, tCO_2e$ . If all electricity tariffs are 100% renewable, there will be no emissions associated with electricity consumption. Therefore, this is the quickest win in terms of emissions reduction.

### 9.4.2 Energy Efficiency Programmes

The Client currently has natural gas supplies at its Ipswich office for heating office. The Client should consider non fossil fuel-based heating systems.

In the short term, emissions can be reduced by switching to a 100% renewable gas tariff. This tariff should be Renewable Gas Guarantees of Origin-certified (RGGO-certified) and could reduce emissions from natural gas by almost 100%. These tariffs often rely on biomethane, although the fuel source may differ in each tariff.

### 9.4.3 Transport and Travel

Company fleets account for over half 55.26% of the total emissions for the reporting year. It is recommended that the Client should embrace switching to EVs where possible as this would help reduce the emission and cost expended considerably.

Upstream transportation and distribution contribute (18.77%) of the total emissions for the reporting period. It is advised that the Client should consider using service companies with more sustainable mode of transport of goods and services. An 5% annual reduction in emissions from this source would help ensure the organisation's emissions is reduced and the NetZero plan is in place.

An ambitious 10% annual reduction in business travel, personal travel and company fleet emissions is considered feasible before 2030. However, with the hope for a greener grid by 2030, it is expected that the Client would make a shift to green fleet would help achieve the NetZero transport in the long term by increasing the target to a 20% annual reduction.

### 9.5 Carbon Reduction Pathway

The figure below represents an indicative carbon reduction pathway based on the above actions. The figure shows that with relatively modest annual targets, the business can achieve carbon reductions in line with global targets without dramatic changes to operations. The indicative carbon reduction plan is based on current operations and company size. The carbon reduction pathway does not take into account any projected business growth. However, this should be factored into any future carbon footprint assessment. The carbon reduction pathway would be due for update if additional data is provided by the Client.

The carbon reduction pathway illustrates a 10% annual reduction from all Scope 1 emissions as planned from the baseline; however this would not help achieve the target. Hence there is a need to be more proactive most especially



by switching to EVs for company cars in order to ensure a proper drive towards a 45% reduction by 2030. For Scope 2 emissions, a 10% reduction annually should be targeted. However, the opportunity to achieve both short term and long-term targets earlier is possible before the reduction target through the purchase of green electricity. For scope 3 emissions, a 10% annual reduction target would help achieve both the near term and long-term targets. For the pathway, a 5% annual reduction was assumed apart from the emissions from upstream and downstream transportation and distribution where a 10% annual reduction was considered.

For the near-term NetZero target of 2050, in line with the SBTi near term and the long-term target for organisations to reduce emission by 50% before 2030 and 90% by 2050, it is expected that the Client emission is reduced to 46.85. tCO₂e by 2030, and 9.37% by 2045.

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■ TOTAL TCO2e — • • Target

Figure 6: Carbon Reduction Pathway 2024



# Appendix A – Limitations



### **Limitations**

The recommendations contained in this Report represent Lucion's professional opinions, based upon the information listed in the Report, exercising the duty of care required of an experienced Senior Sustainability Consultant.

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

This Plan was prepared by Lucion for the sole and exclusive use of the Client and for the specific purpose for which Lucion was instructed. Nothing contained in this Plan shall be construed to give any rights or benefits to anyone other than the Client and Lucion, 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, Lucion does not intend, without its written consent, for this Plan 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 Plan by any other person is unauthorised and such use is at the sole risk of the user. Anyone using or relying upon this Plan, other than the Client, agrees by virtue of its use to indemnify and hold harmless Lucion 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 – PPN06/21 Carbon Reduction Plan – Felgains Ltd



Supplier name: Felgains Ltd

Publication date: 20th March 2025

### **Commitment To Achieving Net Zero**

Felgains Ltd has appointed Lucion 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 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 prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

### Baseline Year: 1st January 2022 to 30th December 2022

### Additional Details relating to the Baseline Emissions calculations.

The Baseline Assessment includes Scope 1, 2 and 3 as required by the PPN 06/21 in relation to the Business Operations Felgains.

### Baseline year emissions:

Emissions	Total (tCO <sub>2</sub> e)
Scope 1	60.25 tCO₂e
Scope 2	10.03 tCO₂e
Scope 3 (PPN06/21 Scope)	23.42 tCO₂e
Total Emissions	93.70 tCO₂e

### **Current Emissions Reporting**

Reporting Year: 1st January 2024 to 30th December 2024		
Emissions	Total (tCO₂e)	
Scope 1	62.14 tCO <sub>2</sub> e	
Scope 2	8.77 tCO₂e	
Scope 3 (Included Sources)	37.36 tCO₂e	
Total Emissions	108.27 tCO₂e	

### **Emissions Reduction Targets**

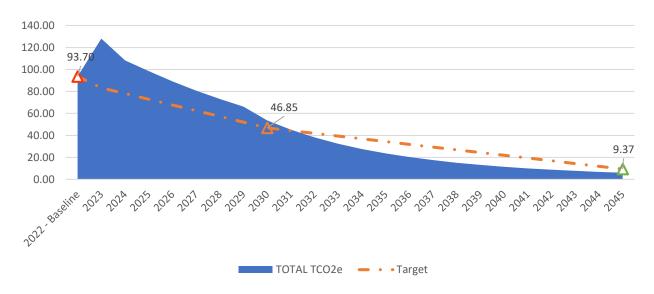
In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.



We project that annual carbon emissions for all scopes will decrease to  $46.85 \text{ tCO}_2\text{e}$  by 2030 and  $9.37 \text{ tCO}_2\text{e}$  by 2045. This represents a reduction from baseline emissions of 90% by 2045: any residual emissions will be offset prior to 2045.

Progress against these targets can be seen in the graph below:

### **Carbon Reduction Pathway**



### **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. Develop plans to engage low energy transport services for the delivery of upstream goods and services.

### **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.

At the moment, no carbon reduction plan has been implemented yet. However, plans are in place to implement significant carbon reduction strategies.

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: SAMUEL WEBBER

Position: MANAGING DIRECTOR

Signature:



