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PPN06/21 - Carbon Footprint Assessment and Carbon Reduction Plan

V. Guldmann A/S

Presented to: V. Guldmann A/S

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Lucion Contract Reference 120698.644508

Report Details

Client	V. Guldmann A/S
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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 V. Guldmann A/S ('The Client') to undertake an assessment of greenhouse gas emissions for their business operations during the 2023/2024 financial year (1st October 2023 -30th September 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 '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 establish baseline carbon emissions and produce a carbon reduction plan to aid a smooth drive towards NetZero.

The Client is specialised within the healthcare sector and the mobility industry of ceiling hoists, ramps and consulting of ergonomic work environment and operates within two main areas: Guldmann Products Service that provides products to the healthcare sector and Guldmann Consulting which provides education to hospital staff.

It is understood that V. Guldmann A/S is the UK based Permanent Establishment of the parent company V. Guldmann A/S, based in Denmark. The UK operations of the Client do not include the manufacturing of products; works are largely office based and fall under sales and administration areas of focus. It is understood that manufactured goods are delivered directly from factories in Denmark to end clients / users in the UK. V. Guldmann A/S UK is not believed to operate any distribution or storage sites in the UK.

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 UK 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 use the 2023/2024 as the company's baseline emissions and has therefore not carried out carbon assessment prior to this baseline.

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

- 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 development of a carbon reduction target aligned 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 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_2e) emissions associated with business activities. Carbon dioxide equivalent includes the six main GHG covered by the Kyoto Protocol: carbon dioxide (CO2), 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_2.

1.6 Limitations

The 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 have been prepared for V. Guldmann A/S.

2.2 Reporting Period

The reporting period for this PPN06/21 GHG Assessment is in line with the Client's 2023/24 financial year:

- 1st October 2023 – 30th September 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

This is the Client's baseline year of their carbon footprint. Therefore, the Client has not previously calculated any carbon footprint and this 2023/2024 emissions would form the baseline for the Client.

2.5 Data Completeness

Electricity data (annual kWh per sqm) has been extracted from the recently assessed (July 2023) EPC for the York office and this has been used to calculate the annual kWh consumption by multiplying through with the total square meters of Client's occupied space for both York and Bristol offices.

Natural gas consumption data for the Bristol office has been estimated using the average natural gas consumption data for non-domestic buildings (offices) for employees between 10 and 49 as reported by the Department for Business, Energy and Industrial Strategy pg37[1]. Similarly, the quantity of wood pellets used for heating at the York office has not been provided, hence Lucion has made an estimation using available data as provided by the Energy Pellets of America [2].

Spend based data has been provided for the hotel travel, and average hotel night rate in the United Kingdom has been used. Spend based data has been provided for the fuel grey fleet and this has been converted using 45p per mile and then converted to the equivalent emission using unknow car type. Upstream T&D and waste data has been provided. The Client does not have any emissions from Downstream T&D, therefore this category has been excluded.

Whilst substantial data coverage has been provided, it is the intention of the Client to continually improve their data capture processes in the future.

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

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.

The carbon footprint assessment was carried out in general accordance with 'PAS2050:2001 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services' and the 'GHG Protocol'.

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 2024' as the reporting periods fall within the 2023 calendar year. This is in line with environmental reporting guidance.

[1] The Non-Domestic National Energy Efficiency Data-Framework 2022 (England and Wales) [online]
[2] How Many Wood Pellets Do I Need to Heat My Home? [online]

2.7 Site Information

The Client's following site has been included within the scope of this assessment:

- York - Red Kite Unit 10, Hawk Creative Park, York YO61 3FE United Kingdom; and
- Bristol - Offices 2 & 3, The Stables, Says Court Farm, Badminton Road, Frampton Cotterell, Bristol, BS36 2NY

2.8 Data Verification

For all data sources, evidence has not been provided. In such cases, data verification cannot be conducted. 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 V. Guldmann A/S.

2.9 Recommendations for Future Reporting

To improve upon the accuracy of future GHG assessments, the following recommendations are:

- Improve data collection for electricity consumption on both York and Bristol offices through engagement with landlord from time to time;
- Ensure natural gas consumption and the quantity of wood pellets used biomass; and
- Ensure business travel data includes detailed location and distance-based information regarding flights (departures, destinations, number of passengers, flight class), trains (destinations), and hotel stays (location, number of rooms and guests per night).

3.0 Operational Scopes

3.1 Definitions

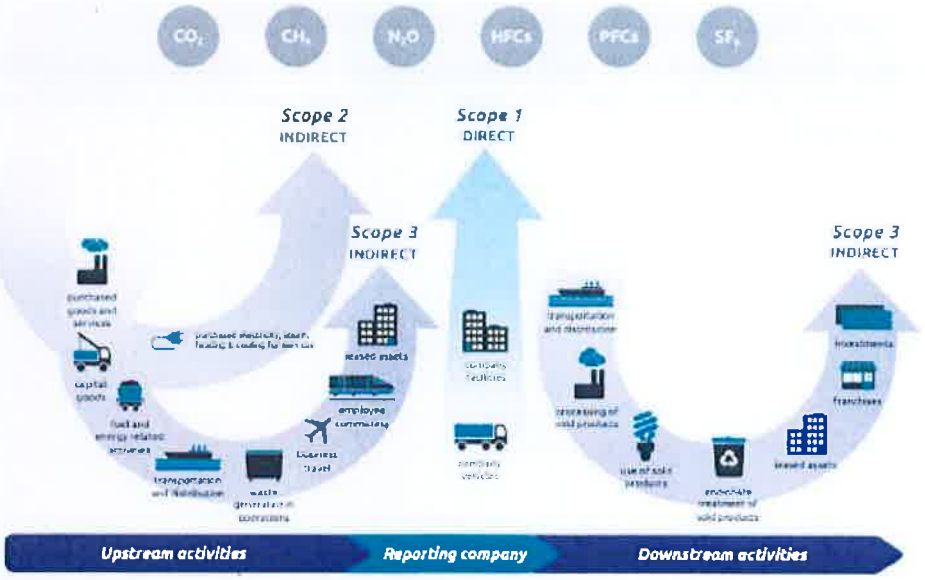
GHG Emissions are categorised into Scopes:

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 petrol cars and diesel vans as company vehicles. Spend amount on each fuel types have been provided, and the equivalent quantity of the fuel were extrapolated using average cost of fuel price for the period as published by the UK Gov.
- **Natural Gas:** Building fuel in the form of natural gas is utilised the Client's Bristol site. Data was extrapolated using average kWh of natural gas per square meter.
- **Biomass:** Building fuel in the form of biomass from wood pellet is utilised at the Client's York site. Data was extrapolated using average kg of wood pellets per square meter per year. The CO_2 emissions was excluded in line with the GHG protocol.

Scope 2 – Indirect Combustible Fuels

- **Purchased Electricity:** Emissions for grid electricity have been calculated for both sites using the kWh consumption extracted from the York office Energy Performance Certificate (EPC) all the Site in the 2023 reporting year.

Scope 3 – Indirect Emissions

Category 3.4 Upstream Transportation and Distribution

- **Upstream Transportation and Distribution:** The Client imports health equipment's from the Denmark office 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 and fuel claims have been recorded and data provided as a lumped sum for all business travel. All cost provided has been assumed to be for personal vehicles apart from hotel stay cost that was provided separately;
- **3.6.2 Trains:** The Client conducts regular rail travel for business purposes. However, no data on origin and destination data were unavailable, data has been excluded based on discrepancies between train fairs;
- **3.6.3 Flights:** The Client conducts regular air travel for business purposes. However, no data on origin and destination data has been provided, therefore data has been excluded based on discrepancies between train fairs origins and destinations have been provided;
- **3.6.4 Hotels:** Employees are occasionally required to stay in hotels when travelling for business purposes. A lump sum amount spent on hotel stay has been provided and the average cost of hotels in the UK has been used to extrapolate the number of nights; and
- **3.6.5 Taxis:** The Client has not reported any taxi usage.

Category 3.7 Employee Commuting

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

3.3 Exlusions

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

Scope 3

Category 3.1 Purchased Goods

- **Category 3.9: Downstream transportation and distribution:** The Client is a service provider and therefore do not produce any goods to be moved off facilities; and
- **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 2023/24 Reporting Year (RY) have been calculated. Table 1 summarises total operational emissions by Scope.

Table 1 shows that total emissions for the period 1st October 2023 – 30th September 2024 totalling 271.95 tCO_2e. Scope 1 emissions (building fuel in the form on natural gas, biomass and company fleet) accounts for 13.39% of total carbon emissions. Scope 2 emissions associated with purchased electricity accounts for 1.33% of total emissions. The remaining 84.28% 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), and category 7: employee commuting (commuting and homeworking).

Table 1: Summary of GHG Emissions Results

Scope	tCO_2e – Location	%
Scope 1	36.24	13.39%
Scope 2	3.59	1.33%
Scope 3	230.84	84.28%
Total	**270.68**	**100.00%**

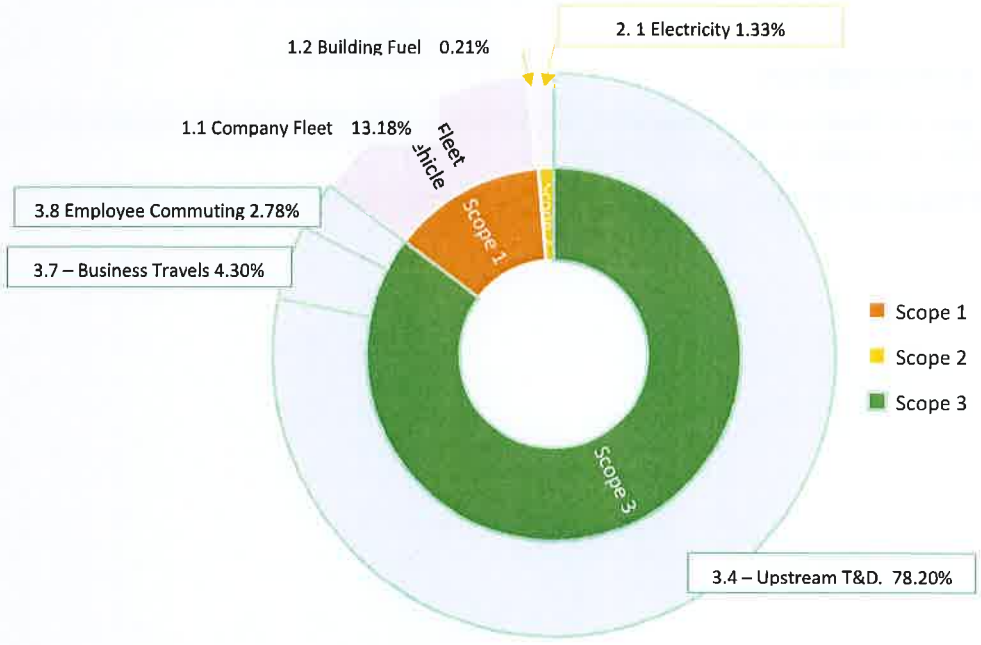
4.2 GHG Emissions by Source and Scope

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 3 sources. GHG emissions associated with each source during the 2023/24 reporting period are presented in Table 2 and Figure 2 below. UK Gov. conversion factors for the 2024 reporting year was used.

Figure 2 illustrated emissions from each of the distribution, upstream transportation and distribution accounts for 78.20%, company fleets 13.18%, business travels – personal travel (4.30%), employee commuting and WFH accounts for 2.78%, electricity (1.33%), and building fuel (natural gas and wood pellets) (0.21%) of the total emission

Table 2 provides a summarised breakdown of relative consumption and equivalent tCO_2 emissions.

Figure 2: Carbon Emissions by Scope & Categories – 2023/24



GHG emissions associated with each source are set out in Table 2 below. The results illustrate how upstream transportation and distribution accounts for 77.84% of total emissions, and was largely due to the nature of the Clients business operations which involves sales-based work with high levels of importation from the parent company in Denmark. The remaining emissions result from fleet vehicles (13.88%), business travels (4.3%), home working (2.48%), employee commuting (0.29%), building fuel in the form of natural gas (0.16%) and wood pellet (0.04%), electricity (1.32%) and water consumption (0%).

Emission from waste resulted in 0 tCO_2e because all wastes are recovered and recycled, therefore no emissions was attributed to the process.

Table 2: Summary of Total Energy Consumption

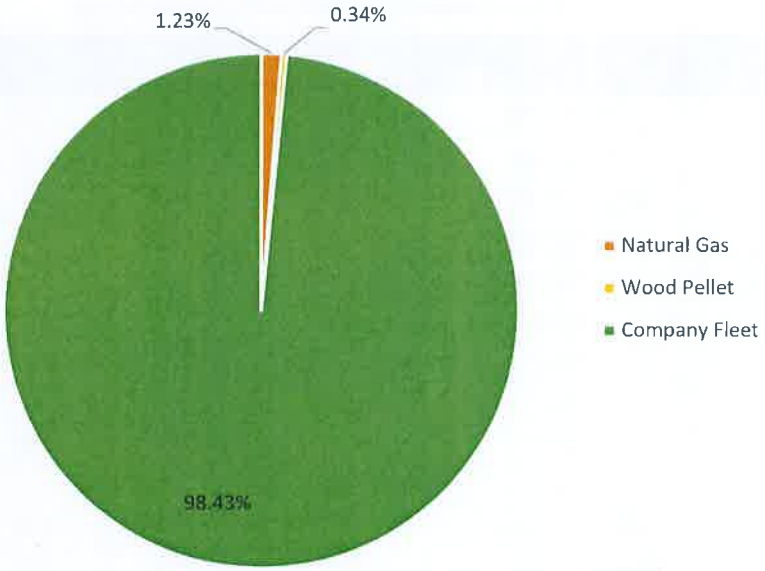
Scope & Category	Source	Measure	Unit	tCO_2e	%
1.1	Fleet Vehicle	Litres	14,839.79	37.68	13.88%
1.2	Natural Gas	kWh	2,438.33	0.45	0.16%
	Biomass - Wood Pellet	Tonnes	2.24	0.12	0.04%
2.1	Grid Electricity	kWh	17,334.33	3.59	1.32%
3.4	Upstream T&D	tonnes.km	344,962.37	211.68	77.84%
3.5	Waste	Tonnes	0.135	0.00	0.00%
3.6	Flights	km	-	-	-
	Rail	km	-	-	-
	Hotel	km	279	2.90	1.07%
	Taxi	km	-	-	-
	Personal Vehicles	km	52,403.69	8.75	3.23%
3.7	Employee Commuting	km	7,203.00	0.79	0.29%
	Home working	WFH	20,142.00	6.72	2.48%
3.9	Downstream T&D	-	-	-	-
Total				**270.68**	**100.00%**

5.0 Scope 1 Results

Figure 3 below summarises emissions associated with the direct combustion of natural gas, wood pellet and company fleets consumption associated operations at the Client's sites. Company fleet account for 98.43% of Scope 1 emissions, 1.23% associated with natural gas and 0.34% associated with wood pellet consumption emissions.

Conversion factors from 2024 UK Government GHG Conversion Factors for Company Reporting for fuel consumption have been used.

Figure 3: Scope 1 Emissions Distribution



5.1 Natural Gas

Natural gas accounts for 0.16% of total GHG emissions of Client's for the reporting year. Natural gas is only used for heating at the Bristol office. The 2024 conversion factors are taken from UK Government GHG Conversion Factors for Company Reporting and was applied in the calculation.

Table 3: Natural Gas Emissions According

Office Location	kWh	tCO_2e
Bristol	2,438.33	0.45
Total	**2,438.33**	**0.45**

5.2 Biomass – Wood Pellets

Biomass emission from wood pellets consumption accounts for 0.04% of total GHG emissions of Client's for the reporting year. Wood pellets serve as fuel for the biomass boiler used for heating at the York office. The 2024 conversion factors are taken from UK Government GHG Conversion Factors for Company Reporting and was applied in the calculation. The CO_2 content of the emission has been excluded as out of scope in line with the GHG protocols.

Table 4: Wood Pellet Emissions According

Office Location	tonnes	tCO_2e
York	2.24	0.12
Total	**2.24**	**0.12**

5.3 Company Vehicles

The Client has two vehicle types, Cars and Vans which operates on petrol and diesel respectively. The total litres consumed by the Client and associated emissions are presented in Table 5 below. A total of 14,839.93 litres were used by the company vehicles which amount to 35.68 tCO_2e for the 5 vehicles.

The 2023 conversion factors are taken from UK Government GHG Conversion Factors for Company Reporting and was applied in the calculation.

Table 5: Summary of Gas Emissions According to Building Types

Fuel Type	Vehicle Type	Litres	tCO_2e	% tCO_2e
Diesel	Van	10,829.72	27.32	76.57%
Petrol	Car	4,010.07	8.36	23.43%
Total		**14,839.79**	**35.68**	**100.00%**

6.0 Scope 2 Results

6.1 Electricity

Scope 2 emissions account for 1.33% of total GHG emissions from the Client operations for the 2023/24 reporting year. As extracted from the EPC for York office, the kWh per square meter has been used to derive the total kWh consumption for the area occupied by the Client. The average consumption of 133kWh per square meter from the York office has been used to estimate the electricity consumption for the Bristol office using the number of days occupied. As reported by Figure 4, 85.79% of the emissions emanated from the York office while the remaining 14.21% emissions are from the Bristol office.

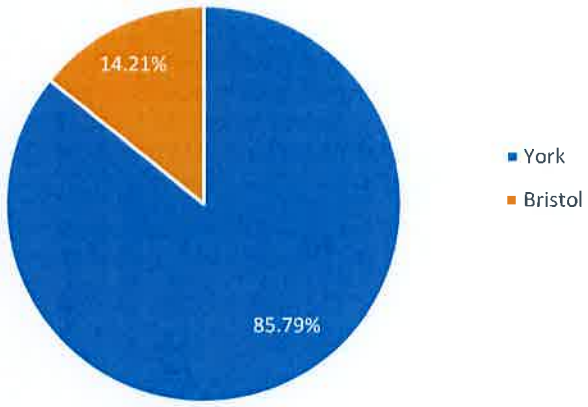
Both Figure 3 and Table 6 explain the distribution of emissions from different site locations. In total, 3.59 tCO_2e resulted from the electricity consumption from both facilities.

The 2024 UK conversion factors are taken from the UK Government GHG Conversion Factors for Company Reporting.

Table 6: Summary of Emissions from Electricity According to Building Types

Building Type	Number of days occupied	Square meter	kWh	tCO_2e
York	366	122	14,896.00	3.08
Bristol	122	55	2,438.33	0.51
Total		**177**	**17,334.33**	**3.59**

Figure 4: Electricity Emissions by office location

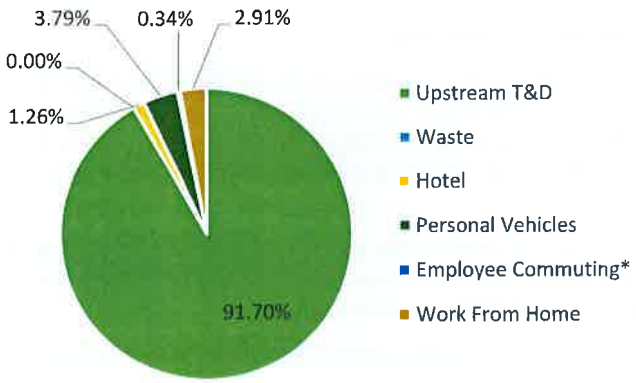


7.0 Scope 3 Results

The results demonstrate that Scope 3 accounts for 85.28% of total GHG emissions for V. Guldmann A/S for the 2023/24 reporting year. A percentage breakdown of Scope 3 emissions is presented in Figure 5 showing that upstream transportation and distribution (91.70%) contributes the most to Scope 3 emissions followed by grey fleets (3.79%), work from home emission (2.91%) and business travel – hotel (1.29%), and employee commuting (0.34%). Emissions from waste amount to 0% because all waste were reported recovered and recycled.

The 2024 UK conversion factors are taken from the UK Government GHG Conversion Factors for Company Reporting.

Figure 5: Scope 3 Emission Sources



7.1 Category 4 – Upstream Transportation and Distribution

Table 7 below summarises emissions associated with all upstream transportation and distribution activity for importation of goods and services related activities from the Client's parent company to the final user in the UK. Emissions for this category accounts for the largest scope 3 emissions (91.70%).

The 2024 UK conversion factors are taken from the UK Government GHG Conversion Factors for Company Reporting.

Figure 7: Emission from Upstream Transportation and Distribution

Vehicle Type	tonnes.km	tCO_2e
Van – Large Diesel	344,962.37	211.68
Total	**344,962.37**	**211.68**

7.2 Category 5 – Waste Generated in Operation

Waste data has been provided. However, the emissions associated was zero. In total 7.74 tonnes of waste is generated by the Client per year on both locations. As detailed in line with the waste data reference, appropriate conversion factor has been used, from UK Government GHG Conversion Factors for Company Reporting for general, recycling, energy from waste and incineration waste.

Table 8: Summary of Emissions from Waste

Waste Type	Disposal Method	Weight (Tonnes)	tCO_2e
Refuse - Commercial & Industrial Waste	Recycle	4.30	0
Refuse - Organic mixed food & garden waste	Recover	3.44	0
Total		**7.74**	**0.00**

7.3 Category 6 – Business Travel

As illustrated in Table 9 below, a total of 52,403.69 km was reported as grey fleet during the reporting period, and this represents 75.09% of the business travel distribution. The remaining 24.91% of the business travel emissions is attributed to hotel stays. Data for other forms of business travel emission has not been reported by the Client.

Table 9: Emissions from Business Travel

Source	Measure	Unit	tCO_2e	%
Hotel	Number of Nights	279	2.90	24.91%
Personal Vehicles	km	52,403.69	8.75	75.09%
Total			**11.65**	**100.00%**

7.4 Category 7 – Employee Commuting

The results as illustrated in Table 10 show emissions associated with the distance travelled by employee's home to office locations within the reporting period. Office locations included York and Bristol Offices. For the reporting year, only 2 employees are office based while the remaining employees are remote and working from home employees except for instances where they have to engage with attending meetings with their customers. Total emissions from employee commuting equals 0.79 tCO_2e.

Homeworking emissions were calculated based on the average number of working from home days and hours per week, based on 49 working weeks in the year. The Client provided a total of 9 employees responses. In total 6.72 tCO_2e were produced from homeworking for the 2023/24 reporting year.

UK Government GHG Conversion Factors for 2024 Company Reporting for each transportation mode and homeworking have been applied.

Table 10: Employee Commuting Emissions

Category	Activities	Unit	Value	tCO_2e
Employee Commuting	Car - Plug-in Hybrid Electric - Large	Km/yr	4,704.0	0.56
	Car - Plug-in Hybrid Electric - Medium	2km/yr	2,499.0	0.23
Work From Home	Work from home hours	Annual WFH	20,142.00	6.72
Total				**1,464.32**

7.5 Category 7 – Downstream Transportation and Distribution

The employee does not transport or distribute goods and services from the office; therefore, no emissions is associated to this category.

8.0 Carbon Intensities

Carbon intensity ratios have been established to assess the normalised carbon performance of operations, based on employee headcount and square meters 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 tCO_2e per sqm of floor area where the Clients operates. This is detailed in Table 10 below. The calculation includes all emissions resulting from scopes 1 and 2.

The floor area occupancy for the Client's office in York office and Bristol office has been reported as $122m^2$ and $55m^2$ respectively.

The following site has been included within this ratio:

- York - Red Kite Unit 10, Hawk Creative Park, York YO61 3FE United Kingdom; and
- Bristol - Offices 2 & 3, The Stables, Says Court Farm, Badminton Road, Frampton Cotterell, Bristol, BS36 2NY

Number of Employee

Performance is also assessed using a carbon intensity ratio of tCO_2e per employee. Over the 2023/24 period, the Client had an average of 13 employees. This calculation includes all scope 1, 2 and 3 emissions.

Revenue

Performance has been assessed using an intensity ratio of tCO_2e per £1,000,000 revenue. The Client provided a revenue figure of £6,300,000for 2023/24. This calculation includes all emissions resulting from all scopes.

Table 11: Carbon Intensity

Carbon Intensity	Unit	tCO_2e	tCO_2e/unit
Revenue (tCO2e per £m)	£6,300,000	270.68	43.0
Floor Area ((Scope 1 and 2) tCO2e per m^2	$167m^2$	39.83	0.24
Employees (tCO2e per employee)	13	270.68	20.6

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 '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.

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 2023/24 reporting year's emission analysis, no carbon reduction strategies have been reported as implemented approach by the Client. However, further to the establishment of the baseline emissions, the Client would have a clear pathway 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 2050, carbon offsets should be purchased to account for the remaining residual emissions.

This reduction plan sets out five 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 is involved stated that 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 2023/24 reporting year for both York and sites account for 3.59 tCO_2e of the total emissions for the reporting year. In order to drive a NetZero emission through electricity usage, the Client at the next available office lease renewal should consider the option of landlords that 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 3.59 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 Bristol office. The Client leases the spaces and currently does not have the control to change heating systems within the offices.

However, should the Client move office locations in the future, it is recommended to look for new accommodation which does not rely on fossil fuel-based heating systems. It is worth noting that gas heating is more cost-effective, so the move to renewable electricity-based heating may increase operating costs. However, recent price increases have occurred within the market, and it is anticipated that gas prices will continue to increase, thereby reducing the financial gains provided.

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

Upstream transportation and distribution contribute largely (78%) 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 from the Denmark office since the operation of the Client depend largely on importation from the parent company in Denmark.

Company fleets account for over 13.18% 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. It is recommended that the type of fuel and car size (e.g., petrol, small car) is reported going forward to encourage a better reporting standard.

For personal vehicles, the Client is encouraged to develop plans that would see employees take up EVs after a number of years of service. This would provide an opportunity for employees to take up EVs since the Client performs a lot of business activities using grey fleet.

A 5% annual reduction in business travel, personal travel and company fleet emissions is considered feasible before 2030, and a 15% reduction in upstream transportation between 2030 and 2045 is considered feasible.

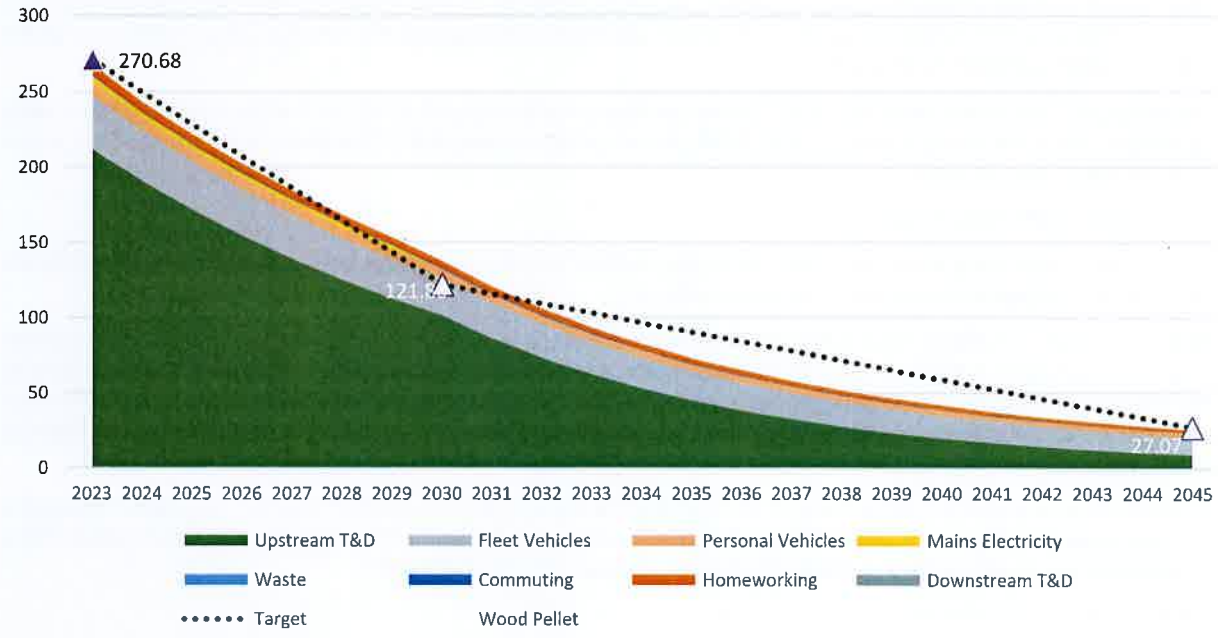
9.5 Carbon Reduction Pathway

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. It 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.

A 20% annual reduction in all Scope 1 emissions with exception to natural gas (10%) annual should be targeted. 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 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 971.42. tCO_2e by 2030.

Figure 6: Carbon Reduction Pathway 2023/24



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 – V. Guldmann A/S

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Supplier name: V. Guldmann A/S

Publication date: 11th December 2024

Commitment To Achieving Net Zero

V. Guldmann A/S has appointed Lucion 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.

V.Guldmann A/S 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 October 2023 to 30th September 2024	
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 V. Guldmann A/S	
Baseline year emissions:	
Emissions	**Total (tCO_2e)**
Scope 1	**36.24 tCO_2e**
Scope 2	**3.59 tCO_2e**
Scope 3 (Included Sources)	**230.84 tCO_2e**
Total Emissions	**270.68 tCO_2e**

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Current Emissions Reporting

Reporting Year: 1st October 2023 to 30th September 2024	
Emissions	**Total (tCO_2e)**
Scope 1	**36.24 tCO_2e**
Scope 2	**3.59 tCO_2e**
Scope 3 (Included Sources)	**230.84 tCO_2e**
Total Emissions	**270.68 tCO_2e**

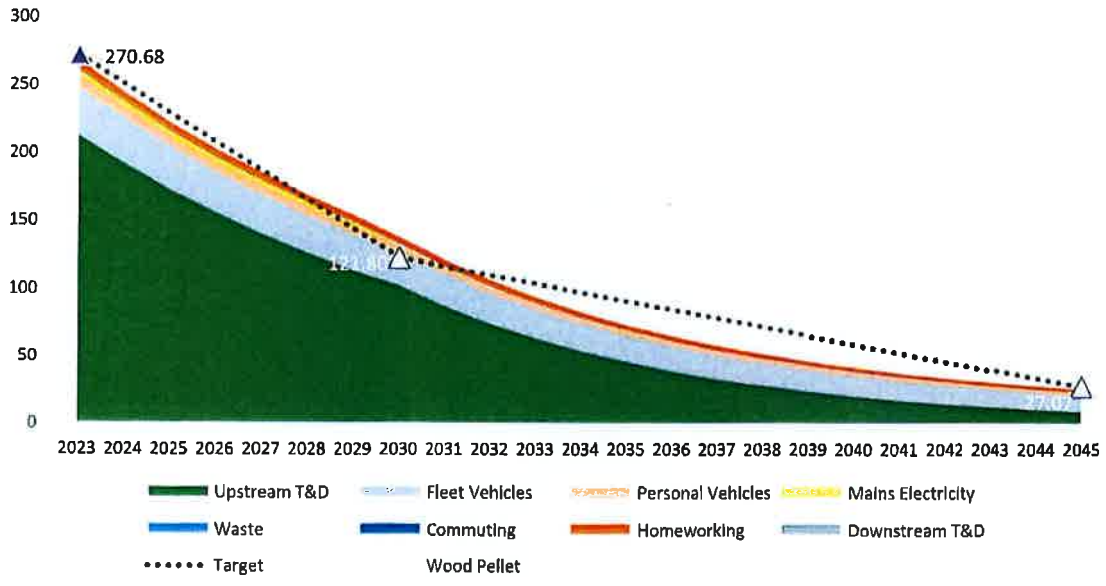
Emissions Reduction Targets

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 139.94 tCO_2e by 2030 and 26.59 tCO_2e 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

- Focus on renting office spaces with electric heating to removing emissions for gas supply by 2030;
- Focus on renting office spaces with on-site renewable energy generation or renewable energy tariffs
- Transitioning to electric vehicles for the company fleet by 2030;

- Develop company policies that would encourage employee to switch to green and sustainable travel options;
- Use of business travel only when necessary (personal vehicles/flights/trains/taxis/hotels stay) by 2045; and
- 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: Carsten Gutmann

Position: CEO

Signature:

Date: Jan 13. 2025.

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