

Procurement Policy Note 06/21 Report 2021

**Presented
to:** Emergent Crown Contract Office Furnishings Ltd


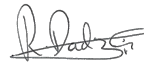
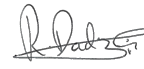
Issued: August 2023

Delta-Simons Project No: 22-1054.01

Report Details

Client	Emergent Crown Contract Office Furnishings Ltd
Report Title	Procurement Policy Note 06/21 Report 2021
Site Address	Unit 5-10 Browmills Industrial Estate Brighthouse Road, Hipperholme, Halifax, HX3 8EF
Report No.	22-1054.01
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Quality Assurance

Issue No.	Status	Issue Date	Comments	Author	Technical Review	Authorised
2	Final	17/08/2023	Amended in 2023 following Client comment to update Waste figures.	 Hannah Greenway Consultant	 Robert Dadzie Principal Consultant	 Robert Dadzie Principal Consultant

About Us

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

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

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



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

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

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Appendices

[Appendix A - PPN 06/21 – Carbon Reduction Plan Emergent Crown Contract Office Furnishings Ltd](#)

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1.0 Introduction

1.1 Appointment

Delta-Simons Limited ("Delta-Simons") was instructed by Emergent Crown Contract Office Furnishings Ltd (the "Client") to undertake a baseline carbon footprint for the Client's operations during the financial year of 2021. A net-zero plan was also required to demonstrate how the Client can decarbonise its operations in line with global climate change targets and be compliant with the *Procurement Policy Note 06/21: Taking account of Carbon Reduction Plans in the procurement of major government contracts* (PPN 06/21).

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

The Client is a distributor of office furnishings, including desks, chairs, tables, soft seating, storage and accessories, to a wide variety of Clients throughout the UK, including public sector Clients. The Client has a Sales Office and Showroom and Distribution Centre in Halifax, West Yorkshire. Import of goods is direct from manufacturers, who are predominantly (c.95%) based in the UK, with the remaining goods imported from the Republic of Ireland. The business also has a fleet of company vehicles (mix of owned and leased) and a hire fleet of vans and trucks. The client makes some products; operations include the upstream importation of goods into the UK and downstream distribution of goods within the UK.

The carbon footprint shall assess the impact from key consumables, such as energy, transport, business travel, and the waste and recycling generated in the Sales Office and Showroom and on-site.

The Client has not calculated its carbon footprint before, so this assessment will form the first baseline year. It is understood that the Client may also wish to mitigate their Scope 1, 2 and 3 carbon emissions, therefore a carbon reduction plan has also been included within this report.

The following key drivers underpin the Client's requirement to conduct this Carbon Footprinting 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 Plus. These aim to achieve an 80% reduction of supply chain emissions by 2028 to 2032 and Net zero by 2045;
- 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 include:

- Launch online meeting with key personnel from across the business;
- Review Client data related to energy, transport, waste, and material/product procurement;
- Where data is unavailable or impractical to obtain, appropriate assumptions can be made by Delta-Simons, in line with best practice standards;
- Establish appropriate and robust assessment boundaries in line with Procurement Policy Note 06/21 and best practice standards;

- Calculation of total carbon dioxide equivalent (CO₂e); emissions;
- Production of a summary carbon footprint report; and
- Development of Net-Zero carbon reduction plan meeting minimum requirements of PPN 06/21.

A Carbon Reduction Plan is presented as Appendix A in line with the template for reporting under PPN 06/21

The standard limitations associated with this assessment are presented in Appendix B.

1.5 Methodology and Assurance

This assessment has been self-certified to be carried out in general accordance to 'ISO14064-1:2006 Greenhouse Gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals.', 'PAS2050:2001 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services' and the 'GHG Protocol' and 'Procurement Policy Notice PPN 06/21'.

This assessment includes all mandatory Scope 1 (directly combustible fuels) and Scope 2 (purchased electricity) emissions sources; as well as all material Scope 3 emissions, as identified.

Wherever possible, 'DBEIS/DEFRA - UK Government Conversion Factors for Company Reporting' has been used in line with environmental reporting guidance. In the absence of conversion factors, specific data has been obtained from product manufacturers, suppliers or other publicly available sources, and referenced accordingly.

This assessment measures, where possible, the carbon dioxide equivalent (CO₂e) emissions associated with business activities. CO₂e 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 CO₂.

2.0 Report Boundaries

2.1 Corporate Structure

This Carbon Footprint assessment is conducted for Emergent Crown Contract Office Furnishings Ltd only.

2.2 Reporting Period

The reporting period for this GHG assessment is in line with the Financial Year 2021:

- 1st January 2021 – 31st December 2021

2.3 Base Year Calculation

Since this is the Client's first year of carbon reporting, this assessment will form both the baseline calculation year and current reporting year for the purpose of PPN 06/21.

2.4 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.

2.5 Data Completeness and Verification

The Client has provided data to calculate its annual emissions. Electricity, gas, water, transport, and waste data during 2021 has been collected, alongside a wide range of other emissions sources.

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

The data provided is based on finance records and data exports have been provided. In such cases, data verification cannot be conducted. Delta-Simons has taken the data provided in good faith. Verification of the data used in this report is the responsibility of Emergent Crown Contract Office Furnishings Ltd.

2.6 Quantification Methodology

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.', 'PAS2050:2001 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services' and the 'GHG Protocol' and 'Procurement Policy Notice PPN 06/21'

2.7 Site Information

Details of the Sales Office and Showroom and Distribution Centre operated by the Client and their related energy supplies are presented in Table 1 below.

Table 1: Site Utilities

Site	Electricity	Gas	Water	Refrigerants
Sales Office and Showroom (Halifax)	✓	✓	✓	x
Distribution Centre (Halifax)	✓	✓	✓	x



3.0 Operational Scopes

3.1 Definitions

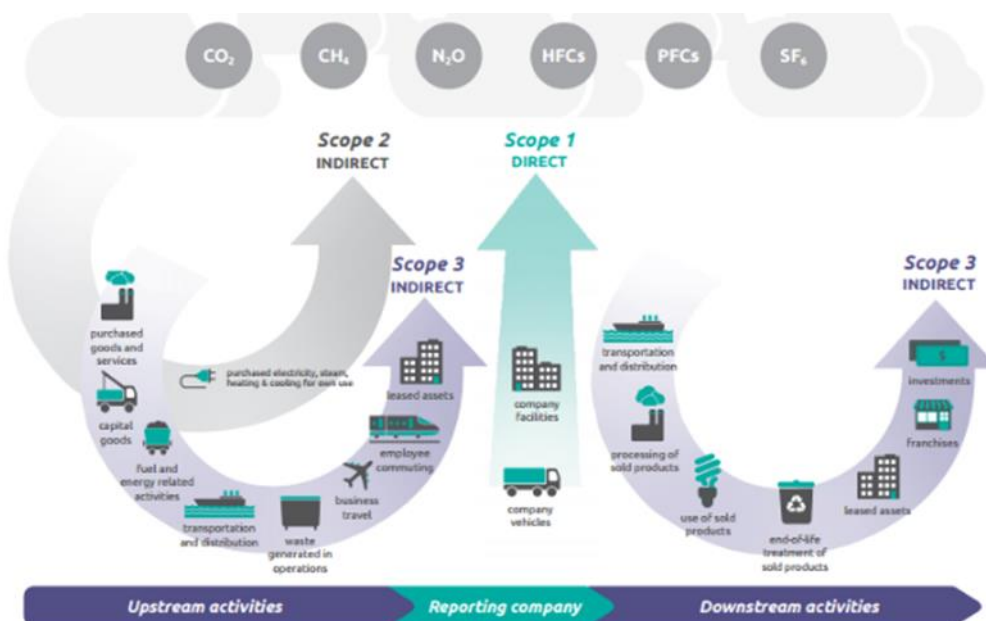
GHG Emissions are categorised into Scopes:

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 all mandatory Scopes 1 and 2 sources (plus Scope 3 grey fleet and company travel) in line with UK Environmental Reporting Guidance and included the following sources:

Scope 1 - Direct Combustible Fuels

- **Company Fleet:** The Client operates a fleet of vehicles consisting of diesel cars, diesel vans, and diesel trucks;
- **Natural Gas:** Gas is consumed as a heating fuel at all sites (i.e., one Sales Office and Showroom and one Distribution Centre) in Halifax.

Scope 2 - Indirect Combustible Fuels

- **Purchased Electricity:** The Client consumes electricity at all sites (i.e., one Sales Office and Showroom and one Distribution Centre) where it has direct energy payment responsibility.

Scope 3 - Indirect Emissions

- **Category 4: Upstream Transportation & Distribution**

- **Transportation & Distribution (import):** Upstream transportation and distribution mileages have been included in the assessment in line with the requirements of the PPN 06/21; Consignor area code and consignee area code has been provided, distance for road freight and sea freight has been calculated using assumptions (see Section 3.4);
- **Transportation & Distribution (UK only):** Upstream transportation and distribution mileages have been included in the assessment in line with the requirements of the PPN 06/21; Consignor area code and consignee area code has been provided, distance for road freight has been calculated using assumptions (see Section 3.4);
- **Category 5: Waste Generated in Operations**
 - **Waste & Recycling:** As a result of its Sales Office and Showroom and site operations, the Client generates general waste, cardboard, wood, IT Equipment, and plastic. The majority of waste is recycled, with minimal sent to landfill;
 - **Water:** Water consumption at the Sales Office and Showroom, average of 1.38 litre per day;
- **Category 6: Business travel**
 - **Grey Fleet (Personal Vehicles):** Emissions are based on the distance travelled as recorded on business mileage claims. Mileage has been recorded and data provided;
 - **Hotels:** Employees are regularly required to stay in hotels when travelling for business purposes. Location of hotel and length of stay has been provided by the Client;
- **Category 7: Employee Commuting**
 - **Employee Commuting:** Emissions arising from employee commuting are included in this assessment in line with the requirements of the PPN 06/21. Mileage has been recorded and data provided;
- **Category 9: Downstream Transportation & Distribution**
 - **Transportation & Distribution (UK only):** Downstream transportation and distribution mileage have been included in the assessment in line with the requirements of the PPN 06/21; Mileage has been recorded and data provided;

3.3 Exclusions

The following sources have been excluded from the boundaries of the report due to them being outside of the company's financial control, or due to them being outside of the scope of PPN06/21.

Scope 3 - Other Indirect Emissions

- **Category 1: Purchased Goods & Services**
- **Category 2: Capital Goods**
- **Category 3: Fuel- and energy-related activities (not included in Scope 1 or Scope 2)**
- **Category 6: Business travel**
 - **Trains:** Emissions associated with rail travel for business purposes. Emissions associated with this source are excluded as the fact the Client does not conduct business travel by this form of transport.
 - **Flights:** Emissions associated with flight travel for business purposes. Emissions associated with this source are excluded as the fact the Client does not conduct business travel by this form of transport.

- **Taxis:** Emissions associated with taxi travel for business purposes. Emissions associated with this source are excluded due as the fact the Client does not conduct business travel by this form of transport.

- **Category 8: Upstream Leased Assets**
- **Category 10: Processing of Sold Products**
- **Category 11: Use of Sold Products**
- **Category 12: End of Life of Sold Products**
- **Category 13: Downstream Leased Assets**
- **Category 14: Franchises**
- **Category 15: Investments**

3.4 Assumptions

Assumptions were used on scope 3 emissions to calculate road and sea distance for Transportation & Distribution (import) and UK only.

- **Distance road freight:** Road freight distance was calculated using <https://www.distance.to/>
- **Distance sea freight:** Sea freight distance was calculated using <https://classic.searoutes.com/>

4.0 Results

4.1 Summary

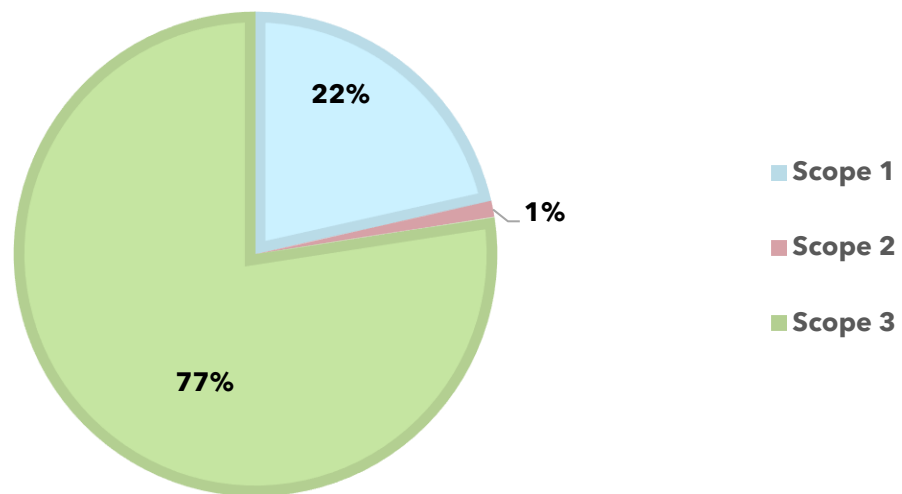
GHG emissions associated with the Client's operations during the 2021 financial year have been calculated. Table 2, below, summarises total operational emissions by Source.

Table 2: Summary GHG Emissions Results

Scope	Source		Total Units	Conversion	tCO2e	%	%
Scope 1	Company Fleet	Diesel - fuel (L)	44,493.54	2.512	111.78	16.75%	21.72%
		£	£58,747.48				
	Natural Gas	Energy (kWh)	180,882.10	0.183	33.13	4.97%	
		£	£11,867.42				
Scope 2	Electricity	Energy (kWh)	33,748.00	0.212	7.17	1.07%	1.07%
		£					
Scope 3	Waste & Recycling	Cardboard (tonnes)	15.00	21.294	0.32	0.05%	77.21%
		£					
		General Waste (tonnes)	1.62	467.046	0.76	0.113%	
		£					
		Wood (tonnes)	4.00	21.294	0.09	0.01%	
		£					
		IT Equipment (tonnes)	0.20	21.294	0.004	0.0006%	
		£					
		Plastic (tonnes)	0.76	21.294	0.016	0.0024%	
		£					
	Water	Energy (m³)	349.50	0.149	0.05	0.01%	
		£	£1,489.87				
	Grey fleet (Personal Vehicles)	Diesel - distance (km)	10,557.30	0.168	1.78	0.27%	
		£	£2,952.00				
	Hotels	UK - London (nights)	15	13.80	0.21	0.03%	
		£	£1,158.64				
		UK - Non-London (nights)	141	13.90	1.96	0.29%	
		£	£10,868.03				
	Employee Commuting	Diesel - distance (km)	55,483.74	Various	13.05	1.96%	
		£					
		Petrol - distance (km)	42,027.05	0.174	7.33	1.10%	
		£					
		Hybrid EV - distance (km)	2,092.15	0.055	0.11	0.02%	
	T&D Upstream	£					
		Import - Road freight - distance (km)	8,616.56	0.910	7.85	1.18%	
		£					
		Import - Sea freight - weight.distance (tkm)	307,427.38	0.0177	5.45	0.82%	
		£					
		UK - distance (km)	542,783.05	Various	354.57	53.14%	
		£					
	T&D Downstream	UK - distance (km)	296,038.83	Various	121.65	18.23%	
		£					
				tonnes CO2e	667.27		
	TOTAL			Cost (£)	£87,083.44		

The breakdown of emission sources is presented in Figure 2, below. Scope 1 emissions account for 22% of total GHG emissions. 1% is attributable to Scope 2 emissions from purchased electricity, and the remaining 77% is attributed to Scope 3 emissions.

Figure 2: GHG Emissions by Scope FY 2021



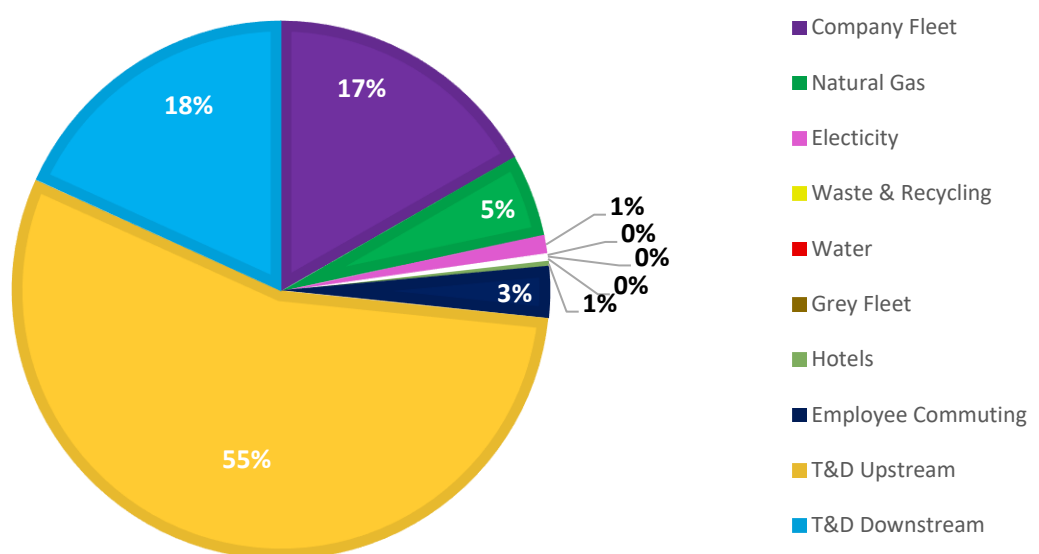
4.2 Emissions by Source Financial Year 2021

GHG emissions associated with each source are set out in Figure 3 below. The largest source of emissions is from transportation & distribution upstream (55%), with transportation & distribution downstream accounting for a further 18%. Emissions from company fleet account for 17%, emissions from natural gas consumed account for 5%, and emissions from employee commuting account for 3%.

These five emissions sources are responsible for a combined 98%.

All other emissions sources are nominal (<2%).

Figure 3: GHG Emissions by Source FY 2021



4.3 Company Fleet

The Client operates a fleet of company vehicles (mix of owned and leased). The table below summarises emissions associated with the company fleet and uses the UK Government GHG Conversion Factors for Company Reporting.

Table 3: Company Fleet GHG Emissions Results

Fleet	Fuel (Litres)	Cost	tCO ₂ e
Total Emissions	44,493.54	£58,747.48	111.78

4.4 Natural Gas

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

Table 4: Natural Gas GHG Emission Results

Site	FY 2021/22	
	kWh	tCO ₂ e
Sales Office and Showroom (Halifax)	64,092.00	11.73
Distribution Centre (Halifax)	116,790.20	21.40
Total Emissions	180,882.10	33.13

4.5 Purchased Electricity

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

Table 5: Electricity GHG Emission Results

Site	FY 2021/22	
	kWh	tCO ₂ e
Sales Office and Showroom (Halifax)	11,175.00	2.37
Distribution Centre (Halifax)	22,573.00	4.79
Total Emissions	33,748.00	7.17

4.6 Waste & Recycling

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

Table 6: Waste & Recycling GHG Emission Results

Waste Type	FY 2021/22	
	Tonnes	tCO ₂ e
General Waste	1.62	0.77
Cardboard Waste	15.00	0.32
Wood Waste	4.00	0.09
Plastic Waste	0.76	0.016
Electrical Waste	0.20	0.004
Total Emissions	21.58	1.18

4.7 Water

The table below summarises emissions associated with the consumption of water within both the Sales Office and Showroom and Distribution Centre. Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting for water consumption.

Table 7: Water consumption GHG Emission Results

Site	FY 2021/22	
	M3	tCO ₂ e
Sales Office and Showroom (Halifax)	100.50	0.015
Distribution Centre (Halifax)	249.00	0.037
Total Emissions	349.50	0.052

4.8 Grey Fleet

The Client reimburses employee for business travel undertaken in employee-owned vehicles. The Client has provided mileage data claimed by employees when using company and employee-owned vehicles. The table below summarises emissions associated with the company grey fleet and uses the UK Government GHG Conversion Factors for Company Reporting.

Table 8: Grey Fleet GHG Emission Results

Grey Fleet	FY 2021/22		
	Total km	Expense Claimed	tCO ₂ e
Total Emissions	10,557.30	£2,952.00	1.78

4.9 Hotels

The Client has provided breakdowns of all business-related hotel stays over the reporting period. The location of each hotel stay has been provided for each trip, as well as the number of nights stayed. The table below summarises emissions associated with Emergent Crowns' hotel stays during the period. Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting for hotel stay per night.

Table 9: Hotels GHG Emission Results

Location	FY 2021/22	
	Nights	tCO ₂ e
UK	141	1.96
London	15	0.21
Total Emissions	156	2.17

4.10 Employee Commuting

The Client provided Delta-Simons with the number of employee commuting, the proportion of each mode of transport used for commuting purposes, as well as the average distance travelled for the reporting period. Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting for Employee Commuting.

Table 10: Employee Commuting GHG Emission Results

Vehicle Type	FY 2021/22		
	Fuel Type	km	tCO ₂ e
Car	EV	2,092.15	0.20
	Petrol	42,027.05	7.33
	Diesel	4,602.72	0.78
Van	Diesel	50,881.02	12.27
Total Emissions	-	48,721.92	20.57

4.11 Upstream Transportation & Distribution

The table below summarises emissions associated with Upstream Transportation & Distribution and Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting.

Table 11: Upstream Transportation & Distribution GHG Emission Results

Transport Type	Units	FY 2021/22	
		km	tCO ₂ e
Import - Road Freight	km	8,616.56	7.85
Import - Sea Freight	Tonnes.km	307,427.38	5.45
UK - Distance	km	542,783.05	354.57
Total Emissions	-	858,826.98	367.87

4.12 Downstream Transportation & Distribution

The table below summarises emissions associated with Downstream Transportation & Distribution and Conversion factors have been used from UK Government GHG Conversion Factors for Company Reporting.

Table 12: Downstream Transportation & Distribution GHG Emission Results

Vehicle Type	FY 2021	
	km	tCO ₂ e
Van	150,676.44	36.34
12 tonne (Van)	145,362.39	85.32
Total Emissions	296,038.83	121.65

4.13 Carbon Intensity Ratios

Carbon intensity is expressed in several ways to provide normalised figures which can be compared on an annual basis to assess performance. Table 13, below, outlines carbon intensity per revenue which is the preferred intensity ratio stated by the Client.

Revenue

Overall performance of the company is assessed using a carbon intensity ratio of tCO₂e per £1,000,000 revenue. This calculation includes all emissions resulting from company fleet, natural gas, electricity, grey fleet, waste, water, business travel and transportation & distribution. The Client provided a revenue figure of £5,611,801 in 2021.

Table 13: Carbon Intensity Ratios

Carbon Intensity Ratio	FY 2021
Revenue (tCO ₂ e per £m)	118.904

5.0 Carbon Reduction Plan

5.1 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 our absolute carbon emissions by 45% before 2030, and by 80% prior to 2050. The Paris Agreement entered into force on 4th November 2016, with the United Kingdom one of the first nations to ratify the Agreement.

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

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

5.2 Emergent Crowns Contract Office Furnishings' Target

The Client has informed Delta-Simons that they wish to become carbon net-zero by 2040, via reducing their emissions as much as possible before offsetting the residual emissions.

The following recommendations suggest potential actions that Emergent Crown Contract Office Furnishings Ltd could take to reduce their emissions.

5.3 Recommendations

5.3.1 Transportation & Distribution

The first carbon reduction measure that the Client should consider would involve sourcing greener freight options and utilise electric vehicle transport where possible. If transport is made by a supplier that has an 100% electric fleet, then by reporting that, calculated emissions will reduce.

External influence refers to the expected shift in technology and infrastructure that countries and companies will have to adopt in order to meet their Net Zero targets. These include:

- Electrifying fleet vehicles; and
- Improving delivery routes and strategy.

5.3.2 Renewable Electricity Tariffs

The Client should consider the procurement of REGO-backed renewable energy tariffs for electricity supply to all sites. 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. If all sites are supplied with renewable electricity tariffs, it will reduce emissions by approximately 7 tCO₂e per year.

5.3.3 Company Fleet

The Client should consider replacing its current fleet of company-owned vehicles from diesel fuelled vehicles towards hybrid and/or fully electric alternatives. It is recommended that at the end of each vehicle's

lease, the Client should first look to replace vehicles with hybrid models, before exchanging these to fully electric once the hybrid leases have expired.

If the entire fleet was transitioned to fully electric vehicles, total fleet emissions could be entirely carbon neutral should they only be charged using REGO-backed electricity tariffs at any of the Client's sites. This will reduce emissions by approximately 112 tCO₂e per year.

5.3.4 Heat Decarbonisation

The Client currently has natural gas supplies at all their sites. It is recommended that the Client considers replacing any heating systems with alternatives which do 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. If all sites are supplied with renewable electricity tariffs, it will reduce emissions by approximately 33 tCO₂e per year.

5.3.5 Energy Efficiency Programmes

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

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

Where not already installed, LED lighting can replace fluorescent and incandescent lighting to achieve significant energy savings. Where financially feasible, further implementation of automated controls should also be combined with LED technology to achieve full optimisation. The installation of technology such as: PIR motion and daylight sensors for lighting, CO₂ sensors for ventilation and temperature sensors can help to ensure environmental parameters in the office are kept to the most efficient levels.

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

5.3.6 Employee Commuting

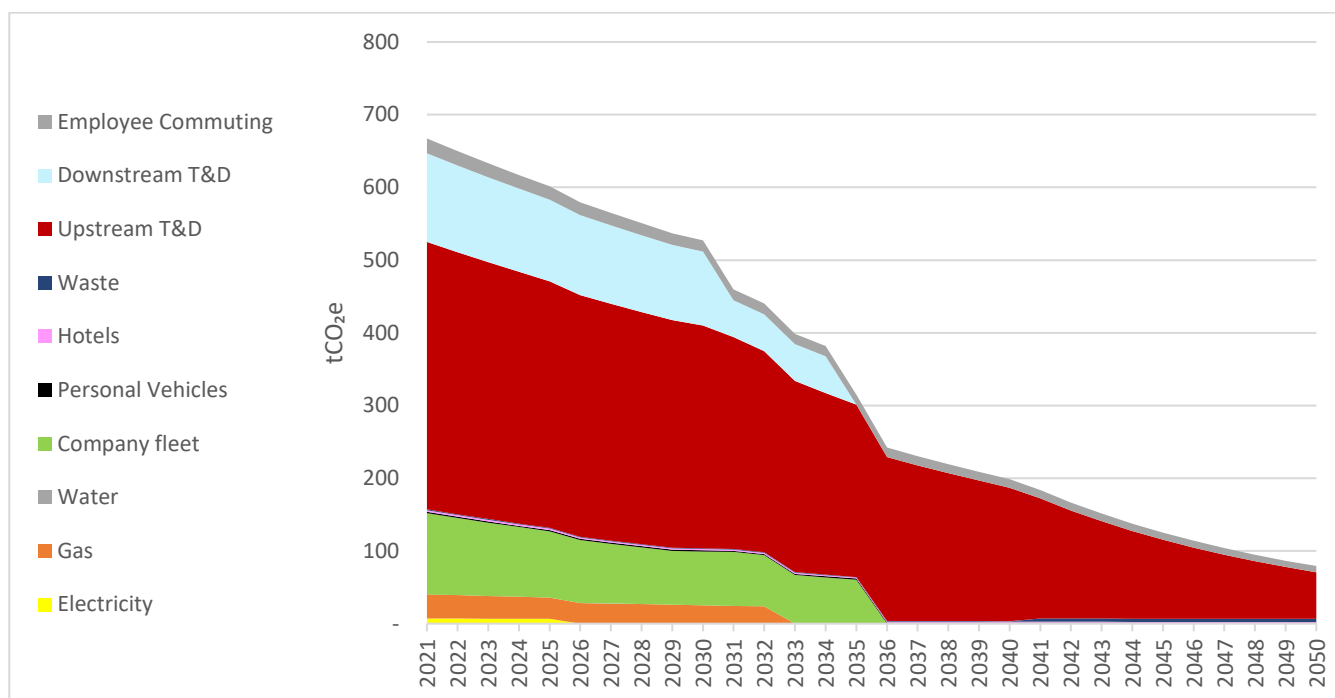
The Client should also aim to reduce employee commuting mileage. This may be achieved via the implementation of a green travel plan that promotes active travel. Sustaining working from home/hybrid practices where feasible will also help to reduce the need for commuting.

This may be achieved by introducing initiatives to educate staff on personal footprint (single use plastics, travel, vehicles) and introducing a cycle to work scheme to promote cycling as a green mode of transport, which will reduce associated carbon emissions.

5.4 Carbon Reduction Pathway

Figure 4 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.

Figure 4: Emissions Projection 2021 to 2050



5.5 Carbon Offsetting and Sequestration

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

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

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



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

Delta-Simons can source a variety of carbon offsets and sequestration projects to suite your ambitions and corporate values (solar, wind, carbon capture, rainforest conservation, tree-planting etc.). Projects often have additional social benefits such as health and wellbeing, education, reduced poverty and inequality.

Carbon offsets are typically priced at £10-£16 per tonne, whilst habitat conservation and restoration projects are typically priced at £15-£20 per tonne.

Table 14, below, provides an indication on the potential cost of offsetting and sequestering for the financial year 2021 operational carbon emissions of the Client.

Table 14: Carbon Offsetting and Sequestration

2021 Financial Year (673.94 tCO₂e)	Lower Budget	Higher Budget
100% Offset (Typically £10 - £16 per tonne)	£6,739.36	£10,782.98
50% Additional Offset (Typically £15 - £20 per tonne)	£10,109.04	£13,478.72
Beyond Net Zero Cost Range	£16,848.40	£24,261.70

Appendix A - PPN 06/21 - Carbon Reduction Plan

Carbon Reduction Plan Template

Supplier name: Emergent Crown Contract Office Furnishings Limited

Publication date: 05th September 2022

Commitment to achieving Net Zero

Emergent Crown Contract Office Furnishings Limited has appointed Delta-Simons Ltd to support in the development of a baseline carbon emissions footprint, and the production of a meaningful strategy for reduction of operational emissions to achieve Net-Zero as early as possible

Emergent Crown Contract Office Furnishings Limited is committed to achieve Net Zero emissions by 2040 for scope 1&2 emissions and by 2040 for scope 3 emissions.

Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

Baseline Year: 1st January 2021 – 31st December 2021	
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 of Emergent Crown Contract Office Furnishings Limited.	
Baseline year emissions (2021):	
EMISSIONS	TOTAL (tCO₂e)
Scope 1	144.91
Scope 2	7.17
Scope 3 (Included Sources)	515.19
Total Emissions	667.27

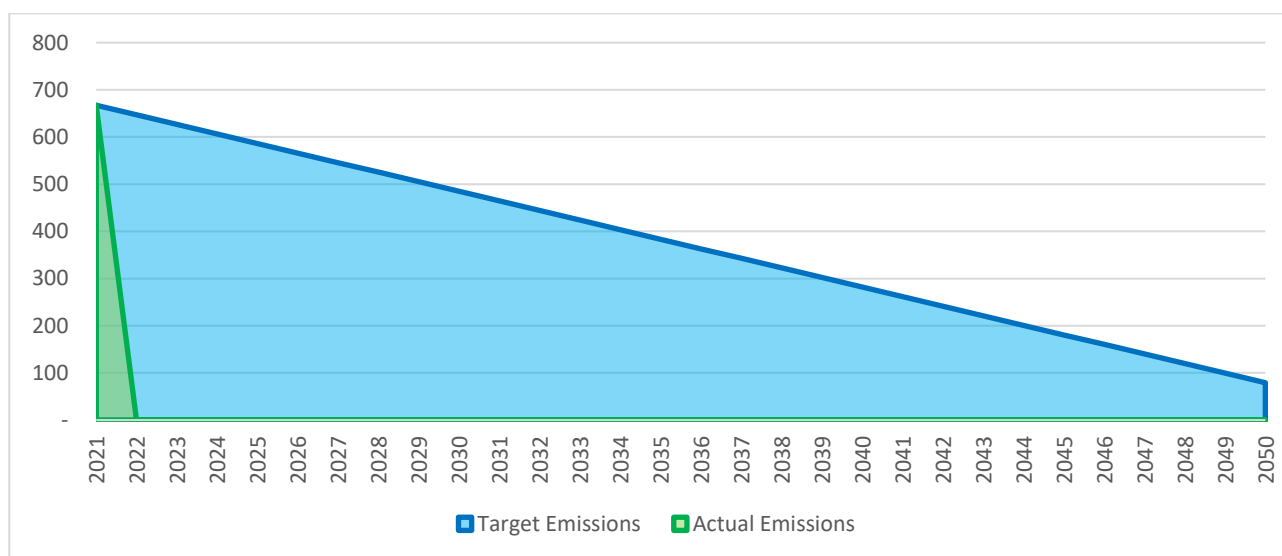
Current Emissions Reporting

Reporting Year: 2021	
EMISSIONS	TOTAL (tCO ₂ e)
Scope 1	144.91
Scope 2	7.17
Scope 3 (Included Sources)	515.19
Total Emissions	667.27

Emissions Reduction Targets

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

We project that total carbon emissions will decrease by 588.09tCO₂e by 2050. This is a reduction of 88%. Progress against these targets can be seen in the graph below which plots the combined trajectory for total emission reductions across all three scopes:



Carbon Reduction Projects

The Client is working to develop specific carbon reduction measures to achieve its near term and long-term carbon reduction goals. These measures are expected to include:

- Transitioning to a fully electric fleet of company vehicles by 2035;
- Invest in heat decarbonisation and the uptake of electricity-based heating systems by 2033;

- Move towards REGO back green electricity tariffs by 2026;
- Engage with suppliers and encourage their uptake of low/ultra-low emission vehicles by 2035.

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 standard¹ and uses the appropriate Government emission conversion factors for greenhouse gas company reporting².

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard³.

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:



Director

Date: 14/09/2022

¹ <https://ghgprotocol.org/corporate-standard>

² <https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

³ <https://ghgprotocol.org/standards/scope-3-standard>

Appendix B - Limitations

Limitations

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

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

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