

RED

**THE WORLD'S LEADING DESIGNER
OF COMPLEX BUILDINGS**

ENVIRONMENTAL MANAGEMENT REPORT

ANNUAL STATEMENT 2023

Prepared by the Sustainability Solutions & Climate Change Team

Copyright © RED Engineering & Design Ltd 2023

A company of **TRACTEBEL**


FOREWORD

This document and its contents are confidential and have been prepared and are intended solely for Red Engineering's information and use.

Red Engineering Design Limited accepts no responsibility or liability to any other party (exception for death and personal injury) in respect of or arising out of or in connection with this document and/or its contents.

Copyright: The copyright of this document is vested in Red Engineering Design Limited. This document may not be reproduced in whole or in part without their express written permission.



MARTIN SIEH
CEO



IAIN MACDOUGALL
Head of Sustainable Solutions & Climate Change



Introducing RED Engineering Design's 2023 Environmental Statement

We are thrilled to present our 2023 Environmental Statement, marking a significant milestone as a part of the Tractebel family. This report showcases RED's environmental performance and progress in alignment with our strategic objectives.

Highlights of 2023

2023 saw remarkable growth and innovation at RED, with an expanded headcount and service offerings to meet the evolving demands of our clients.

Despite our strides in growth and innovation, we acknowledge the challenges in reducing our gross environmental impact. Factors such as increased business travel, commuting, and shifts in carbon grid factors significantly influenced our environmental footprint.

At RED, we firmly believe that sustainability is a shared responsibility. We are dedicated to engaging our employees, clients, and suppliers in our sustainability journey. To drive further progress, our targets for 2024 will be rigorously discussed in our 2024 Energy/Environmental Management reviews, with corrective actions recorded for audit purposes.

New Initiatives for 2024

We are introducing a new, more accurate commuting survey, project carbon and biodiversity screening etc. These will be designed to allow RED and Tractebel pinpoint specific areas for reduction in environmental impact.

Our ongoing mandatory employee training and inductions aim to educate, advocate and inspire innovative approaches to enhance our environmental performance. These efforts have already led to new approaches in data collection, carbon calculation methods, and increased staff engagement.

We extend our heartfelt gratitude to all our stakeholders for their unwavering support and contributions to our sustainability journey. We are excited to collaborate with you to build a more sustainable future for everyone.

We express our sincere appreciation to all individuals involved in collecting, processing, and presenting this report annually. Your dedication and efforts are instrumental in translating our carbon journey from words on a page into tangible affirmative action.

CONTENTS

1.0 INTRODUCTION	6
1.1 PERFORMANCE FIGURES DASHBOARD	8
1.2 PREDICTION & ANALYSIS	10
1.3 CORPORATE SOCIAL RESPONSIBILITY	10
1.4 MANAGEMENT SYSTEMS	11
2.0 ABOUT RED	12
3.0 RED SUSTAINABILITY GOALS	14
3.1 OFFICE ENERGY AUDITS	16
3.2 OFFICE WASTE AUDITS	16
3.3 BIODIVERSITY	17
4.0 RED SITES	18
5.0 RED PERFORMANCE BY CATEGORY	22
5.2 CARBON FACTORS	23
5.3 WATER CONSUMPTION	26
5.4 MATERIALS & WASTE	26
5.5 COMMUTING & BUSINESS TRAVEL	27
5.6 OCCUPANCY TRACKING	29
6.0 RED PERFORMANCE BY SITE	30
6.1 LONDON, UK (HEAD OFFICE)	32
6.2 OXFORD, UK	34
6.3 GUILDFORD, UK	36
6.4 NEWCASTLE, UK	38
6.5 SINGAPORE	40
6.6 TURKEY, ISTANBUL	42
6.7 MANILA, PHILIPPINES	44
6.8 DUBLIN, IRELAND	46
6.9 CORK, IRELAND	48
6.10 DUBAI, UAE	50
7.0 RED PERFORMANCE BY EMPLOYEE	52
8.0 SUMMARY	54
9.0 NEXT STEPS	56
10.0 CORPORATE SOCIAL RESPONSIBILITY	64
10.1 ENVIRONMENT	66
10.2 LABOUR PRACTICES	67
10.3 COMMUNITY INVOLVEMENT	70
10.4 FAIR OPERATING PRACTICES	72
11.0 INNOVATION AND RESEARCH DEVELOPMENT	77
APPENDIX A – ISO 14001	78
APPENDIX B – ISO 15001	80
APPENDIX C – Streamlined Energy & Carbon Reporting (SECR)	82
APPENDIX D – Energy Savings Opportunity Scheme (ESOS)	85
SUSTAINABILITY SOLUTIONS & CLIMATE CHANGE TEAM	86



INTRODUCTION

1.0

INTRODUCTION

This document represents the fourth instalment in a series of yearly reports released by the RED Sustainable Solutions and Climate Change team. This report aims to monitor and benchmark our environmental impact and convey our plans for achieving net-zero emissions. The aim is to use this report to communicate to our stakeholders the environmental footprint of RED, our plans to reduce this impact and how well we are executing them. This will then allow the management to review our methods and ensure we achieve actual reductions in our footprint incrementally to zero. The process will eventually address, not only carbon, but all other GHG emissions, biodiversity and our other non-financial performance indicators within our CSR roadmap. Our baseline was set in 2019 at which point we measured our energy usage, carbon generation and a number of other KPIs against which we measure our environmental performance. The report discusses our progress against our overarching targets on an annual basis for the foreseeable future.

In 2023, we continued to update our energy and emissions data processes to improve data quality and more accurately track our performance over time. Specifically, the rolling out of a new company-wide commuting survey and creation of an embodied carbon calculator for MEP systems and services. We recognise that the scope of our environmental impact extends beyond our fuel and energy related emissions and as such, we are currently in the process of expanding our Scope 3 coverage to include all relevant reporting categories (from our value chain). The expanded Scope 3 inventory will be included in our 2024 reporting.

All subsequent reports will provide comprehensive review and analysis of our environmental performance across our offices, with RED's sustainability goals and ISO 14001 and ISO 50001 certification commitments¹. Unlike the period between 2020 and 2022 RED will no longer report under ENGIE Impact but instead will report to Tractebel as part of the wider ENGIE Global environmental reporting.

Tractebel is a global engineering and consulting company delivering integrated solutions for sustainable energy and built environment projects. Tractebel's expertise are trusted worldwide across multiple markets like nuclear, renewables, power & gas, electrical grids, hydropower & dams, water resources & supply, desalination, complex & high-tech buildings, transport infrastructures, and ports & waterways.

By connecting strategy, design, engineering, social & environmental studies, project management and in-house digital applications, Tractebel partners with companies and public authorities to create a positive impact on people and the planet.

Tractebel is part of the ENGIE Group, a global reference in low-carbon energy and services.

¹ REDs ISO certification for 14001 & 50001 apply to our UK offices only. However, the same policies which govern and manage our UK offices apply to ALL RED offices across the world.

1.1 PERFORMANCE FIGURES DASHBOARD

Analysis of RED's performance throughout the period 2019 to 2023 is used to identify potential areas for improvement and forecast future performance. The following figures show the breakdown of use categories and annual performance over this period.

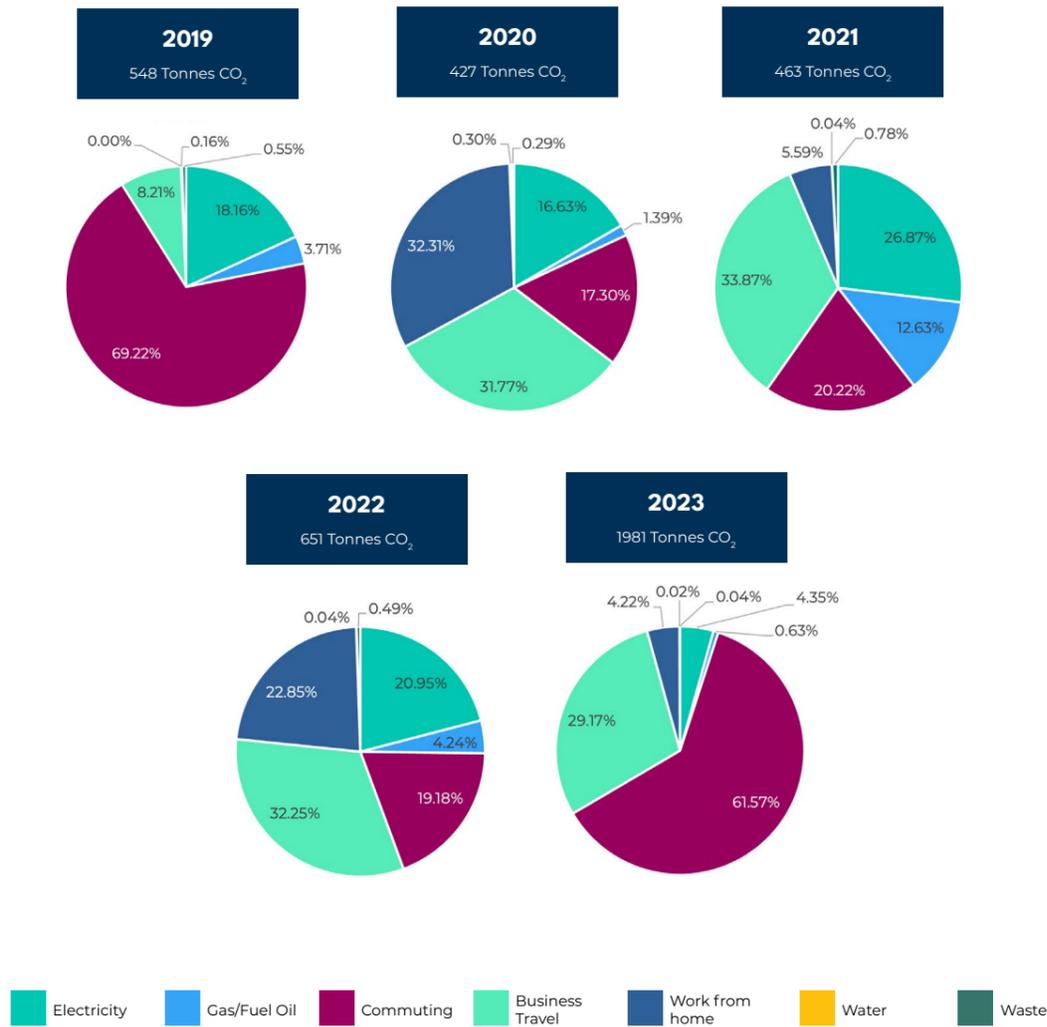


FIGURE 1 Carbon emission by category for period 2019-2023, in percentage of Tonnes CO₂ equivalent



FIGURE 2+3 Annual carbon emissions with and without normalisation from 2019 to 2023 and future projection



FIGURE 4+5 Carbon emission of 2023 with and without normalisation for RED sites

1.2 PREDICTION & ANALYSIS

1.2.1 Analysis

In 2022 RED predicted a marginal reduction in our gross carbon footprint. This was based on the prevailing drop in carbon factors across the world which would affect the electrical grids our offices rely on and, to a lesser degree, the carbon footprint of some forms of transport used for commuting. We also predicted our commuting and business travel to remain similar to 2022.

Our prediction of the carbon generated from our travel was incorrect and we instead witnessed a large increase in flights taken for business and a larger number of employees choosing to commute into our offices.

Finally, we did not predict the impact the Ukraine war would have on energy prices, notably the reduction in the use of gas in Europe and the increase in coal-fired generation. The compound effect of these factors has resulted in an increase in our carbon footprint by a factor of almost 3.

1.2.2 Corrective action

As mentioned in the foreword, RED recognise this level of environmental performance does not meet the targets we have set and as such we will assess our 2023 performance in our management review for ISO 50001, ISO 14001 and wider environmental policies to establish a set of corrective actions and necessary adjustments to address this.

1.2.3 Prediction

RED is conducting a management review of our 2023 environmental performance and upon completion of this, will publish a revised targets and predictions for 2024.

1.3 CORPORATE SOCIAL RESPONSIBILITY

In our ongoing commitment to sustainable business practices, RED embraces Corporate Social Responsibility (CSR) as a guiding principle. We recognise that our operations have far-reaching implications, influencing stakeholders, the well-being of the communities we operate in and the surrounding environment. REDs CSR activities are aligned with the wider Tractebel and ENGIE initiatives which are derived from ISO 26000. Our commitment to reducing our environmental footprint, promoting sustainable resource use, and engaging in community development underscores our dedication to creating a positive and lasting impact. By integrating CSR into our business framework, we strive not only to meet legal and ethical standards but to proactively contribute to a more sustainable and equitable world.

This report reflects our ongoing efforts to uphold these principles, providing transparency on our CSR initiatives and their impact on the environment and society.

Our Statements:

- People, Planet and Prosperity have to balance each other in responsible decision-making
- Our activities may have an impact on the society as a whole
- Our CSR Policy is defined with our stakeholders and based on regular, open dialogue.

1.4 MANAGEMENT SYSTEMS

To assist in achieving our goals, RED has implemented both an Environment Management System (EMS) and an Energy Management System (EnMS) to manage our environmental impact and energy consumption. They are both certified externally through a third party and apply to the UK offices only. The EMS and EnMS are integrated into business processes and designed to assist in achieving the sustainability goals.

ISO 14001 Environmental Management System (EMS)

Key Environmental Aspects are:

- Design activities
- Electricity consumption
- Procurement
- Employee transport
- Waste management

Our Environmental Objectives relate to our Environmental Aspects and support our Sustainability Goals.

ISO 50001 Energy Management System (EnMS)

This report provides the foundational energy report highlighting our energy consumption and tracking against our baseline year of 2019. We have an emphasis on monitoring, measuring and improving our data collection. As the business grows and expands, it is important to use normalisation of energy and resultant emissions. Thus, the performance is evaluated using key energy performance indicators as set out in the EnMS, these are as follows:

- EnPI 001: kWh of electrical energy used per m² of office space
- EnPI 002: kWh of heating fuel energy used per m² of office space
- EnPI 003: Total kWh of energy used per employee

Both management systems are discussed regularly by the senior management team at Management Reviews with quarterly reporting to the Board on progress against KPIs. In addition, each management system has a policy that has been signed off by the CEO. These policies also apply to offices that are not externally certified to normalise the conservation of nature and reduce our energy consumption.

ABOUT RED

2.0

ABOUT RED

RED Engineering Design is a global company of specialist building services and ICT engineers. For the last two decades, RED has spearheaded efforts towards the zero-carbon goal by providing step-change low-carbon solutions.

The comprehensive range of RED Engineering services spans the entire life cycle of construction projects, delivering time, cost and resource efficiencies for clients. From Mechanical, Electrical, and Public Health Engineering to Process Design and Advisory Consultancy, RED offers a broad spectrum of services. With 20 years of exemplary client service, RED's acclaim for leading technical capabilities is rooted in exceptional talent, a supportive work environment, and an unwavering dedication to diversity and inclusion.

The key facts that describe RED Engineering Design are:

- A skilled team with experience spanning various construction sectors.
- Demonstrated history of performance improvements, contributing to reduced operational costs and environmental impact.
- Conducting due diligence and energy audits globally, providing support to organizations worldwide and assisting in environmental performance reporting for the world's leading companies.
- Implementation of advanced analytical tools and policies aimed at establishing and reinforcing continuous improvement cycles.

In 2023, the integration of RED into Tractebel marked a significant milestone for the company. Tractebel is a global engineering and consulting company, providing holistic solutions for sustainable energy and built environment projects. Tractebel operates under the ENGIE Group, a prominent player in low-carbon energy and services on a global scale.

3.0

RED SUSTAINABILITY GOALS

RED SUSTAINABILITY GOALS

At RED all efforts align with a singular mission: to 'Make Sustainability Happen Today'. The Sustainability Solutions and Climate Change (SS&CC) team are working with RED colleagues to achieve our Sustainability goals. RED are a net positive carbon contributor to our parent company, Tractebel who will offset those emissions to achieve the groups sustainability goals.

■ 'Carbon Negative' by end of 2021

Goal achieved

Goal was achieved in 2021 by reducing 21% of 2020 emissions, and second by purchasing both renewable electricity certificates and carbon offset credits for the remaining emissions to become 'carbon neutral', and finally a step further, purchased more offsets to achieve the 'negative carbon' goal.

Since the inception of this goal RED have, through ENGIE¹ off-set our carbon footprint to claim that we are 'Carbon negative'. This practice is under constant review, and while we still believe it is correct to invest in carbon off-setting, we recognise that defining our operations as 'carbon negative' could be misleading.

Therefore, while we will continue to strive to meet our energy and carbon targets in the same manner it is likely that RED will adjust how we describe our operations to align with the EU NFDR & CSRD regulations along with SBTi guidelines.

■ Balance water footprint internationally by 2023

Goal is behind target

RED have been unable to reduce our gross water consumption in any discernible measure in 2023. This is due to:

1. Our inability to secure more accurate measurement of our office water consumption.
2. Our inability to identify specific water usage savings policies or plans.
3. Our inability to secure internal funding for water restoration certificates (WRCs) to achieve global water balance.

■ Reduce upstream and waste to landfills to achieve zero waste by 2023

Goal is behind track

While RED do have a continuous focus on collecting waste data in a few of our offices we have not been able to embed the internal policies and external contracts within in all our locations to address this issue globally.

Proposals to increase our work in this area have been put forward for internal approval.

¹ For details of REDs carbon off-sets please contact us directly.

To assist in achieving the groups goals RED has set minimum annual targets specific to operations. The table below shows the headline targets and the 2023 performance:

TARGETS	2023 PERFORMANCE
A 5% potential demand reduction* year on year	32% reduction
A 5% potential cost reduction** year on year ¹	-
A 5% potential carbon reduction*** year on year	223% increase

¹ Corrected for inflation.

*Potential demand reduction includes office electricity consumption, office gas/fuel oil consumption and working from home energy consumption

** Cost reduction KPI has been evaluated and found to be unnecessary

*** Carbon reduction includes office electricity consumption, office gas/fuel oil consumption, working from home, commuting, business travel, water and waste emissions.

3.1 OFFICE ENERGY AUDITS

The energy audit is a site survey that examines energy conservation and energy flows using data collection, measurement, and their analysis. It identifies the opportunities for system optimization and reduction of carbon footprint. Office level data is typically collected on monthly basis, as a minimum requirement for energy audit, or using existing or secondary smart meters installed to monitor major energy usage. Ideally, this data streamed from smart meters allows the auditor to analyse hourly energy profile and energy delivered to each system. Subsequently, suitable Energy Efficiency Measures (EEMs) can be identified and applied towards the carbon neutral transition. RED aim to audit two of our offices each year using an ESOS/EED, ASHRAE L2 and ISO 50002 compliant template.

3.2 OFFICE WASTE AUDITS

Sending waste to landfill not only takes up valuable land space but also causes air, water and soil pollution, discharging carbon dioxide and methane into the atmosphere. We want to reduce the amount of waste generated across our offices and have continued to undertake waste audits as a means of evaluating current waste management practices and identifying key opportunities to improve diversion and recycling rates.

In 2023, audits have been undertaken at both our London and Oxford offices. The results are to be shared internally and opportunities are to be considered for implementation in 2024. The waste audits are used to plan towards achieving zero-waste and obtaining TRUE certification in the future. The Total Resource Use and Efficiency Certification (TRUE) is a GBCI product dedicated to 'measuring, improving and recognizing zero waste performance'. TRUE was released in 2016 and has since been put into practice globally, with more than 350 projects across 32 countries². We aim to at least align to the zero waste principles which form TRUE, with the goals of achieving TRUE certification in at least one office by 2025 and auditing a further office annually against the same standard.

¹ [TRUE | Zero Waste certification system \(gbc.org\)](#)
² [Projects | TRUE \(gbc.org\)](#)

3.3 BIODIVERSITY

Biodiversity Net Gain (BNG) legislation in the UK, initially scheduled for implementation last year, will take effect in 2024. This is expected to impact all our larger UK new build projects. This change was one of the catalysts feeding into REDs understanding of our environmental impact.

Not only are RED considering how our projects impact the environment and communities in which they are built but also the effect they have on the natural habitats in those areas. To achieve a comprehensive understanding of these factors is one of our targets for 2024.

We aim to:

- Understand what REDs impact on nature is as a business
- Develop and test a method of measuring the potential impact our projects could have on nature, so that we can set out terms of engagement that safeguard and enhance the biodiversity within our influence.

In the UK the newly introduced BNG regulation is a method of ensuring that biodiversity is included into project planning, within a minimum improvement target of 10% is required (Subject to project scale and scope). Currently, achieving this target can be achieved either on site or off-site, with off-site scheme requiring a minimum 30-year maintenance programme for acceptance. Additionally, statutory biodiversity credits can be purchased to essentially 'offset' site requirements. combination of the three available methods may be used for compliance but must follow a hierarchical approach of on-site, off site and biodiversity credits.

The requirements for enhanced site conditions are not necessarily covered by the ecology sections in schemes such as BREEAM or LEED and will require additional consideration on an individual basis. Transitional arrangements have been set out stipulating that BNG will be enforced via planning conditions, and submissions on or after the specified dates can expect to see this included. Any previously granted planning permissions will be exempt, even in cases where variations are requested.

Please be aware this is not a service RED provide, however arrangements are in place to outsource. If your project requires BNG or you have any queries on the above, please contact the SS&CC team.

4.0

RED SITES

RED SITES

RED's engineering and consulting services are geographically oriented, fostering ongoing collaboration and cooperation among different locations. The international standard operating methodology at RED is typically grounded in:

- A Global delivery strategy
- Utilisation of diverse time zones
- Streamlined and efficient project delivery

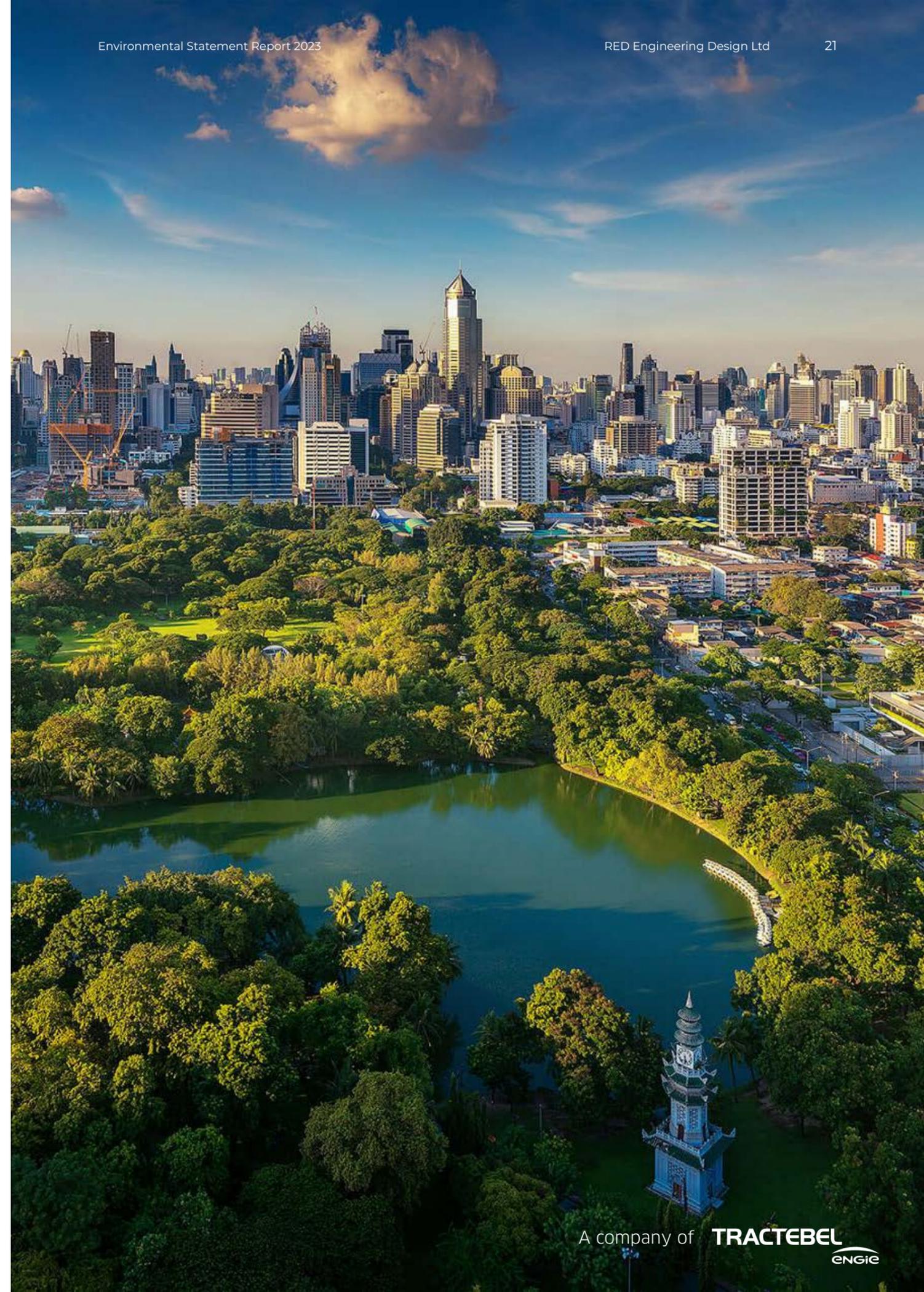
RED offices located in Europe, Middle East (EMEA) and Asia (APAC) regions. Prominent RED locations in EMEA encompass London, Oxford, Newcastle, Guildford, Dublin, Cork, Istanbul, and Dubai. In Asia, the sites comprise Singapore and Manila.



FIGURE 6 RED global existence with representations over continents

OFFICE	YEAR	NUMBER OF OFFICE STAFF	FLOOR AREA (SQ M)	POINT OF CONTACT
Cork, Ireland	2021	3	170	Simona Damerella
	2022	6		
	2023	10		
Dubai, UAE	2019	10	539	Cherryl Cerafica
	2020	13		
	2021	20		
	2022	33		
	Jan-July 2023	35		
	Aug-Dec 2023	35	2130	
Dublin, Ireland	2019	n/a	578	Cris Gonzalez
	2020	n/a		
	2021	19		
	2022	19		
	2023	26		
Guildford, UK	2023	18	17	Carol Tinkler
Istanbul, Turkey	2019	3	105	Kerim Oktay
	2020	3		
	2021	4		
	2022	5		
	2023	5		
London, UK	2019	65	557	Clarissa Bird
	2020	105		
	2021	143		
	2022	163		
	2023	176		
Manila, Philippines	2019	79	656	Christian Dan Jani / Jennyln Flores
	2020	102		
	2021	156		
	2022	248		
	2023	289		
Newcastle, UK	2019	27	130	Claire Yildirim
	2020	18		
	2021	30		
	2022	32		
	2023	41		
Oxford, UK	2019	51	456	Nathalie Hayhoe
	2020	73		
	2021	89	539	
	2022	90		
	2023	78		

TABLE 1 Variable numbers of employees and floor area, and sustainability point of contact



5.0

RED PERFORMANCE BY CATEGORY

RED PERFORMANCE BY CATEGORY

The following subsections summarise RED's environmental performance during the period 2019 to 2023. RED's environmental performance targets will be based on improvements against the 2019 baseline year.

5.1 MAIN ENERGY USES AND CARBON

The energy consumption by RED sites has varied considerably over the period 2019 to 2023. This reporting period sees a reduction in total Electricity, gas and working-from-home (WFH) consumption. Figure 7 shows the breakdown of REDs main energy use categories for the current reporting year; Commuting, Business Travel and WFH. The notable increases in these categories compared to the 2019-2022 period can be attributed to both post COVID-19 'back-to-normal' indicators and changes in reporting methods. The recent implementation of a new commuting survey has revealed an increase in emissions linked to employee commuting. Several factors may have contributed to this rise, including heightened awareness among employees about their commuting habits and associated environmental impacts, resulting in more accurate reporting (see section 5.5 for details).

5.2 CARBON FACTORS

Carbon factors provide standardised values that represent the amount of carbon dioxide (CO₂) emitted per unit of energy consumed or activity undertaken. Using established carbon factors enhances transparency and credibility in reporting efforts as factors undergo continuous review and updating to reflect the latest scientific knowledge, changes in energy production and consumption patterns. In line with this, our report relies on the most recent carbon factors available to ensure that emission calculations remain as accurate and up-to-date as possible.

In the 2023 update, the UK electricity CO₂e factor has increased by 7% compared to the 2022 update. This is due to an increase in natural gas use in electricity generation and decrease in renewable generation and explains the change in electricity carbon factor¹.

¹ <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023>

This year, the carbon factor for business flights has increased from 0.115 to 0.2459. This is due to the calculation of carbon emissions including the consideration of radiative forcing. Carbon emissions from planes at high altitude have an increased effect on global warming. By accounting for radiative forcing, which accounts for the additional warming effect caused by non-CO₂ emissions and their interaction with atmospheric processes, the calculation becomes more accurate and reflects the true climate impact of the flights.

COUNTRY	ELECTRICITY	GAS	HEATING OIL	WATER kg/m ² *	COMMUTING kg/km	AIR TRAVEL kg/km* (INCLUDING REACTIVE)
Ireland	0.322	0.322		0.000298	0.085	0.2.459
Philippines	0.702				0.142	
Singapore	0.4168				0.069	
Turkey	0.412	0.202			0.059	
Dubai, UAE	0.401				0.1923	
UK	0.207	0.18	0.267		0.127	

TABLE 2 Carbon emission factors for the different RED sites

Table 3 shows the energy usage in kWh and its associated carbon emissions, in Tonnes CO₂, calculated using the above factors.

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	kWh	TONNES CO ₂	kWh	TONNES CO ₂	kWh	TONNES CO ₂	kWh	TONNES CO ₂	kWh	TONNES CO ₂
Electricity	250896.2	99.5	186492.6	70.6	359288.1	114.7	428619.5	128.6	243546.7	86.2
Gas / Fuel Oil	99693.8	20.3	41463.8	8.8	235644.7	50.4	134458.0	26.0	66612.0	12.5
Commuting	1897000.0	379.4	672600.0	134.9	711867.2	137.7	588505.6	117.7	4436634.6	1219.8
Business Travel	391304.3	45.0	1193217.4	137.2	314200.1	36.9	1709511.0	197.9	2381977.6	577.8
Work from home	0.0	0.0	310129.9	73.5	481049.9	120.2	451152.8	140.3	384925.5	83.6
Water	3000.0	0.9	4344.0	1.3	828.0	0.2	955.8	0.3	1530.9	0.4

TABLE 3 Main energy consumption categories and carbon emissions

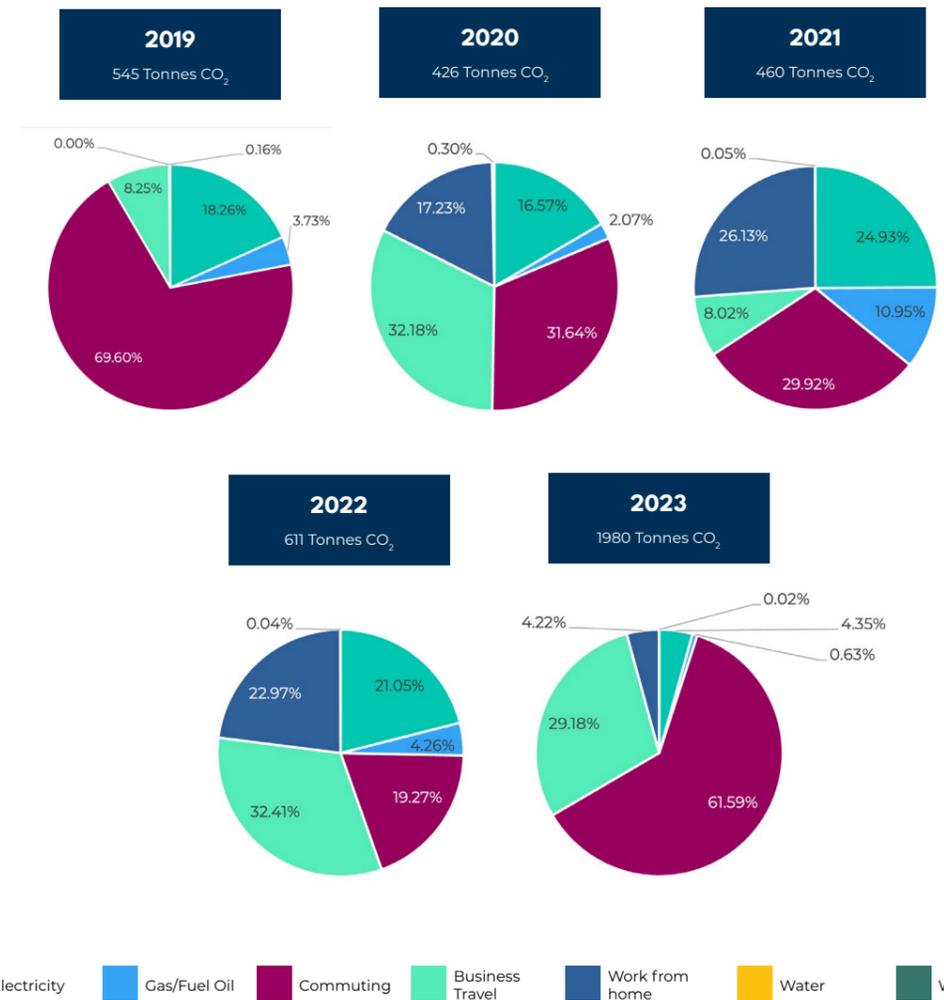


FIGURE 7 Breakdown of energy consumption categories for period from 2019 to 2023

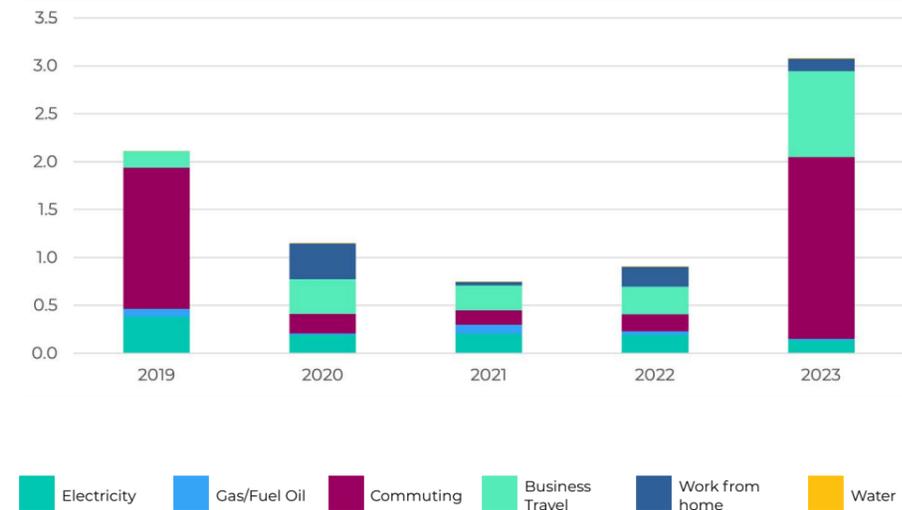


FIGURE 8 Annual carbon emissions per employee for the main energy use categories over the period 2019 to 2023.

5.3 WATER CONSUMPTION

At present, many RED sites do not have metered water consumption. This is primarily due to shared services with neighbouring facilities or the inclusion of water costs in lease contracts. In instances where this applies, estimates have been based on an average of 12 m³/annum/employee, derived from a comprehensive investigation led by the Engie Impact team across the company. By using a higher estimated figure we have accounted for potential variability or unforeseen factors that could increase the value beyond initial projections and allows us to set more ambitious targets for reducing water consumption. Looking ahead, we are planning to incorporate metered water data into our future monitoring efforts, as detailed in section 1.2. This will enhance the accuracy of our reporting in the times to come.

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	m ³	TONNES CO ₂								
Water (annual) ^a	3000	0.9	4344	1.3	828	0.2	955.8	0.3	1530.9	0.4

TABLE 4 Water annual consumption average

^a Estimated from 12 m³ annual average per employee, where RED employees' annual average numbers were: 287, 418, 590, 1006 and 758 for the years 2019-2023, respectively.

5.4 MATERIALS & WASTE

The materials and waste are handled on local basis at the RED sites and this in the UK represents a part of RED's implementation of the ISO 14001. The quantification of carbon footprint due to waste is a complex task and is part of RED's future monitoring plan. In this report, the 2023 data below (Table 5) represents an estimated snapshot figure for the company based upon the 2023 London and Bicester waste audits. The average waste per employee figure from these audits has been applied to REDs total employee count. Note that the carbon factor used to calculate Tonnes of CO₂ is the UK carbon factor obtained from the 2023 UK government Department for Energy Security and Net Zero figures. Previous years data is based on example audits carried out by Engie Impact. Figure 9 shows a bar chart of normalised carbon footprint per employee due to the estimate of generated waste for the period from 2019 to 2023 and future projection assuming 5% carbon reduction.

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Material Waste	-	3	-	1.25	-	3	-	3	39.7	0.8

TABLE 5 Carbon emissions due to the handling of material waste and future projection

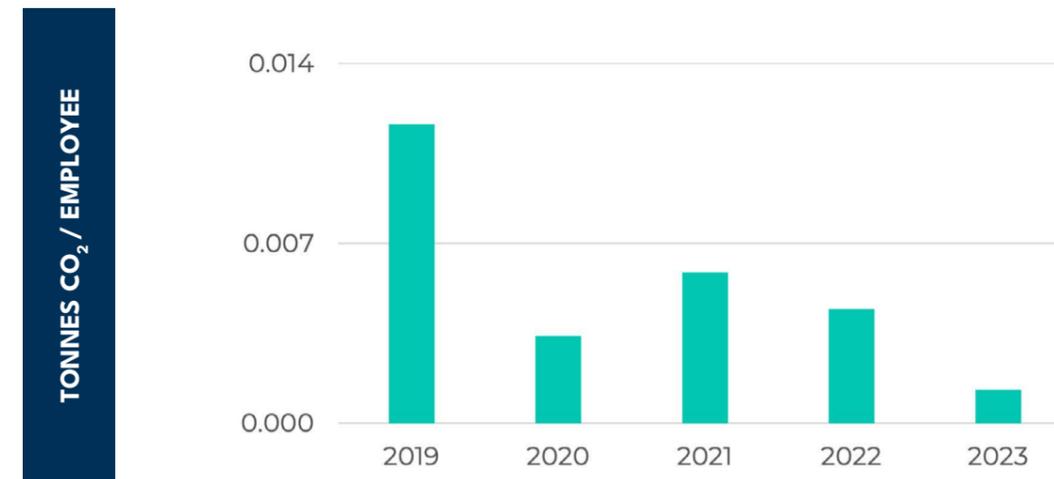


FIGURE 9 Annual carbon emissions due to handling of waste with normalisation

5.5 COMMUTING & BUSINESS TRAVEL

Since 2019, commuting and business travel have represented the highest category contributing to RED's emissions. This was evaluated to be in the range of 70% of total emissions in 2019. In this reporting, the weighting of the commuting emissions is based on a newly implemented commuting survey (38% response rate) for all RED sites. The carbon factor to this emissions is no longer based on the assumption of private car use but, instead are transport node specific. In cases where office response rates were lower, data extrapolation was employed.

The increase in tonnes of CO₂ emissions from employee commuting can be attributed to improvements in data collection methods and the conclusion of COVID-19 restrictions.

Enhanced data collection techniques, such as more precise tracking systems and surveys, has enabled us to capture a more accurate picture of our carbon footprint associated with these two categories. This improved visibility often reveals higher emission levels than previously estimated, as shown in figure 10 and 11.

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	km	TONNES CO ₂	km	TONNES CO ₂	km	TONNES CO ₂	km	TONNES CO ₂	km	TONNES CO ₂
Commuting	1897000.0	379.4	672600.0	134.9	711867.2	137.7	588505.6	117.7	4436634.6	1219.8
Business Travel (air)	391304.3	45.0	1193217.4	137.2	314200.1	36.9	1709511.0	197.9	2381977.6	577.8

TABLE 6 Carbon emissions from commuting and business travel

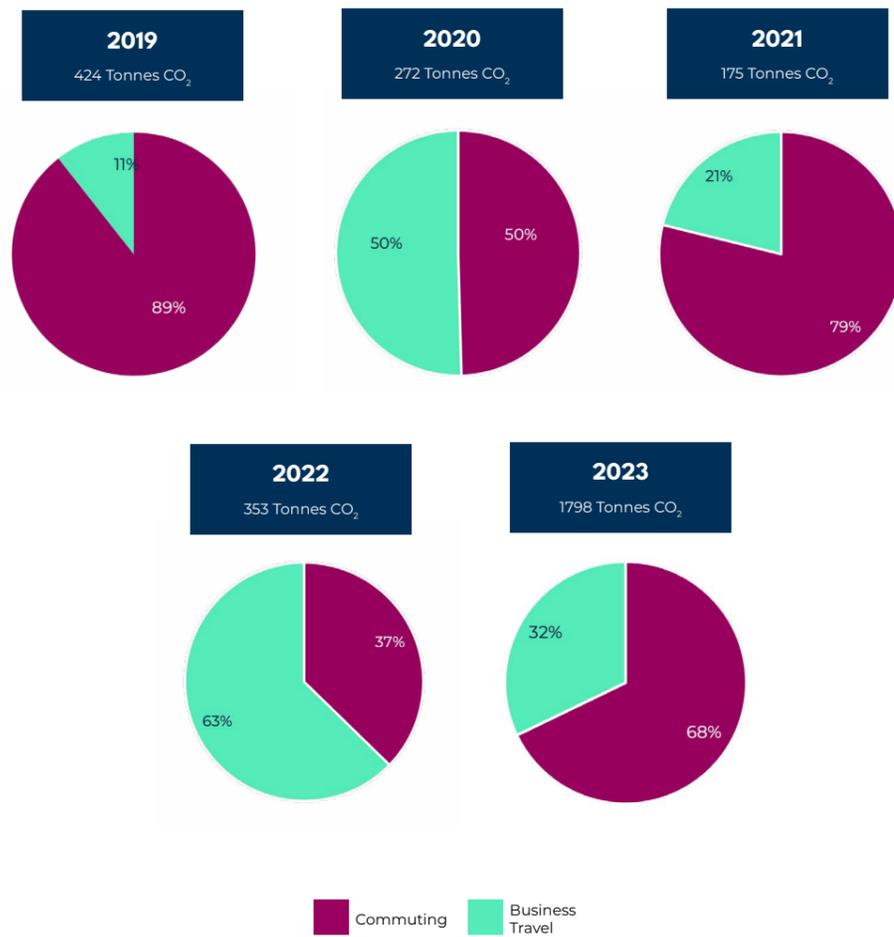


FIGURE 10 Breakdown of travelling categories from 2019 to 2023

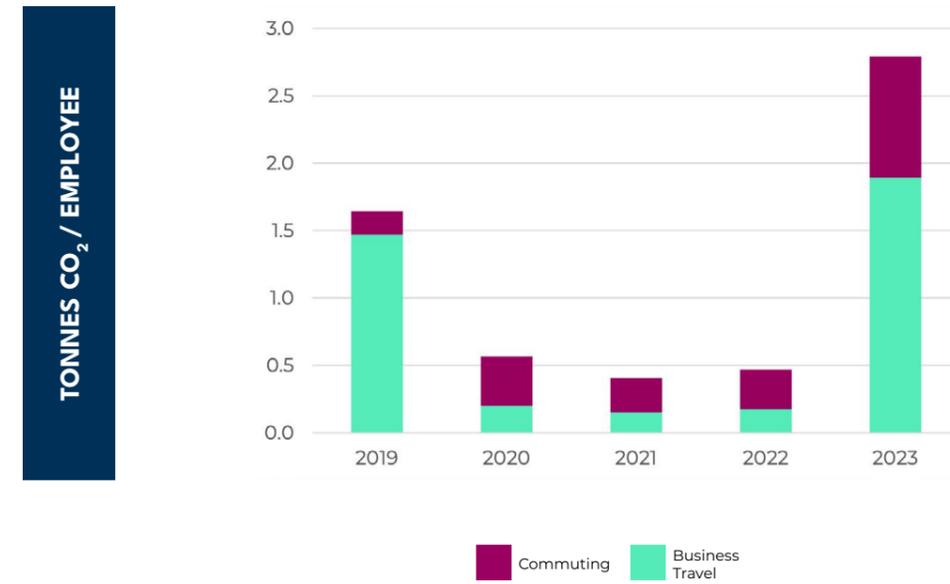


FIGURE 11 Annual carbon emissions due to travelling with normalisation for period of 2019 to 2023

5.6 OCCUPANCY TRACKING

This year, improvements have been made in calculating CO₂ emissions resulting from working from home. We refined our approach by utilising data extracted from our office attendance booking system, alongside regional specific average household electricity and gas consumption figures and average household occupancy statistics. This enabled more accurate estimations of the energy consumption linked to employees' remote work activities.

6.0

RED PERFORMANCE BY SITE



6.1 LONDON, UK (HEAD OFFICE)

Office Characteristics

Lease type: **5-year contract**
 Total Floor Area: **557m² (end of 2023)**
 Number of Staff: **206 (end of 2022)**
 Number of Staff: **176 (end of 2023)**

Systems

Heating: **Gas central heating**
 Airconditioning: **Chilled water system**
 Power: **Day/Night rate**
 Water: **Estimate per sq. meter**
 Renewables: **Indirect**

CONTACT

Office Manager: Clarissa Bird



Carbon Emissions

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	51,608	13	64,936	15	100,992	21	177,300	34	104,441	21.6
Gas / Fuel Oil (kWh)	53,856	10	15,826	3	111,588	21	103,028	19	21,415	3.9
Commuting (km)	646,000	129	165,250	33	165,250	33	337,121	67	996,839	337.30
Business Travel (km)	170,435	20	519,739	60	75,616	9	684,489	79	714,027	175.58
Work from home (kWh)	0	0	102,900	21	140,140	28	130,371	25	197,086	37.18
Water (m ³)	780	0	1,260	0	58	0	407	0	302	0.09

TABLE 7

Carbon emissions by category for the period from 2019-2023

¹ Electricity is 100% backed by REGO (Renewable Energy Guarantees Origin) and gas is 100% carbon offset.

² Gas data for 2019 and 2020 were missing December-March winter months and assumption was made to fill in using 2021 data

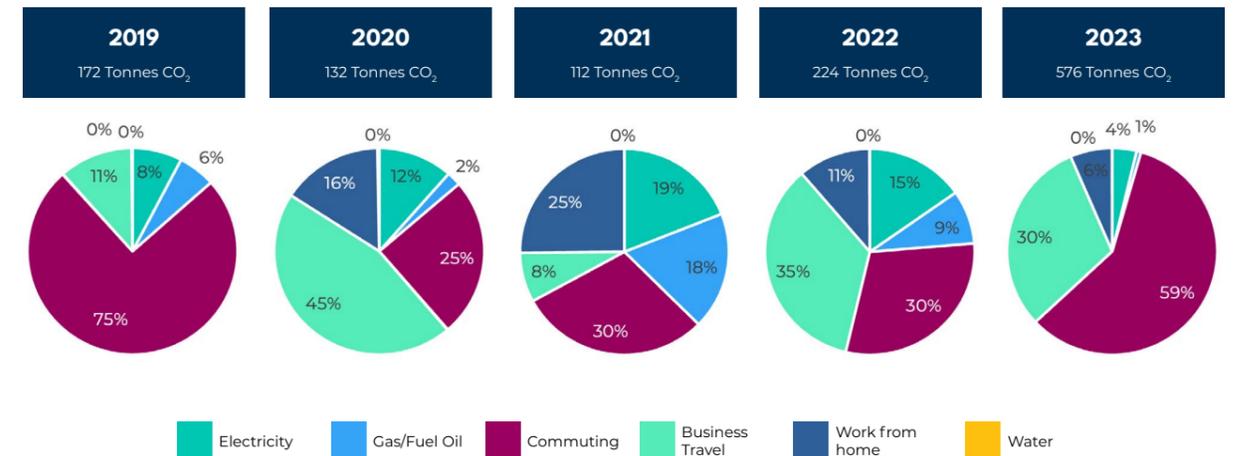


FIGURE 12

Breakdown of carbon emissions categories for period from 2019 to 2023

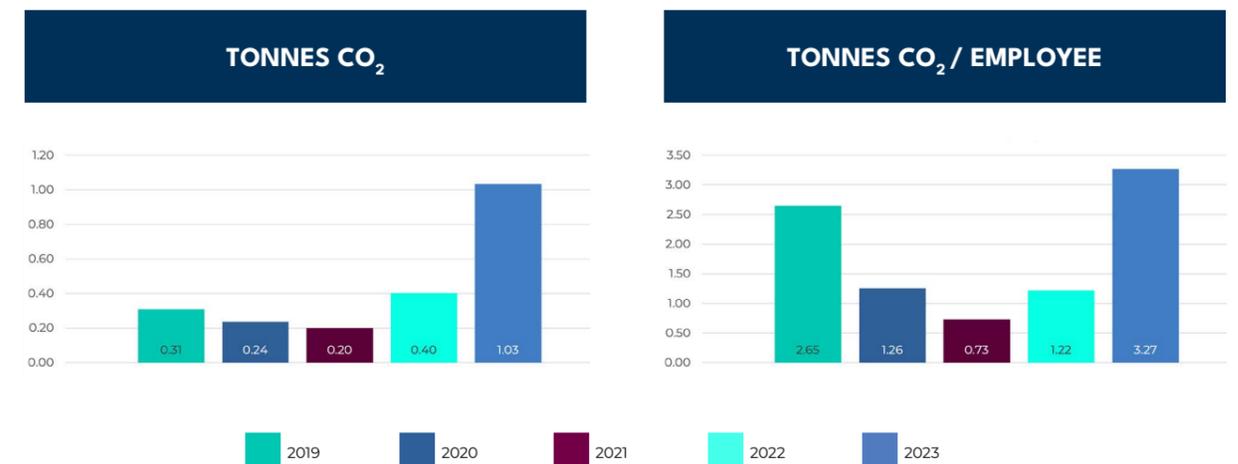


FIGURE 13

Annual carbon emissions with normalisation by site floor area

FIGURE 14

Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for London office's emissions by category were based on:

- 1 Gas/fuel, Electricity, and water usage: obtained from utility bills.
- 2 Commuting: information derived from survey data.
- 3 Working from Home: based on office occupancy percentages, average household utility usage and average household occupancy figures.
- 4 Business travel data: sourced from internal documented records.
- 5 Waste: based on company's estimated average, this will continue to be reported.

6.2 OXFORD, UK

Office Characteristics

Lease type: **3-year contract**
 Total Floor Area: **539m² (end of 2023)**
 Number of Staff: **85 (end of 2022)**
 Number of Staff: **78 (end of 2023)**

Systems

Heating: **Oil fired and DX**
 Airconditioning: **VRF DX system**
 Power: **Day/Night rate**
 Water: **Estimate per sq. meter**
 Renewables: **Indirect**

CONTACT

Office Contact: Nathalie Hayhoe



Carbon Emissions

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	59,216	15	38,026	9	81,082	17	53,242	10	24,657	5.11
Gas / Fuel Oil (kWh)	31,707	8	18,455	5	113,486	28	20,679	5	3,105	0.83
Commuting (km)	611,000	122	298,250	60	298,250	60	183,706	37	450,469	122
Business Travel (km)	136,522	16	416,261	48	59,528	7	538,853	62	425,801	104
Work from home (kWh)	0	0	88,650	18	108,080	22	90,141	17	71,645	13.5
Water (m ³)	612	0	876	0	36	0	184	0	278	0.8

TABLE 8

Carbon emissions by category for the period from 2019-2023

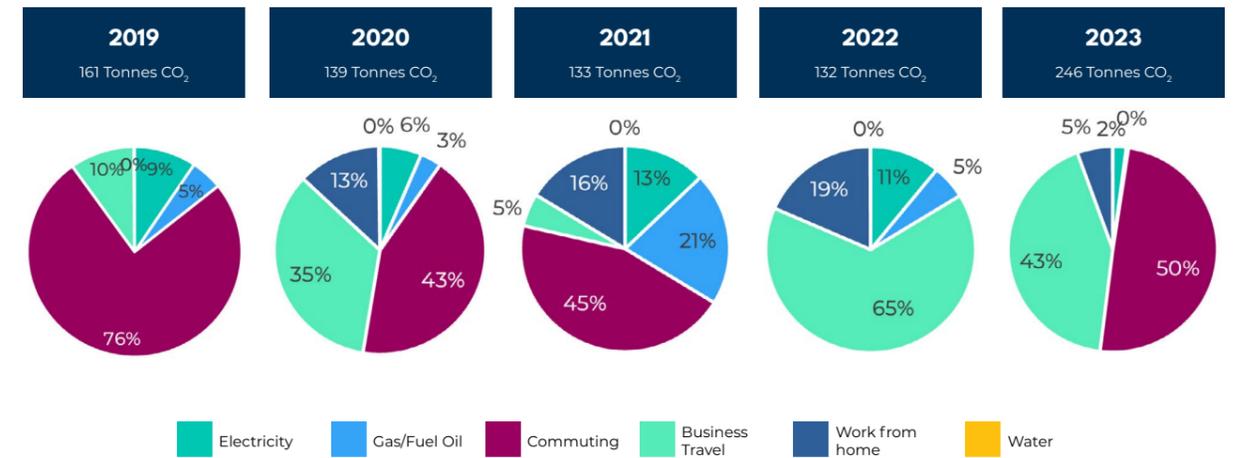


FIGURE 15

Breakdown of carbon emissions categories for period from 2019 to 2023



FIGURE 16

Annual carbon emissions with normalisation by site floor area

FIGURE 17

Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for Oxford office's emissions by category were based on:

- 1 Electricity and fuel oil usage: obtained from utility bills. Data for November and December was unavailable, an average across 10 months was utilised for estimation.
- 2 Water consumption: derived from survey data and occupancy percentages.
- 3 Commuting: information derived from survey data.
- 4 Working from Home: based on office occupancy percentages, average household utility usage and average household occupancy figures.
- 5 Business travel: sourced from internal documented records.
- 6 Waste: based on company's estimated average, this will continue to be reported.

6.3 GUILDFORD, UK

Office Characteristics

Lease type: **6-months lease**
 Total Floor Area: **17m² (end of 2023)**
 Number of Staff: **19 (end of 2022)**
 Number of Staff: **18 (end of 2023)**

Systems

Heating: **DX**
 Airconditioning: **DX**
 Power: **Included in lease**
 Water: **Included in lease**
 Renewables: **Central**

CONTACT

Office Contact: Carol Tinkler



Carbon Emissions

CONSUMPTION	2021	2022		2023	
		USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	Site Opened	0	0.0	0	0
Gas / Fuel Oil (kWh)		0	0.0	0	0
Commuting (km)		2436	0.5	90,774	4.18
Business Travel (km)		0	0.0	75,678	10.70
Work from home (kWh)		33786	6.5	22,897	4.32
Water (m ³)		5	0.0	5.74	0

TABLE 9

Carbon emissions by category for the period from 2022-2023

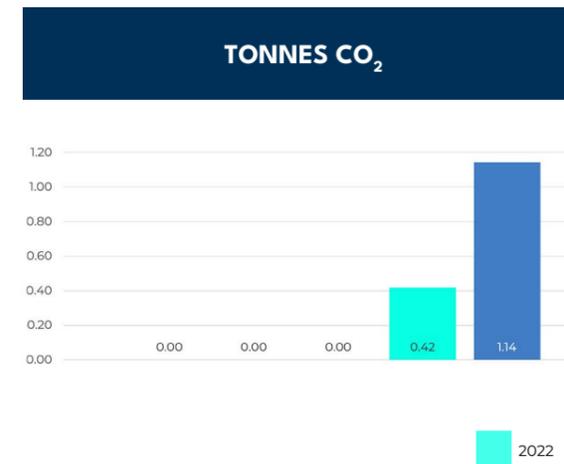


FIGURE 18

Annual carbon emissions with normalisation by site floor area

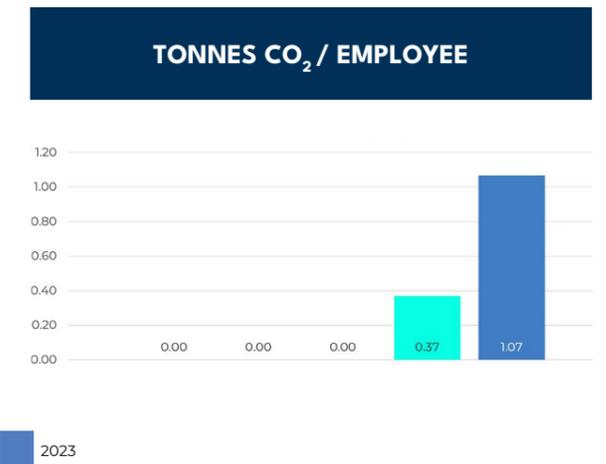


FIGURE 19

Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for Guildford office's emissions by category were based on:

- 1 Gas/fuel, Electricity, and Water consumption: inclusive in lease. An estimation method is planned for next period.
- 2 Commuting data based on survey data.
- 3 Work from Home: based on office occupancy percentages.
- 4 Business travel data: sourced from internal documented records.
- 5 Waste: based on company's estimated average, this will continue to be reported.

6.4 NEWCASTLE, UK

Office Characteristics

Lease type: **3-year contract**
 Total Floor Area: **228m² (end of 2023)**
 Number of Staff: **33 (end of 2022)**
 Number of Staff: **41 (end of 2023)**

Systems

Heating: **Gas central heating**
 Airconditioning: **N/A**
 Power: **Day/Night rate**
 Water: **Estimate per sq. meter**
 Renewables: **Indirect**

CONTACT

Office Contact: Claire Yildirim



Carbon Emissions

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	33,333	9	2,704	1	18,257	4	11,070	10	10,046	2.08
Gas / Fuel Oil (kWh)	14,130	3	7,011	1	10,571	2	10,571	5	41,791	7.56
Commuting (km)	289,000	58	110,200	22	110,200	22	55,798	37	185,111	40.10
Business Travel (km)	55,652	6	169,739	20	25,742	3	233,018	62	166,260	40.88
Work from home (kWh)	0	0	34,550	7	57,583	12	51,570	17	39,058	7.37
Water (m ³)	324	0	216	0	332	0	63	0	650	0.19

TABLE 10

Carbon emissions by category for the period from 2019-2023

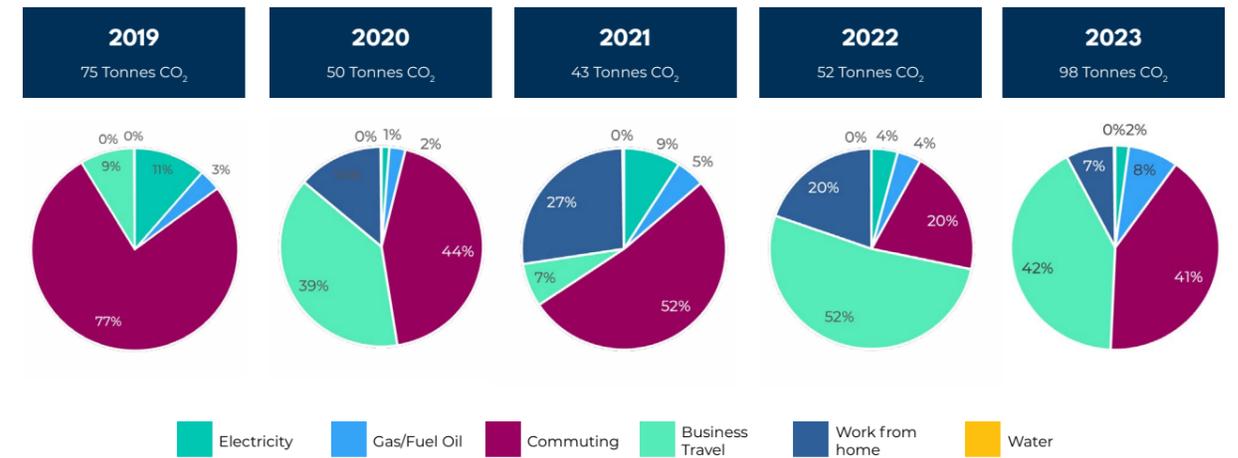


FIGURE 20

Breakdown of carbon emissions categories for period from 2019 to 2023



FIGURE 21

Annual carbon emissions with normalisation by site floor area

FIGURE 22

Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for Newcastle office's emissions by category were based on:

- 1 Electricity usage: readings for the office provided by the landlord.
- 2 Gas/fuel usage: readings for the whole building provided by the landlord. December data unavailable so extrapolation performed.
- 3 Water consumption: readings for the whole building provided by the landlord. October, November and December data unavailable so extrapolation performed.
- 4 Commuting: information derived from survey data.
- 5 Working from Home: based on office occupancy percentages, average household utility usage and average household occupancy figures.
- 6 Business travel data: sourced from internal documented records.
- 7 Waste: based on company's estimated average, this will continue to be reported.

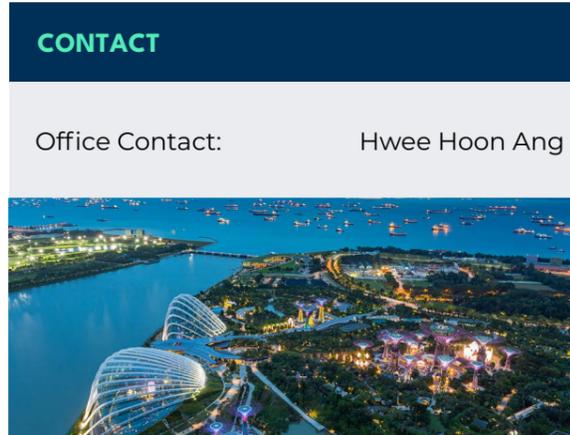
6.5 SINGAPORE

Office Characteristics

Lease type: **3-year lease**
 Total Floor Area: **546m² (end of 2023)**
 Number of Staff: **60 (end of 2022)**
 Number of Staff: **66 (end of 2023)**

Systems

Heating: **N/A**
 Airconditioning: **VRF DX system**
 Power: **Fixed rate**
 Water: **Estimate per sq. meter**
 Renewables: **Indirect**



Carbon Emissions

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	31,105	12	27,738	11	31,762	12	43,153	17	43,653	18.2
Gas / Fuel Oil (kWh)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0
Commuting (km)	67,000	13	33,400	7	33,400	7	83,869	17	157,835	32.50
Business Travel (km)	0	0	0	0	0	0	0	0	450,487	110.77
Work from home (kWh)	0	0	9,589	4	12,075	5	6,653	3	405	0.22
Water (m ³)	216	0	648	0	10	0	20	0	22	0.01

TABLE 11 Carbon emissions by category for the period from 2019-2023

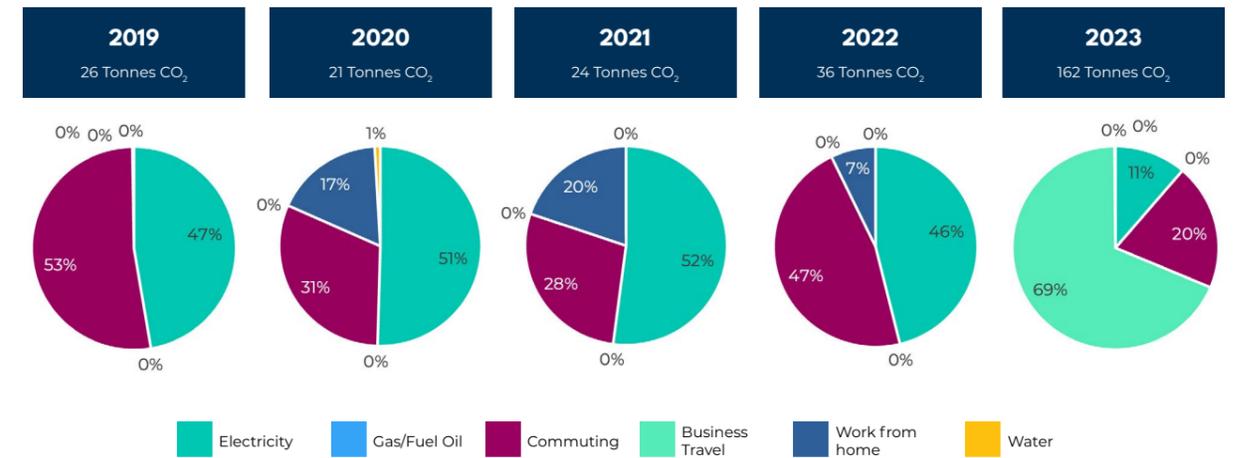


FIGURE 23 Breakdown of carbon emissions categories for period from 2019 to 2023

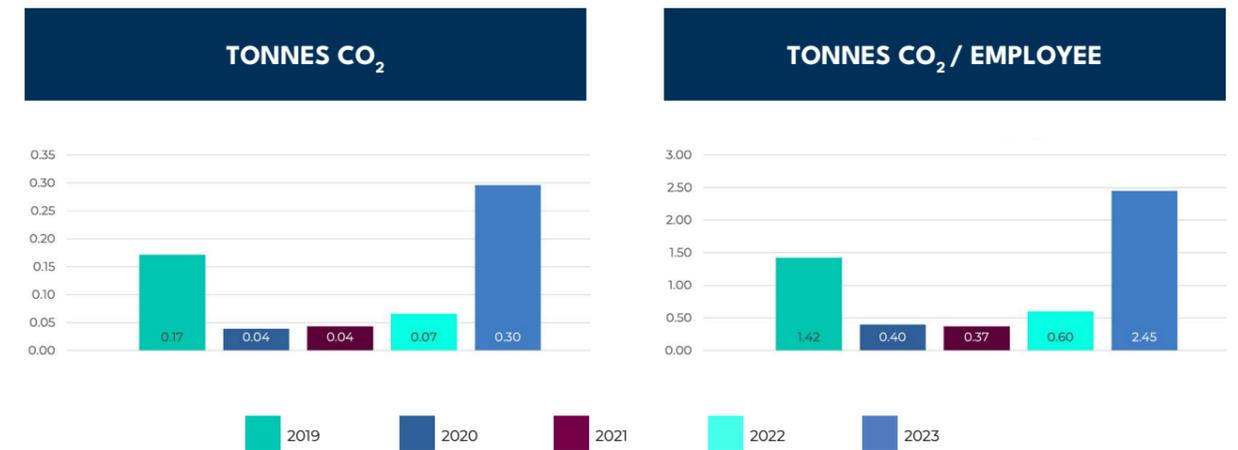


FIGURE 24 Annual carbon emissions with normalisation by site floor area

FIGURE 25 Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

- Data collected for Singapore office's emissions by category were based on:
- 1 Gas/fuel, Electricity, and Water usage: derived from utility bills.
 - 2 Commuting: information derived from survey data.
 - 3 Working from Home: based on office occupancy percentages, average household utility usage and average household occupancy figures.
 - 4 Business travel data: sourced from internal documented records.
 - 5 Waste: based on company's estimated average, this will continue to be reported.

6.6 TURKEY, ISTANBUL

Office Characteristics

Lease type: **3-year lease**
 Total Floor Area: **95m² (end of 2023)**
 Number of Staff: **5 (end of 2022)**
 Number of Staff: **5 (end of 2023)**

Systems

Heating: **Gas fired**
 Airconditioning: **DX split unit**
 Power: **Fixed rate**
 Water: **Estimate per sq. meter**
 Renewables: **Indirect**

CONTACT

Office Contact: Kerim Oktay



Carbon Emissions

CONSUMPTION	2020		2021		2022		2023	
	USAGE UNIT	TONNES CO ₂						
Electricity (kWh)	451	0.2	156	0.1	734	0.3	762	0.32
Gas / Fuel Oil (kWh)	172	0.1	0	0.0	180	0.0	301	0.06
Commuting (km)	0	0.4	4,071	0.4	2,036	0.4	30310	1.80
Business Travel (km)	0	0.0	18,733	2.9	31,536	5.0	37296	9.17
Work from home (kWh)	1,524	0.7	2,031	0.9	1,778	0.7	775	0.33
Water (m ³)	36	0.0	48	0.0	18	0.0	18	0.0

TABLE 12

Carbon emissions by category for the period from 2020-2023

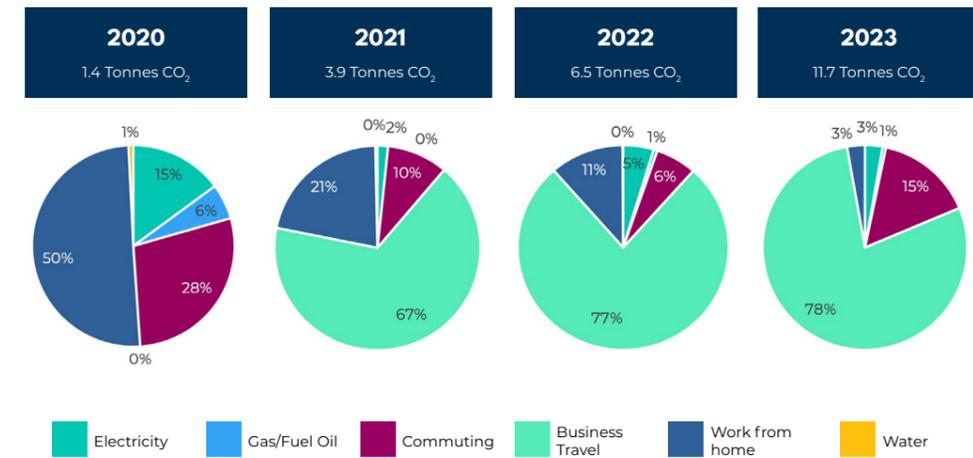


FIGURE 26

Breakdown of carbon emissions categories for period from 2020 to 2023

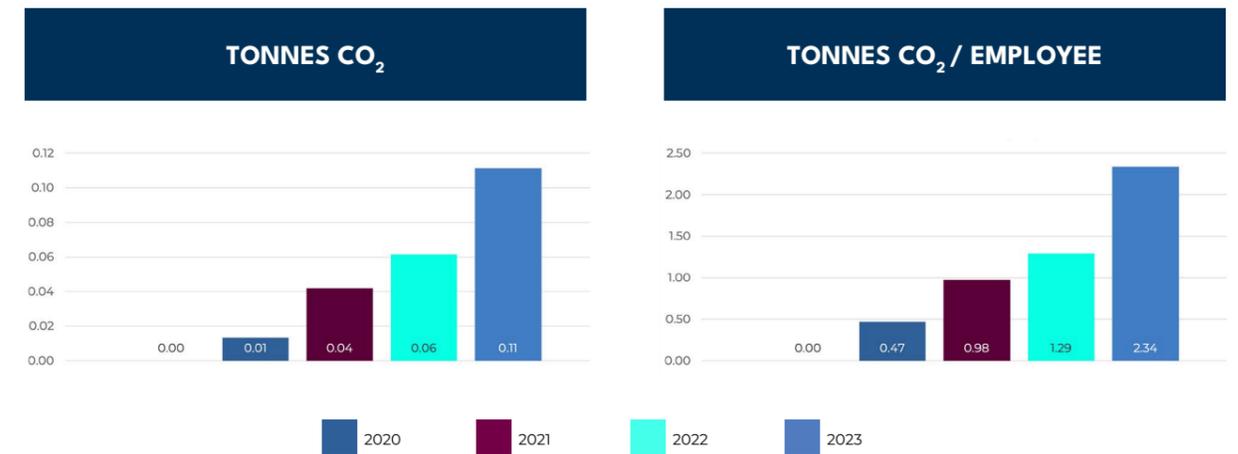


FIGURE 27

Annual carbon emissions with normalisation by site floor area

FIGURE 28

Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for Istanbul office's emissions by category were based on:

- 1 Gas/fuel and Electricity: taken from meter's readings.
- 2 Water consumption: derived from survey data and occupancy percentages.
- 3 Commuting: information derived from survey data.
- 4 Working from Home: based on office occupancy percentages, average household utility usage and average household occupancy figures.
- 5 Business travel data: sourced from internal documented records.
- 6 Waste: based on company's estimated average, this will continue to be reported.

6.7 MANILA, PHILIPPINES

Office Characteristics

Lease type: **3-year lease**
 Total Floor Area: **656m² (end of 2023)**
 Number of Staff: **248 (end of 2022)**
 Number of Staff: **289 (end of 2023 inclusive of RED employees contracted out of the Clark office)**

Systems

Heating: **N/A**
 Airconditioning: **DX system**
 Power: **Fixed rate**
 Water: **Estimate per sq. meter**
 Renewables: **Indirect**

CONTACT

Office Contact: Christian Dan Jani
 Jennyln Flores



Carbon Emissions

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	62364.7	43.78	41965.8	29.46	46728	32.8	37710.00	26.5	49351.0	34.6
Gas / Fuel Oil (kWh)	0	0	0	0	0	0	0	0	0	0
Commuting (km)	136500	27.3	40250	8.05	40250	8.05	13287.64	2.66	2141102.45	524.30
Business Travel (km)	0	0	0	0	0	0	0	0	200481.37	49.30
Work from home (kWh)	0	0	25555.55556	17.94	36574.92355	25.7	50869.15	35.71	10416.62	7.31
Water (m ³)	948	0.28	1308	0.39	58	0.02	69.00	0.02	28.00	0.01

TABLE 13 Carbon emissions by category for the period from 2019-2023

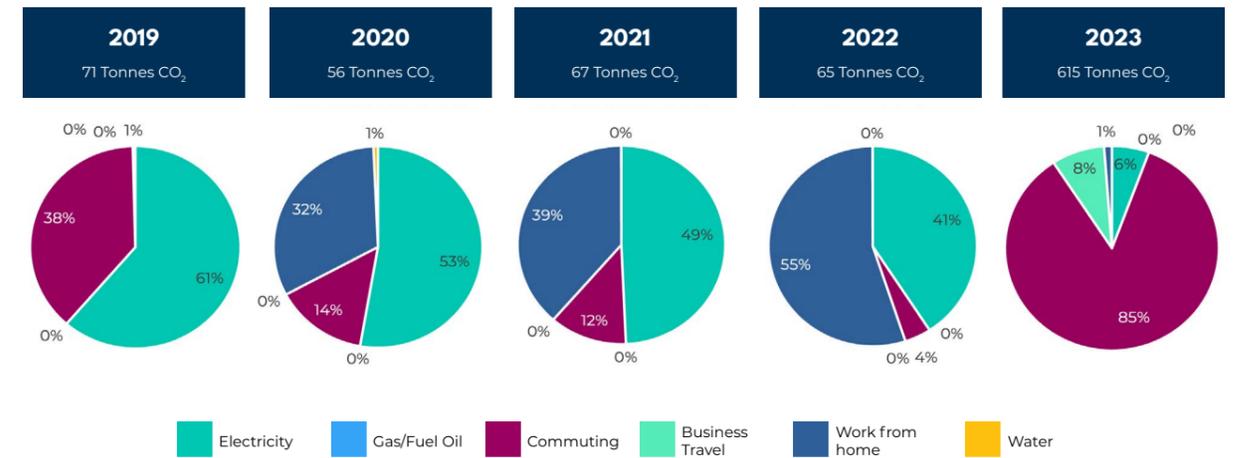


FIGURE 29 Breakdown of carbon emissions categories for period from 2019 to 2023

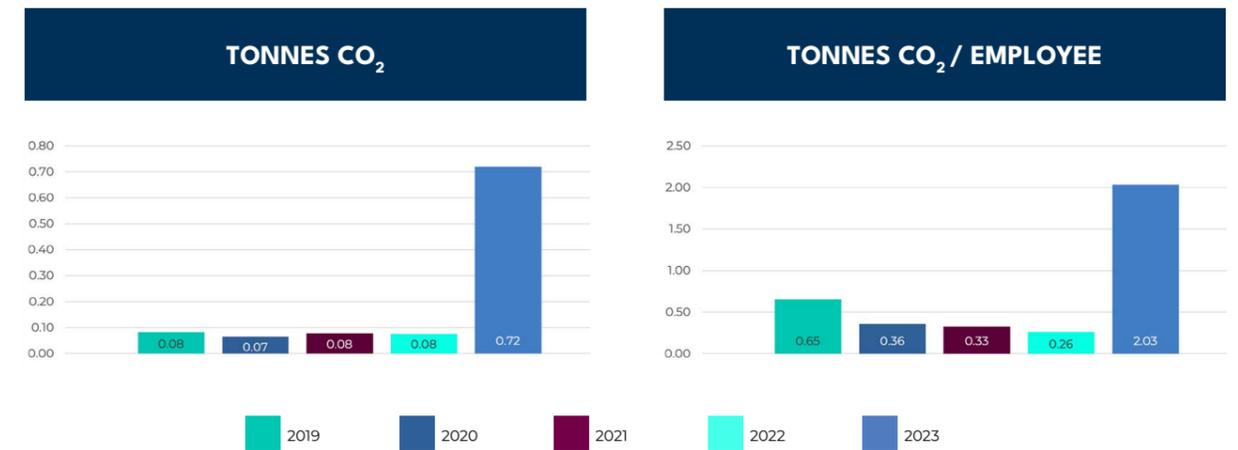


FIGURE 30 Annual carbon emissions with normalisation by site floor area

FIGURE 31 Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for Manila office's emissions by category were based on:

- 1 Gas/fuel, Electricity, and Water usage: derived from utility bills.
- 2 Commuting: information derived from survey data.
- 3 Working from Home: based on office occupancy percentages, average household utility usage and average household occupancy figures.
- 4 Business travel data: sourced from internal documented records.
- 5 Waste: based on company's estimated average, this will continue to be reported.

6.8 DUBLIN, IRELAND

Office Characteristics

Lease type: **3-year lease**
 Total Floor Area: **578m² (end of 2022)**
 Total Floor Area: **109m² (end of 2023)**
 Number of Staff: **19 (end of 2022)**
 Number of Staff: **26 (end of 2023)**

Systems

Heating: **DX**
 Airconditioning: **N/A**
 Power: **Day/Night rates**
 Water: **Metered**
 Renewables: **Not present**

CONTACT

Office Contact: Cristina Gonzalez



Carbon Emissions

CONSUMPTION	2021 CALLAGHAN JOINS RED		2022		2023	
	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	63,891	19	67,146	18	432.53	0.139
Gas / Fuel Oil (kWh)	N/A	N/A	N/A	N/A	0.0	0
Commuting (km)	0	0	0	0	82672.07	10.80
Business Travel (km)	0	0	2,538	0	126733.00	31.16
Work from home (kWh)	34,550	24	30,147	8	19570.87	6.30
Water (m ³)	286	0.1	31	0.0	107.47	0.032

TABLE 14

Carbon emissions by category for the period from 2021-2023

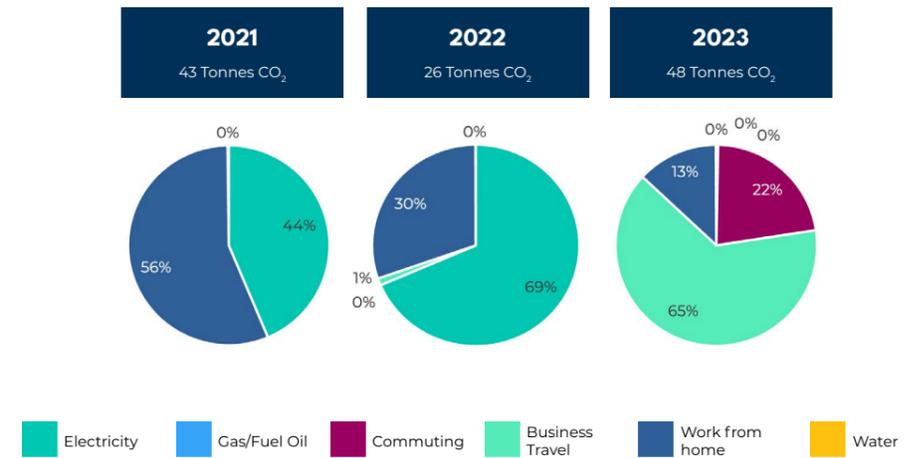


FIGURE 32

Breakdown of carbon emissions categories for period from 2020 to 2023

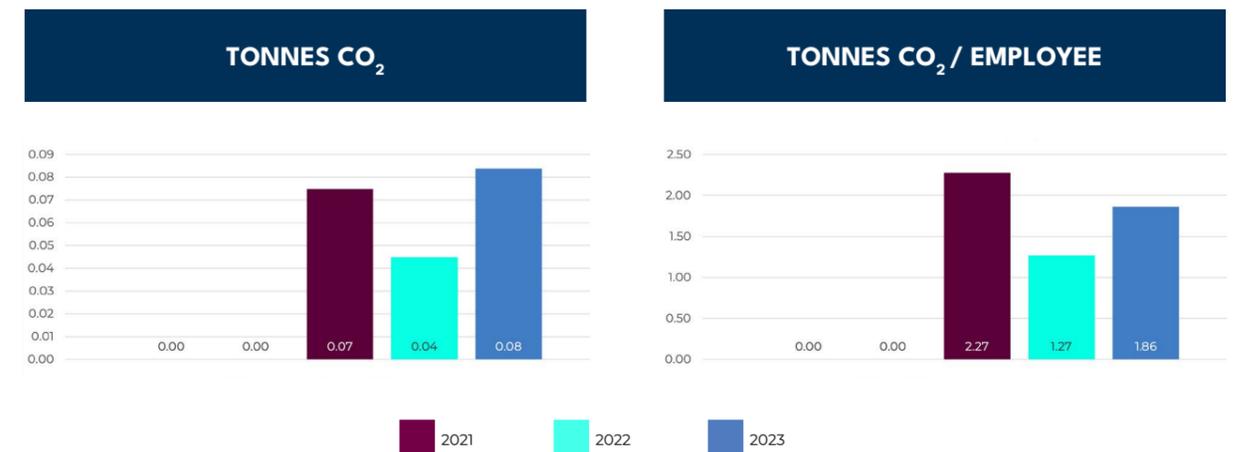


FIGURE 33

Annual carbon emissions with normalisation by site floor area

FIGURE 34

Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for Dublin office's emissions by category were based on:

- 1 Gas/fuel usage: Data not available, office moved to utility inclusive lease.
- 2 Electricity usage: Readings for whole building are provided by the landlord. Data for November and December is unavailable, so extrapolation has been conducted.
- 3 Water consumption: derived from survey data and occupancy percentages.
- 4 Commuting: information derived from survey data.
- 5 Working from Home: based on office occupancy percentages, average household utility usage and average household occupancy figures.
- 6 Business travel data: sourced from internal documented records.
- 7 Waste: based on company's estimated average, this will continue to be reported.

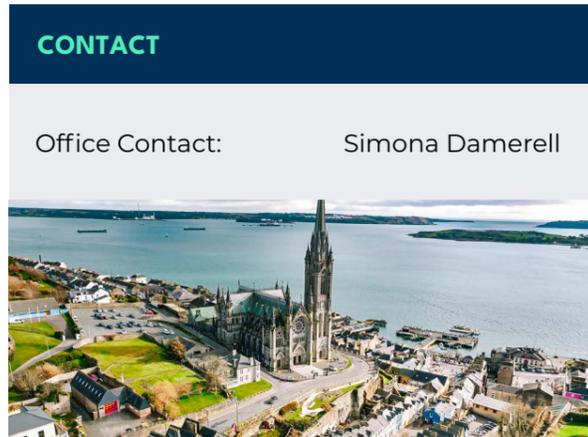
6.9 CORK, IRELAND

Office Characteristics

Lease type: **3-year lease**
 Total Floor Area: **170m² (2022 - Sept 2023)**
 Total Floor Area: **45m² (end of 2023)**
 Number of Staff: **6 (end of 2022)**
 Number of Staff: **11 (end of 2023)**

Systems

Heating: **DX**
 Airconditioning: **DX**
 Power: **TBC**
 Water: **Estimate per sq. meter**
 Renewables: **Not present**



Carbon Emissions

CONSUMPTION	2021 CALLAGHAN JOINS RED	2022		2023	
		USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	No data available	8,357	2	231	0.07
Gas / Fuel Oil (kWh)		0	0	0.0	0
Commuting (km)		0	0	59306	11
Business Travel (km)		6,730	1	30375	7.47
Work from home (kWh)		1,280	0	5453	1.76
Water (m ³)		25	0	63	0.02

TABLE 15

Carbon emissions by category for the period from 2021-2023

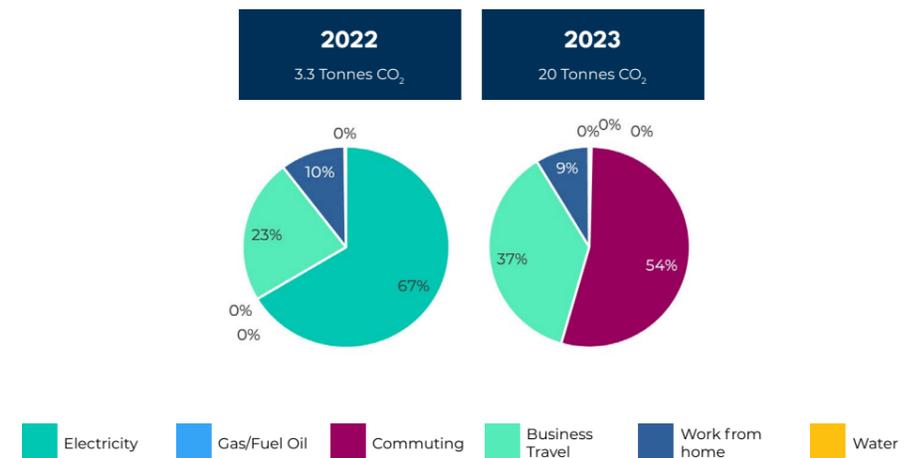


FIGURE 35

Breakdown of carbon emissions categories for period from 2022 to 2023

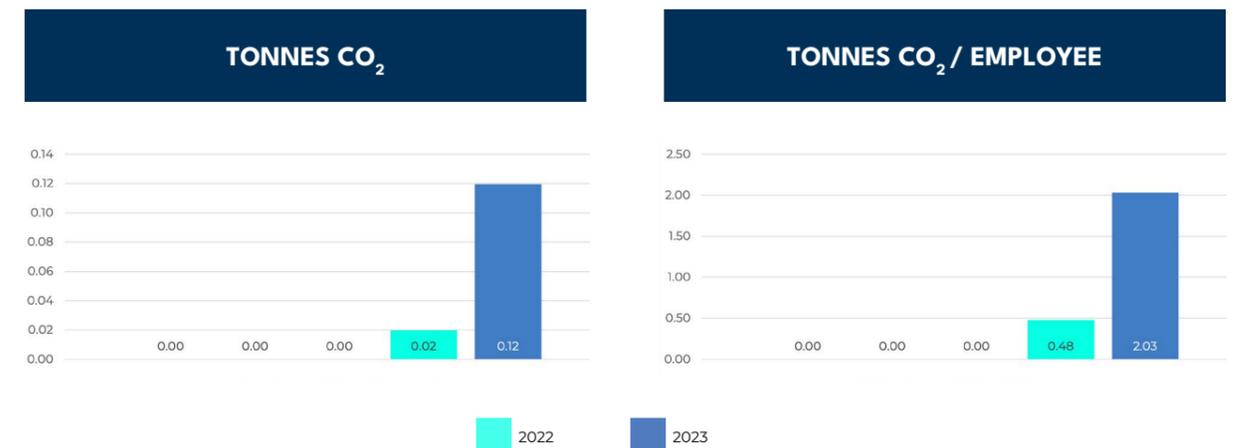


FIGURE 36

Annual carbon emissions with normalisation by site floor area

FIGURE 37

Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for Dublin office's emissions by category were based on:

- 1 Gas/fuel usage: Data not available, office moved to utility inclusive lease.
- 2 Electricity usage: Readings for whole building are provided by the landlord. Data for November and December is unavailable, so extrapolation has been conducted.
- 3 Water consumption: derived from survey data and occupancy percentages.
- 4 Commuting: information derived from survey data.
- 5 Working from Home: based on office occupancy percentages, average household utility usage and average household occupancy figures.
- 6 Business travel data: sourced from internal documented records.
- 7 Waste: based on company's estimated average, this will continue to be reported.

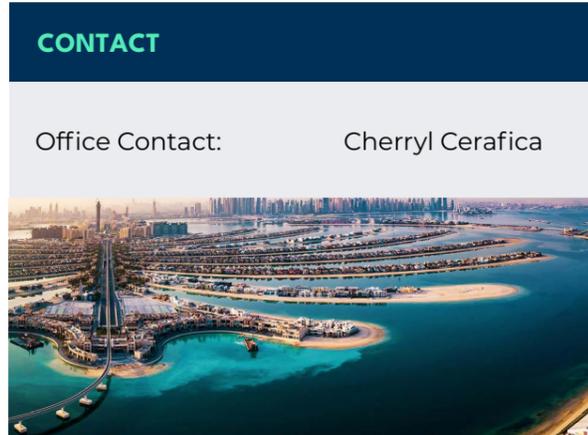
6.10 DUBAI, UAE

Office Characteristics

Lease type: **N/A**
 Total Floor Area: **539m² (end of 2022)**
 Total Floor Area: **2130m² (end of 2023)**
 Number of Staff: **48 (end of 2022)**
 Number of Staff: **35 (end of 2023)**

Systems

Heating: **N/A**
 Airconditioning: **DX system**
 Power: **Consumption-based rate**
 Water: **Estimate per sq. meter**
 Renewables: **Indirect**



Carbon Emissions

CONSUMPTION	2019 BASELINE		2020		2021		2022		2023	
	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂	USAGE UNIT	TONNES CO ₂
Electricity (kWh)	13,269	7	10,673	6	16,420	9	13,677	7	9973	4.00
Gas / Fuel Oil (kWh)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00	0.00
Commuting (km)	147,500	30	25,250	5	38,846	8	93,697	19	242,214	135.80
Business Travel (km)	28,696	3	87,478	10	134,582	15	212,348	24	154,834	38.07
Work from home (kWh)	0	0	11,288	6	17,367	3	24,161	13	17,617	5.34
Water (m ³)	120	0	0	0	0	0	76	0.02	56	0.02

TABLE 16

Carbon emissions by category for the period from 2019-2023

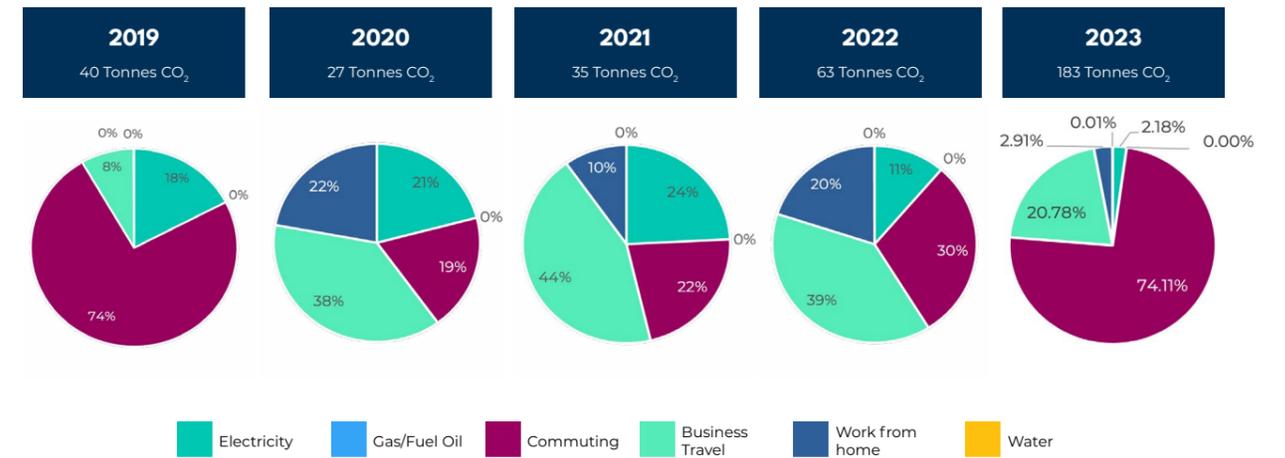


FIGURE 38

Breakdown of carbon emissions categories for period from 2019 to 2023

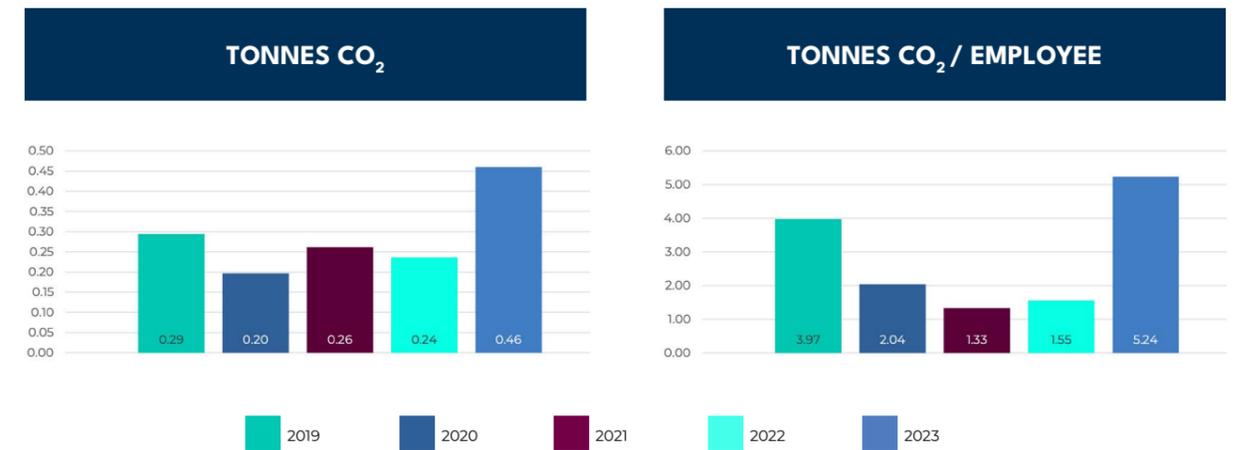


FIGURE 39

Annual carbon emissions with normalisation by site floor area

FIGURE 40

Annual carbon emissions with normalisation by number of employee

DATA AND ASSUMPTIONS

Data collected for Manila office's emissions by category were based on:

- 1 Gas/fuel, Electricity, and Water consumption are covered under a new lease agreement that includes all utilities. Since no data was made available for 2023, estimates for this reporting period are based on average usage per employee in 2022 multiplied by the number of employees in 2023.
- 2 Commuting: information derived from survey data.
- 3 Business travel data: based internal documented records.
- 4 Waste: based on company's estimated average, this will continue to be reported.

7.0

RED PERFORMANCE BY EMPLOYEE

RED PERFORMANCE BY EMPLOYEE



The emissions rate per employee is the main key performance index (KPI) RED uses to evaluate its carbon footprint. While category-specific performance helps pinpoint areas for enhancement, individual employee performance allows for comparison with other companies.

Figure 41 shows RED's annual performance and forecasts for 2024. Despite our advancements in growth and innovation, we recognise the obstacles in minimising our overall environmental impact. Factors like heightened business travel, commuting, and changes in carbon grid factors have notably affected our environmental footprint. Future reporting aims to improve data collection methods and rectify inaccuracies.

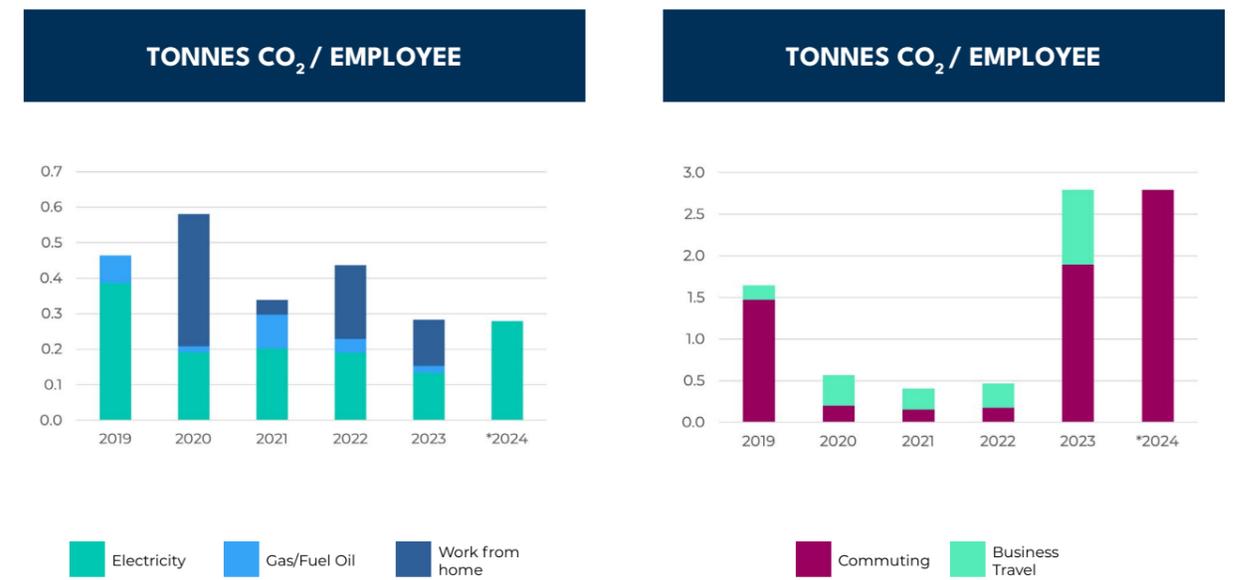


FIGURE 41

Total tonnes of CO₂ emissions normalised by number of employees over the period 2019-2023

8.0

SUMMARY

SUMMARY



This report marks the fourth edition of our annual Environmental Statement disseminated by the RED sustainability team to both the wider company and external stakeholders. The report is designed to assess RED's environmental performance, with a specific emphasis on the measurement of operational CO₂ emissions across all RED sites.

This reporting period has followed a new process to deal with data collection with the successful issuing of a companywide commuting survey. This initiative has provided invaluable insights into the carbon emissions linked to employee transportation choices, enabling us to pinpoint specific areas for improvement in our sustainability efforts. This year's report also marks a pivotal moment as we extend our focus beyond environmental impact to encompass the broader societal and ethical dimensions of our operations. By integrating CSR into our reporting framework, we aim to provide stakeholders with a holistic view of our commitment to making a positive impact on the world around us. This addition signifies a milestone in our journey towards a more sustainable and socially responsible future, and we look forward to sharing our progress and initiatives in this important realm moving forward.

This report dissects RED performance across different usage or consumption categories, examining it on a site-by-site and employee specific basis. This method allows for a visual representation of potential improvements at each site and within various categories. Data normalisation is based on the number of employees and the measurement of site area per meter. Consequently, the key performance indicators featured in this report include emissions per employee as the primary metric, and emissions per unit of floor area as a secondary one. The latter demonstrates significant variability in site occupancy density and distinctions between APAC and EMEA regions.

The RED performance is stated as total carbon emissions in Tonnes CO₂ divided by the number of employees. This serves as a singular value indicator for assessing RED's annual performance.

The total emissions by RED in 2023 was 1,981.1 Tonnes CO₂ which represents 3.1 Tonnes CO₂/employee.

9.0

NEXT STEPS

NEXT STEPS

This report has highlighted that progress is not necessarily straightforward, nor is it always linear. Therefore, we are setting out a companywide strategy to enable appropriate progress in all global locations. Each location will have its own challenges and therefore progress should look distinct.

With the issuance of this report, RED has transitioned into a new corporate framework and is currently engaged in integrating with Tractebel. That means further efforts are being made to promote our sustainability goals and align these goals with that of Tractebel. We will continue committed to maintaining our ISO 14001 and ISO 50001 certifications independently for our UK offices and further promote all the initiatives outlined in this report to underscore our dedication to our sustainability journey.

All of our office based targets are aligned with our ISO 14001 Objectives and KPIs to ensure we remain focussed on delivering on being an environmentally sustainable business.

Summary of our targeted actions for improving our monitoring, measurement and reporting against our sustainability goals at the local level. Detailed targets for each site are also listed below.

2024 TARGET	RED OFFICES									
	OXFORD	LONDON	NEWCASTLE	DUBAI	SINGAPORE	ISTANBUL	MANILA	DUBLIN	CORK	GUILDFORD
Focus on water metering to determine use and develop ideas for water balance.	✓									
Investigate smart metering for electricity consumption			✓							
Determine if possible, to meter any utilities on site.				✓	✓	✓	✓	✓	✓	✓
Conduct energy audit(s)	✓	✓	✓							
Gather necessary data for TRUE waste certification application. Consider pre-certification submission.	✓									
Conduct first waste audit			✓							
Gather at least six-months' worth of data necessary for TRUE certification.		✓								
Work with local staff to determine possibility of waste monitoring. Identify key contact.				✓	✓	✓	✓	✓	✓	✓
Review existing ideas for development of garden space and develop into plan to present to Board.	✓									
Investigate water collection opportunities within the garden space development plans.	✓									
Raise possibility of additional lighting sensors at regular building sustainability meetings.		✓	✓	✓	✓		✓			
Discuss division of lighting with local staff to determine possibilities.			✓	✓	✓		✓			
Promote one local low and/or zero carbon transport option within local area.			✓	✓	✓	✓	✓	✓	✓	✓

TABLE 17

RED sites' targets for 2024

OXFORD TARGETS FOR 2024

The Oxford office offers specific opportunities for improvement due to its rural location. As a result, for 2024 we will target improvements to the office space and commuting opportunities for employees. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED	ON-GOING			NOT STARTED	
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	TRUE certification for waste management	Garden space development	Investigate site water collection opportunities	Conduct energy audit
ACTIONS	Analyse findings in greater detail to determine office right sizing and/or development	-	Training completed. Equipment acquired. Monthly waste weighing. Annual waste audit delayed from November while equipment was acquired, now scheduled for February 2023.	Discussed possibilities with team members. Was put on hold while consideration given to composting waste management.	Investigate water collection opportunities within the garden space development plans.	Scheduled for Q2 2024
2024 TARGET	-	Focus on water metering to determine use and develop ideas for water balance.	Gather necessary data for TRUE waste certification application. Consider pre-certification submission.	Review existing ideas and develop into plan to present to Board.	Investigate water collection opportunities within the garden space development plans.	Conduct energy audit

LONDON TARGETS FOR 2024

The London office is located centrally and thus offers limited opportunity to improve energy consumption. As a result, for 2024 we will target improvements to monitoring and measurement waste management. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED	ON-GOING	NOT STARTED		
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Consider increased opportunities for division of lighting sensors	Conduct energy audit
ACTIONS	Analyse findings in greater detail to determine office right sizing and/or development	Electricity monitored through building central system. Continued attendance at Building level Environment meetings.	First waste audit undertaken and report issued.	No progress on this, in part due to increased occupancy. Regular attendance at building sustainability meetings where possibility can be raised.	Scheduled for Q2 2024
2024 TARGET	-	-	Determine waste collection process and gather at least 6 months worth of data necessary for TRUE certification.	Raise possibility of additional lighting sensors at regular building sustainability meetings.	Conduct energy audit

NEWCASTLE TARGETS FOR 2024

The Newcastle office offers opportunities for improvement through particularly engaged local staff. As a result, for 2024 we will target improvements to monitoring and measurement and commuting opportunities. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED	ON-GOING	NOT STARTED			
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Consider increased opportunities for division of lighting sensors	Review the potential for low and zero carbon transport options for short journeys	Conduct energy audit
ACTIONS	Access gained to data from Lodge desk booking system	Requested during office move but not implemented. Ongoing discussions with site tenants and Landlord.	-	No progress on this, in part due to increased occupancy and change in office location.	No progress on this due to the change in office location.	Scheduled for Q2 2024
2024 TARGET	Analyse findings in greater detail to determine office right sizing and/or development	Improved reporting on quarterly utilities consumption data.	Key contacts made but no further progress on waste monitoring	Discuss division of lighting with local staff to determine possibilities.	Promote one local low and/or zero carbon transport option within Newcastle local area.	Conduct energy audit

DUBAI TARGETS FOR 2024

The Dubai office offers opportunities for improvement through data management. As a result, for 2024 we will target improvements to monitoring and measurement. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED	ON-GOING	NOT STARTED		
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Consider increased opportunities for division of lighting sensors	Review the potential for low and zero carbon transport options for short journeys
ACTIONS	Analyse findings in greater detail to determine office right sizing and/or development	Requested during office move, but new office has all utilities included.	Focus has been on Oxford office. No equipment acquired, no auditing or monitoring completed. No staff identified as key contact.	No progress on this, in part due to increased occupancy and change in office location.	No progress on this due to the change in office location.
2024 TARGET	-	Determine if possible to meter any utilities on site.	Work with local staff to determine possibility of waste monitoring.	Discuss opportunities for division of lighting and daylight possibilities with local staff.	Promote one local low and/or zero carbon transport option within Dubai local area.

SINGAPORE TARGETS FOR 2024

The Singapore office offers opportunities for improvement through data management. As a result, for 2024 we will target improvements to monitoring and measurement. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED		NOT STARTED		
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Consider increased opportunities for division of lighting sensors	Review the potential for low and zero carbon transport options for short journeys
ACTIONS	Analyse findings in greater detail to determine office right sizing and/or development	Requested during office move, but new office has all utilities included.	Focus has been on Oxford office. No equipment acquired, no auditing or monitoring completed. No staff identified as key contact.	No progress on this, in part due to increased occupancy.	No progress on this due to the change in office location.
2024 TARGET	-	-	Work with local staff to determine possibility of waste monitoring.	Discuss opportunities for division of lighting and daylight possibilities with local staff.	Promote one local low and/or zero carbon transport option within Singapore local area.

ISTANBUL TARGETS FOR 2024

The Istanbul office offers opportunities for improvement through data management and the high proportion of business travel. As a result, for 2024 we will target improvements to monitoring and measurement and commuting options. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED		NOT STARTED	
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Review the potential for low and zero carbon transport options for short journeys
ACTIONS	Analyse findings in greater detail to determine office right sizing and/or development	Determine if possible to meter any utilities on site.	Focus has been on Oxford office. No equipment acquired, no auditing or monitoring completed. No staff identified as key contact.	No progress on this due to the change in office location.
2024 TARGET	Analyse findings in greater detail to determine office right sizing and/or development	Determine if possible to meter any utilities on site.	Work with local staff to determine possibility of waste monitoring.	Promote one local low and/or zero carbon transport option within Istanbul local area.

MANILA TARGETS FOR 2024

The Manila office offers opportunities for improvement through data management, particularly as the return to work has not commenced for this office. As a result, for 2024 we will target improvements to monitoring and measurement. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED		NOT STARTED		
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Consider increased opportunities for division of lighting sensors	Review the potential for low and zero carbon transport options for short journeys
ACTIONS	Analyse findings in greater detail to determine office right sizing and/or development	Requested during office move, but new office has all utilities included.	Focus has been on Oxford office. No equipment acquired, no auditing or monitoring completed. No staff identified as key contact.	No progress on this, in part due to increased occupancy.	No progress while appropriate site contact determined.
2024 TARGET	Analyse findings in greater detail to determine office right sizing and/or development	-	Work with local staff to determine possibility of waste monitoring.	Discuss opportunities for division of lighting and daylight possibilities with local staff.	Promote one local low and/or zero carbon transport option within Manila local area.

DUBLIN TARGETS FOR 2024

The Dublin office offers opportunities for improvement through data management. As a result, for 2024 we will target improvements to monitoring and measurement. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED		NOT STARTED	
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Review the potential for low and zero carbon transport options for short journeys
ACTIONS	Analyse findings in greater detail to determine office right sizing and/or development	No progress on this due to change in office location. Utilities included within scope of contract.	Focus has been on Oxford office. No equipment acquired, no auditing or monitoring completed. No staff identified as key contact.	No progress on this due to the change in office location.
2024 TARGET	-	-	Work with local staff to determine possibility of waste monitoring.	Promote one local low and/or zero carbon transport option within Dublin local area.

CORK TARGETS FOR 2024

The Cork office offers opportunities for improvement through data management. As a result, for 2024 we will target improvements to monitoring and measurement. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED	ON-GOING	NOT STARTED	
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Review the potential for low and zero carbon transport options for short journeys
ACTIONS	Access gained to data from Lodge desk booking system	-	Focus has been on Oxford office. No equipment acquired, no auditing or monitoring completed. No staff identified as key contact.	No progress on this due to the change in office location.
2024 TARGET	Analyse findings in greater detail to determine office right sizing and/or development	Determine if possible to meter any utilities on site.	Work with local staff to determine possibility of waste monitoring.	Promote one local low and/or zero carbon transport option within Cork local area.

GUILDFORD TARGETS FOR 2024

The Guildford office offers opportunities for improvement through data management. As a result, for 2024 we will target improvements to monitoring and measurement. Targets are being monitored for progress and developed further where possible for 2024.

	COMPLETED	ON-GOING	NOT STARTED	
	Investigate monitoring staff numbers	Investigate smart metering for all utilities	Conduct regular waste auditing and monitoring of waste figures	Review the potential for low and zero carbon transport options for short journeys
ACTIONS	Analyse findings in greater detail to determine office right sizing and/or development	-	Focus has been on Oxford office. No equipment acquired, no auditing or monitoring completed. No staff identified as key contact.	No progress on this due to the change in office location.
2024 TARGET	-	Determine if possible to meter any utilities on site.	Work with local staff to determine possibility of waste monitoring.	Promote one local low and/or zero carbon transport option within Guildford local area.



10.0

CORPORATE SOCIAL RESPONSIBILITY

CORPORATE SOCIAL RESPONSIBILITY

In our commitment to Corporate Social Responsibility (CSR), we recognise the importance of integrating ethical, social, and environmental responsibilities into our business practices.

We've captured our commitments and achievements to date in this Corporate Social Responsibility (CSR) Strategy – our first ever CSR report. This represents a holistic and results-focused framework for sustainability, with the objective of providing tangible benefits, experiences, and outcomes for users, owners, developers, the environment, and the broader community and society.

Governance of our CSR and sustainability strategy is overseen at board level and led by a CSR steering group that comprises various working groups, office champions and programme managers, all supported by passionate volunteers drawn from across our Global office networks. We encourage you to read this report and to support and engage in the activities and targets presented in this document.



(1) ENVIRONMENT	(2) LABOUR PRACTICES	(3) COMMUNITY INVOLVEMENT	(4) FAIR OPERATING PRACTICES & HUMAN RIGHTS
#1 Global Environmental Policy (develop analysis on biodiversity) #3 Develop carbon screenings/footprint assessment #9 Sustainability induction as part of the onboarding of newcomers #10 Climate Fresks	Mandatory e-learning courses for all employees Inclusive recruitment process Develop internal diversity & inclusivity networks; IDEA & WiRED	Volunteering Charitable giving Partnership dialogue STEM activities	#1 Promote CSR in all the value chain #2 Responsible & inclusive purchasing policy Introduce CSR evaluation Risk assessments & risk committee #5 Integrate into mandatory training

10.1 ENVIRONMENT

The environmental aspect of Corporate Social Responsibility (CSR) involves extensive actions aimed at reducing environmental impacts and promoting sustainability, as outlined in this report. This pillar of CSR emphasises the necessity for RED to actively respond to environmental challenges and make positive contributions to planetary well-being. The report underscores RED's dedication to responsible environmental management and its determined endeavours to effect significant change.

It is important to emphasise that the outcomes of our CSR strategy align with our long-established values and that of Tractebel.

10.2 LABOUR PRACTICES

Prioritising the well-being and development of our workforce

OUR FOCUS AREA

Inclusion, Diversity, Equity and Accessibility

Lead by our IDEA working group, our focus is to support, empower and celebrate difference within our workplace through an environment of unity, inclusion, equal opportunity and respect for all; acknowledging that diversity and difference is a part of who we are as a business and to encourage a wide range of perspectives, ideas and styles of working from a variety of cultural backgrounds.



ONGOING COMMITMENTS & TARGETS

We run a comprehensive series of "Lunch and Learn" sessions tailored for staff from graduate/early-career entry through to senior leadership. Promotion of the celebration of festivals, holidays and notable events within the RED group, and organisation of events in order to promote the IDEA Groups aspirations. In 2023, these included Eid-al-fitr, Neurodiversity Pride Day, Pride, Black History Month and International Women in Engineering Day. The aim is of marking these celebrations and events is to break down barriers by sparking curiosity.

In November 2023, there was an outreach to engage with demographics traditionally underrepresented in STEM, including women and ethnic minorities. Members of IDEA and WiRED took part in an Activity Day, hosting students from William Perkins School at the London office for engaging STEM activities.

- We will continue to provide employees with the information and resources required to increase awareness of neurodiversity.
- We will continue to present to senior leadership team on the importance of diversity at the upper levels of RED and what can be done to address the imbalance.

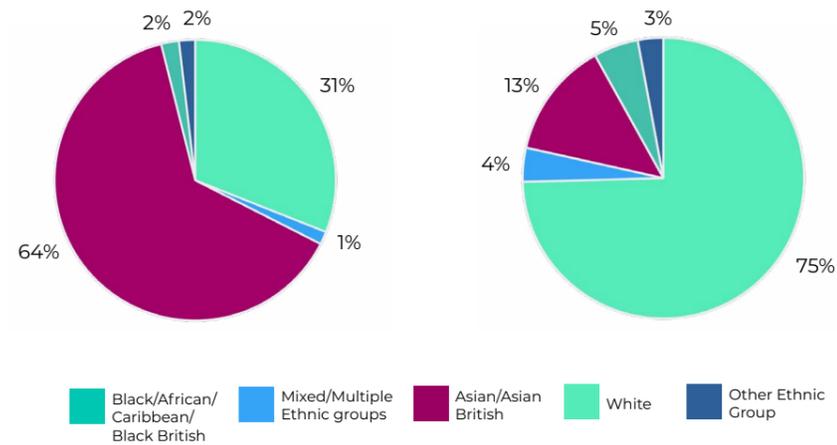


FIGURE 42

Ethnic Diversity % - PERM STAFF (RED GROUP) - 2023

FIGURE 43

Ethnic Diversity % - PERM STAFF (RED GROUP) - 2023 (EUROPEAN OFFICES)

Health & Wellbeing

We have always placed importance on the health and wellbeing of our people. It is demonstrated through our health and wellbeing initiative, RED Wellness, which involves key internal resources, such as RED Wellness intranet page which provides access to resources, news and events related to our employee health and wellbeing initiative and access to Employee Assistance Programme. We have a monthly Wellness Induction for all global new starters, a strong network of health and wellbeing champions and trained Mental Health First Aiders to encourage local team activities and support, and our annual 'RED Wellness Day' which encourages employees to take time away from work to focus on their health and wellbeing.

ONGOING COMMITMENTS & TARGETS

- We will continue to provide employees with the information and resources required to support them across all aspects of mental health and wellbeing.
- We will continue to educate our employees to encourage the removal of stigma, and provide everyone with a safe space in which they feel heard.
- We will continue to address work-place factors that may impact employee's sense of wellbeing.
- We will offer a year-round schedule of regular activities, webinars and workshops related to health and wellbeing.

Health & Safety

RED's aim is to foster a culture of care for the well-being of employees and all other stakeholders that is aligned with our values. Employees should always feel empowered to report concerns and to stop working in an unsafe environment.

ONGOING COMMITMENTS & TARGETS

- Continued development and alignment with ENGIE group rules (ENGIE Corporate, Tractebel, ENGIE Solutions GBU)
- Presentation of H&S site visit requirements
- Introduce Managerial Safety Visits
- Introduce meeting safety moments for all employees
- Monthly H&S Reporting of manhours and incidents to include subcontractor



10.3 COMMUNITY INVOLVEMENT

STEM - Science, Technology, Engineering and Mathematics

Many of our staff are also STEM ambassadors and speak at schools and colleges to inspire the next generation of engineers. We continue to build links with academia through provision of guest lectures and curriculum advice.

ONGOING COMMITMENTS & TARGETS

- STEM Ambassadors increased from 4 (2022) to 12 (2023)
- 16 applications in progress (presence in each UK office)
- 7 dedicated STEM events in 2023
- Partnered with schools
- Designed our own workshops
- Collaborated with other initiatives
- School open days & career fairs
- Mock interviews
- Welcomed students to the office
- To become an official STEM-registered organisation by 2024



Return to Work Scheme

STEM Returners – This organisation works closely with women returners, but target people from any background, which aligns well with actions coming from the IDEA and Early Careers focus groups in RED.

Both offer great platforms for networking with other industry leaders, and provide ways of learning from other organisations on how they assist those returning to work after prolonged periods.



RISING STAR AWARD

Winner: Taya Williams

Awarding Body: Women into Construction



EDI COMPANY AWARD

Winner: RED'S IDEA Initiative

Awarding Body: CIOB



YOUNG ENGINEER OF THE YEAR

Winner: Takwa Dawdi

Awarding Body: MEP Middle East



ENGINEER OF THE YEAR

Winner: Sarah Hussain Zahidi

Awarding Body: Construction Week Middle East



ELECTRICAL ENGINEER OF THE YEAR

Winner: Sarah Hussain Zahidi

Awarding Body: CIBSE UAE Awards

10.4 FAIR OPERATING PRACTICES

Together with our suppliers, we ensure the respect of international human rights standards in the selection and execution of our projects.

Ethics

All RED entities operate in compliance with ENGIE Group's principles, setting the tone for our employees, ensuring they;

- Act in accordance with laws and regulations
- Behave honestly and promote a culture of integrity
- Are loyal
- Respect others

ONGOING COMMITMENTS & TARGETS

RED is fully committed to identifying, controlling and mitigating risks associated with our business activities through our Enterprise Risk Management (ERM) Framework, addressing all business areas and enterprise-level risks. Annual Ethics ERM risk assessments are undertaken relating to anti-bribery and corruption, and Human Rights.

All client projects go through a risk assessment process, with checks required based on various different factors such as project location and fee level:

- Client and subcontractor/sub-consultant due diligence.
- Human rights checklist (approval required for all projects in high-risk countries).
- Embargo risk assessment (where required).
- All new employees are provided with a copy of the Ethics Charter and Practical Guide to Ethics.
- All employees receive an Ethics induction during onboarding.
- Company-wide communications and the Legal/Ethics and Data Privacy newsletter sent throughout the year.
- Mandatory Ethics e-learning modules.
- Annual webinars in addition to mandatory e-learning for employees in positions considered to be at higher risk of bribery.
- Launched our revised Approved Supplier process and Supplier Code of Conduct, outlining our expectations of suppliers and sub-consultants.
- Ethics Champions inducted in 2023.
- Confidential 24/7 helpline, the ENGIE Whistleblowing Line available for all employees, contractors, and external stakeholders globally.

Women in RED - WiRED

RED's internal network and initiative group 'Women in RED (WiRED)' has been formed to target the engineering industry and get the matters of gender diversity onto the map at RED. This name is used to demonstrate inclusivity of all women within RED, not just engineers and those with STEM backgrounds.

WiRED's hard-working and enthusiastic members aim to push key actions that are focused on "empowering women to lead courageously and achieve career success, by cultivating a community of belonging, connection and growth". Each employee plays an important role in creating a strong, efficient and inspirational organisation, and WiRED seeks to recognise this and provide a platform of growth and support for all.



ONGOING COMMITMENTS & TARGETS

- Grown from 15 to 50 members since the beginning of 2023
- Feed into policy and recruitment initiatives
- Influence career progression & training
- Education workshops
- Mentoring schemes
- Return to work scheme and implementation
- STEM visits
- Diversified interview processes
- Speaking with and inspire young minority groups
- STEM ambassadors (increased from 4 in 2022 to 12 in 2023)
- Mentoring
- University initiatives
- Launch of 'WiRED APAC' in Manila



WiRED Internal Survey 2023

In June 2023, WiRED released an internal survey to all the women in RED, globally. The results provided invaluable insights on how the workforce perceives RED's D&I efforts, how they feel as an employee and how RED can improve moving forward. This feedback is now being used to fuel new campaigns into 2024, to ensure everyone's voice is heard and that RED is providing an inclusive, safe and empowering culture. This survey shall be repeated on an annual basis, giving employees regular opportunities to reflect and provide feedback.

Mentoring Scheme

RED's HR team have already made excellent progress at implementing a structured mentoring scheme at RED, and WiRED continues to support the process to ensure that all females within the company receive the mentoring support they require, from the correct person. We are also encouraging our WiRED members to become mentors themselves, both internally and externally, so they can act as a role model and offer advice and support to those who need it.

WiRED 'Appreciation' Social

To express how much RED values the hard work and effort that is put into driving D&I efforts, the WiRED members are invited to enjoy an evening of food, drink and activities on an annual basis. This provides an excellent opportunity for the Women in RED to come together in an informal environment, reflect on the successes and events of the year so far, get to know each other in person and talk about all things work AND life.

Return to Work Scheme

Women Returners – members of WiRED are currently working on a partnership with the Women Returners Scheme, which was an excellent idea brought forward by Niamh Faughnan. Through this scheme, we'll be able to recruit people who are women returners, or have been out of work for a few months to a few years for various reasons.

These women don't have to be from STEM background, but could be wanting to pursue / explore a new career in the engineering industry. They also offer a mentoring scheme which RED can align with.

At this point, a proposal has been returned and is pending final approval from the HR Team.

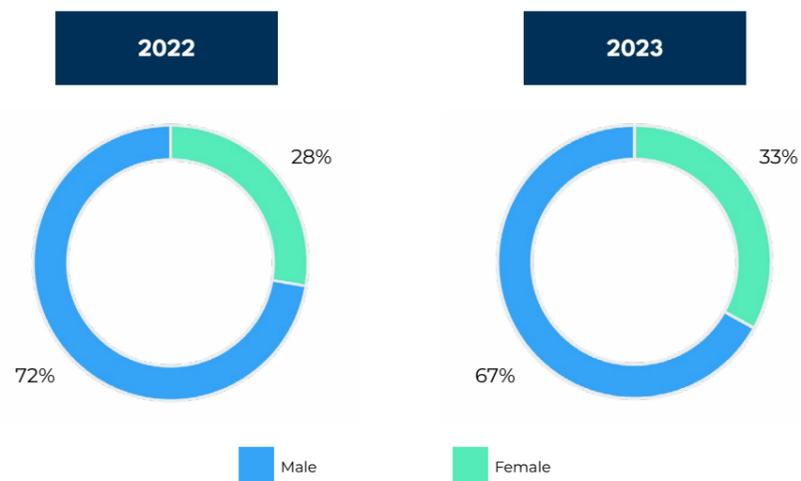


FIGURE 44

Male to Female Staff Percentages 2022-2023



INNOVATION AND RESEARCH DEVELOPMENT

11.0

INNOVATION AND RESEARCH DEVELOPMENT

We lead by example, leveraging our research & development teams to establish better calculate carbon emissions.

Our longstanding commitment to technical innovation has become even more significant in the face of the climate crisis. Engineers now play a central role as the world turns to us for viable solutions. We are actively spearheading initiatives that deliver positive outcomes for the climate, users, communities, investors, and operators, showcasing our dedication to addressing environmental challenges through cutting-edge engineering.

Investing in Innovation

We have a dedicated Research and Development team that works across all our disciplines. 2023 has seen the development of WLCA tools, most notably an embodied carbon calculator for MEP systems and services, where existing tools in the market fail to capture the resources that are utilised in the construction of Data centres.

By leveraging our trusted relationships with clients and partners, we delve into the creation of genuine sustainable outcomes for the built environment. We are actively advising our clients on strategies to minimize embodied carbon and operational energy, while also establishing comprehensive site-wide sustainability initiatives.

ONGOING COMMITMENTS & TARGETS			
BROWNFIELD DATA CENTRE Optimising the refurbishment of data centres to provide the lowest power consumption and enhance deployment of existing space and assets in Singapore & South-East Asia	SMALL MODULAR REACTORS In collaboration with Tractebel, provide a roadmap to nuclear powered computing. Assisting with the Energy Transition away from fossil fuels.	FUTURE FUELS Biodiesel, Bioethanol, Hydrogen, HVO, Ammonia, E-fuels, market evaluation, where we are now and what's coming.	FUTURE OF POWER GENERATION Review of Fuel Cells, Multi-fuel Engines and Turbines and their application for off-grid power systems.
HYDROGEN The practicalities of a hydrogen powered data centre. Investigating the codes and standards as well as technological challenges.	KPIs FOR DATA CENTRES Looking at the minimum legislative requirements, but also best practice and how new EU rules will be mandating the move towards a Net Zero Carbon business model.	SEA OR RIVER WATER COOLING How sea or river water can be used to provide a sustainable method of cooling data centres and reduce overall energy consumption.	CIRCULARITY IN DCs Embodied carbon impact of the IT equipment in DCs, how to characterise them and the difficulties with obtaining appropriate data.

The contents of this report offers a brief summary of our accomplishments and commitments. Your contribution and active engagement in our journey are warmly welcomed, with the aspiration to reciprocate and be part of your endeavours too.

APPENDIX A



ISO 14001 Environmental Management System (EMS) Summary

As part of our ISO 14001 EMS framework, we regularly report on our six objectives. The information below represents our end-of-year update for 2023, highlighting the progress made toward these objectives. Any objectives that are not yet complete will continue to be pursued throughout 2024, with appropriate KPIs in place to track and demonstrate progress.

OBJECTIVE 01

10 Year Sustainability Framework

KPIs

- Production of 10 year plan in 2023 (after alignment with Tractebel)
- Establish a framework of KPIs, Measurement and responsibility throughout REDs structure by end of 2023

35%

Supporting Activities

- Ongoing discussions with Tractebel to align sustainability actions
- Ongoing input into Tractebel Europe IMS
- Draft 10 year plan under review
- Alignment with SBTi now also being included

OBJECTIVE 02

100% Recyclable building design

KPIs

- Regular LCA projects feeding our database of embodied carbon – 12 per year
- First report of the recycled content of REDs projects at end of 2023

50%

Supporting Activities

- Multiple LCA bids have been issued across multiple sectors
- Delivering more than 12 LCA projects per year
- Internal training of commercial teams in basic LCA understanding
- Further training planned throughout the business
- Recycled content of REDs projects target missed and will be included in 2024

OBJECTIVE 03

Carbon Capture

KPIs

- Present CPD on Carbon capture to RED by end Q2 2023
- Present carbon capture options externally (CPD or in design concept) by end of Q4 2023.

50%

Supporting Activities

- CPD planned for Q2 2024.
- On review we prioritised Objective 2 on embodied carbon training

OBJECTIVE 05

Office energy/waste audits

KPIs

- RED Annual Environmental Report sign-off & issue.
- Office by office targets

100%

Supporting Activities

- 2022 RED Environmental Report issued Q1 2023
- Report includes office by office targets and current progress
- Review of targets to align with strategy and ISO standards ongoing
- Alignment of office by office energy data ongoing
- Waste audits completed for London and Oxford office
- Energy audits for London, Oxford and Newcastle offices planned for Q2 2024
- Moved Ireland/Dubai offices to more efficient buildings

OBJECTIVE 04

Carbon off-set

KPIs

- Align approach to carbon data collection and calculation with Tractebel in 2023
- Review potential carbon off-set options with Engie
- Present carbon mitigation/off-setting to ExCom for approval.

100%

Supporting Activities

- Carbon data collection under review
- Investigation into carbon off-set options underway
- 2022 carbon off-set purchase being consolidated with 2023
- Compliance with EU regulations under review
- All off-sets will be purchased

OBJECTIVE 06

Task Force on Nature-Related Financial Disclosures

KPIs

- Internal review of REDs operations against TNFD framework beta in Q3 2023.

100%

Supporting Activities

- TNFD framework update due for release in September 2023
- Team in place to review against existing framework
- TNFD has been adopted by Engie Group. To avoid double reporting RED will contribute to Group

APPENDIX B



ISO 50001 Energy Management System (EMS) Summary

Our ISO 50001 EMS covers our energy use across our London, Oxford and Newcastle offices. However, the process and policies associated with this system are applicable to all our global offices. Therefore we have reported against our Energy Performance Indicators (EnPIs) both globally and for the offices included within the scope of the externally certified Management System.

ISO 50001 ENERGY DATA

ENPIs

- EnPI 001: kWh of electrical energy used per m² office space
- EnPI 002 : kWh of heating fuel energy used per m² office space
- EnPI 003: Total kWh energy used per employee
- EnPI 001: 20.5 kWh/m² (93% of 2019 baseline)
- EnPI 002: 9.8 kWh/m² (67% of 2019 baseline)
- EnPI 003: 797 kWh per employee (84% of 2019 baseline)
- Total Energy: 513,245 kWh (210% of 2019 baseline)

Supporting Activities

- Quarterly reporting progress on energy consumption
- Ongoing investigation into energy metering, particularly at Newcastle office

ELECTRICAL ENERGY (kWh)/m²

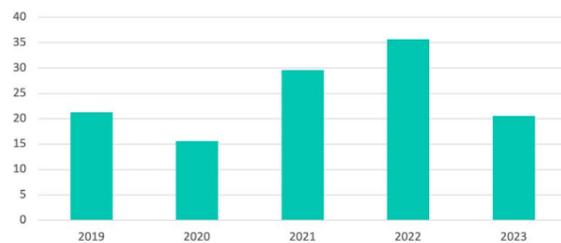


FIGURE 45

EnPI001

HEATING FUEL ENERGY (kWh)/m²

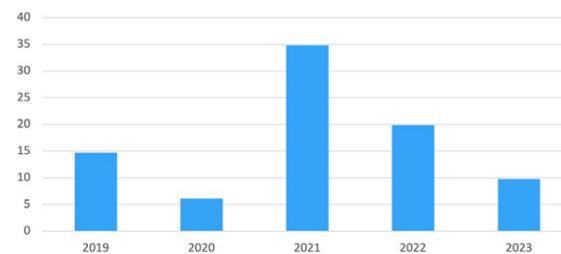


FIGURE 46

EnPI002

ENERGY (kWh) / EMPLOYEE

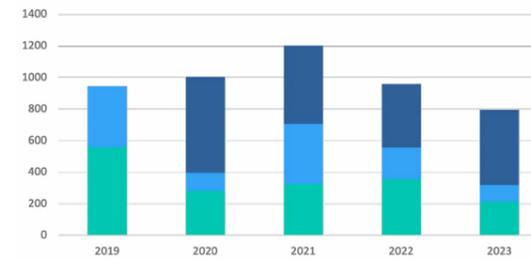


FIGURE 47

EnPI003

ENERGY (kWh)

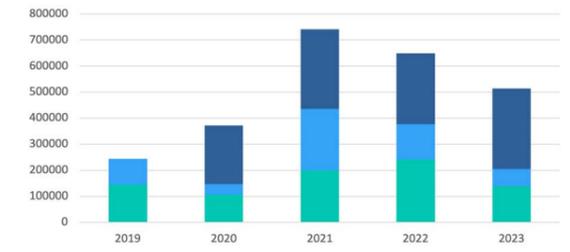


FIGURE 48

Total Energy

APPENDIX C

Streamlined Energy & Carbon Reporting (SECR) Summary

Executive Summary

The Streamlined Energy and Carbon Reporting (SECR) is a UK government policy requiring qualified companies to publicly report their energy use, associated greenhouse gas emissions and any measures taken to improve energy efficiency on an annual basis.

We are pleased to present the Streamlined Energy and Carbon Reporting (SECR) report for RED Engineering for the financial year ending 31st December 2023. This report outlines our commitment to environmental sustainability through the reporting of our energy consumption and carbon emissions, and our efforts to mitigate climate change. As an office-based UK engineering MEP design company, we recognize the importance of responsible business practices and strive to minimize our environmental impact.

Scope

This report covers the activities and operations of RED Engineering across all our office locations in the United Kingdom during the financial year. The data presented here includes information on our energy consumption, greenhouse gas emissions, and sustainability initiatives.

a. Energy Consumption

We have diligently monitored and recorded our energy consumption across all our offices during the reporting period. Our energy consumption includes electricity, gas, and other energy sources. By closely monitoring our energy usage, we aim to identify opportunities for improvement and implement energy-saving measures.

b. Carbon Emissions

We have quantified our carbon emissions resulting from various sources within our operations. These emissions are categorized into three scopes as defined by the Greenhouse Gas Protocol:

Scope 1: Direct emissions from our own activities, including combustion of fossil fuels

Scope 2: Indirect emissions from purchased electricity, heating, and cooling.

Scope 3: Indirect emissions from activities not owned or controlled by us, including business travel (train travel, flights, taxi journeys) and procurement

Consumption and Emissions Summary

	CURRENT REPORTING YEAR (2023)		COMPARISON TO PREVIOUS REPORTING YEAR (2022)	
Scope 1 energy consumption	Gas (kWh)	66,612 kWh	Gas (kWh)	241,612 kWh
	Fuel Oil	3105 kWh	Fuel Oil	kWh
	Fuel (hire cars and mileage claims) (mileage)	- km	Fuel (hire cars and mileage claims) (mileage)	195,813 km
Scope 2 energy consumption	Electricity (kWh)	139,144 kWh	Electricity (kWh)	134,278 kWh
Total gross Scope 1 + 2 energy consumption	205,756kWh		375,891 kWh	
Scope 1 emissions	12.5 tCO ₂ e		46.73 tCO ₂ e	
Scope 2 Emissions	11.1 tCO ₂ e		25.62 tCO ₂ e	
Total gross Scope 1 + 2 emissions	23.6 tCO₂e		72.35 tCO₂e	
Intensity ratio (gross Scope 1 + 2)	0.0176 tCO ₂ e/m ²		0.0546 tCO ₂ e/m ²	
	0.0754 tCO ₂ e/person		0.223 tCO ₂ e/person	

TABLE 18

Mandatory reporting of scope 1 and 2 emissions

	CURRENT REPORTING YEAR (2023)		COMPARISON TO PREVIOUS REPORTING YEAR (2022)	
Scope 3 energy consumption	Air travel (mileage/ kWh)	858590 miles	Air travel	- miles
		- kWh		1,061,593 kWh

TABLE 19

Mandatory reporting of scope 3 emissions

Sustainability Initiatives

The below summarises our initiatives for improving our monitoring, measurement and reporting against our sustainability goals. All are at different stages of completion with many continuing to progress throughout 2024.

- Investigation into the use of smart EV charging at the Oxford office, which was discussed at Board level and rejected due to complications of provision of vehicle fuel for some staff.
- Develop ideas for water balance of water consumption.
- Gather necessary data for TRUE waste certification application with the consideration of a pre-certification submission.
- Work with local staff to determine the possibility of waste monitoring, identifying key contacts.

- Review existing ideas for the development of the garden space and develop a plan to present to the Board, including an investigation into water collection opportunities within these development plans
- Promote one local low and/or zero carbon transport option within the local area

Methodology

The methodology used to calculate the greenhouse gas (GHG) emissions and energy use reported in this document is based on the Greenhouse Gas Reporting Protocol – Corporate Standard. The following steps were taken to calculate the GHG emissions and energy use reported in this document:

- The company's energy consumption was collected from utility bills, meter readings, business travel mileage by means of air flying mileage, and estimates of waste generation and employees work from home contribution.
- The energy consumption was converted to GHG emissions using the UK government's emission conversion factors of 2023 of 0.207 kgCO₂/kWh for electricity consumption, 0.183 kgCO₂/kWh for gas consumption 0.267 for heating oil consumption, and 0.2459 kgCO₂/km was used for air travel based on international stipulated factors.
- The GHG emissions were aggregated by scope (scope 1, scope 2, and scope 3).
- We have used two intensity ratios, these have been calculated based on the floor area of our UK office spaces and the number of UK based employees

The following assumptions were made in the calculation of the GHG emissions and energy use:

- Working from home and commuting data is based office occupancy data, average household energy consumption, occupancy data, and surveys to produce estimated figures. The carbon emissions factor for commuting emissions is transport node and location specific.
- The water consumption at many RED sites is not currently metered. Therefore, data is based on an estimated average of 12 m³ / annum / employee, taken from a wider company investigation conducted by the Engie Impact team and a carbon factor of 0.000298 g/lit.

The following limitations of the methodology should be noted:

- The methodology does not account for all sources of scope 3 GHG emissions.
- The accuracy of the results depends on the accuracy of the data used.
- The data is not verified by a third party.

APPENDIX D

Energy Savings Opportunity Scheme (ESOS) Compliance

In order to comply with the Energy Saving Opportunity Scheme (ESOS) we will submit our notification of compliance to the environment agency before the 5th June 2024 deadline using our existing ISO 50001 certification as evidence.

SUSTAINABILITY SOLUTIONS & CLIMATE CHANGE TEAM



IAIN MACDOUGALL

Head of Sustainable Solutions & Climate Change



OLIVER HANSON

Associate Engineer



ALEX VELLA

Associate



ELINOR KENT

Senior Sustainability Engineer



CHARLES DE GUZMAN

Senior Sustainability Engineer



MONETTE CABLES

Sustainability Engineer



ROBERT YATES

Principal Sustainability Consultant



HOPE AMIRA

Associate Sustainability Consultant



AMELIA CUNNANE

Senior Sustainability Engineer



AAUAB GURUNG

Graduate Mechanical Engineer



DALVINA CHIN

Graduate Sustainability Engineer



CLAIRE YILDIRIR

PA & Office Manager

KEEP IN TOUCH

For more information about RED, please contact:

EMEA

Dubai	dubai@red-eng.com	+971 4 297 8846
Dublin	dublin@red-eng.com	+353 1 661 4420
Cork	dublin@red-eng.com	+353 21 242 8685
Guildford	guildford@red-eng.com	+44 20 7299 8260
London	london@red-eng.com	+44 20 7299 8260
Newcastle	newcastle@red-eng.com	+44 191 500 3140
Oxford	oxford@red-eng.com	+44 1869 355 600
Istanbul	istanbul@red-eng.com	+90 212 211 9914

APAC

Singapore	singapore@red-eng.com	+65 6226 3106
Manila	manila@red-eng.com	+63 2 7950 90 16/7
Clark	clark@red-eng.com	+63 2 7950 90 16/7

RED-ENG.COM



[red-engineering](#)



[RED_Eng_Design](#)



[red_engineering_design](#)



[RedEngineeringDesign](#)

RED

A company of **TRACTEBEL**


Environmental Statement Report 2023