

Empowering your journey to Net Zero



BEcome Net Zero

Carbon Footprint Audit Report

June 2023 - May 2024



Contents

1. Executive Summary
2. Introduction
3. Emissions Inventory
4. Pathway to Net Zero
5. Sustainability Journey
6. Action, Impact, Value
7. Offsetting with Purpose – The Strategy for Net Zero
8. Conclusion
9. Verification
10. Key Facts



Executive Summary

Redbridge & Sons continues experience growth in the UK's renewable energy sector, demonstrating that business growth and sustainability can go hand in hand. With strong leadership and sustainability at the heart of the business and its offering, Redbridge understand now more than ever is the time to begin their own sustainability journey, showcasing their own sustainability credentials to its clients and that the organisation practices what it preaches.

Partnering with Balanced Energy this carbon report for Redbridge & Sons outlines a comprehensive analysis of the company's greenhouse gas emissions for the reporting period from 1st June 2023 to 31st May 2024.

Key Highlights

- ✓ **Fuel Consumption** – The biggest contribution and total emissions, adding 52.56 tCO₂e. This poses a notable challenge to achieving decarbonisation, mainly due to the considerable investment and technological improvements needed.
- ✓ **Energy Consumption** – The second biggest contributor is the company electricity consumption is and total emissions, causing a footprint of 4.87 tCO₂e
- ✓ **Fleet & Travel Growth** – Increased business miles and commuting contributed to a rise in Scope 1 and 3 emissions, requiring strategic transport planning. This has been improved with introduction of 2 Electrical Vehicles
- ✓ **Next Steps** – Strengthening carbon data management, implementing a structured Carbon Reduction Plan, renewable energy procurement, carbon budgeting, and strategic UK-based offsetting investments.

Total Carbon Footprint: 63.357 t/co2

 Intensity Metric: tCO₂e/FTE.
4.53 tCO₂e/FTE

 Intensity Metric: tCO₂e/million pound revenue.
19.19 tCO₂e/million pound revenue



Introduction

Redbridge & Sons was born out of a need for high quality support. With constant inquiries from both commercial and domestic clients looking to reduce their energy consumption, Redbridge has since grown month on month. Their pathway is the next step on their company journey as they look to address their own carbon emissions and potentially enter new markets.

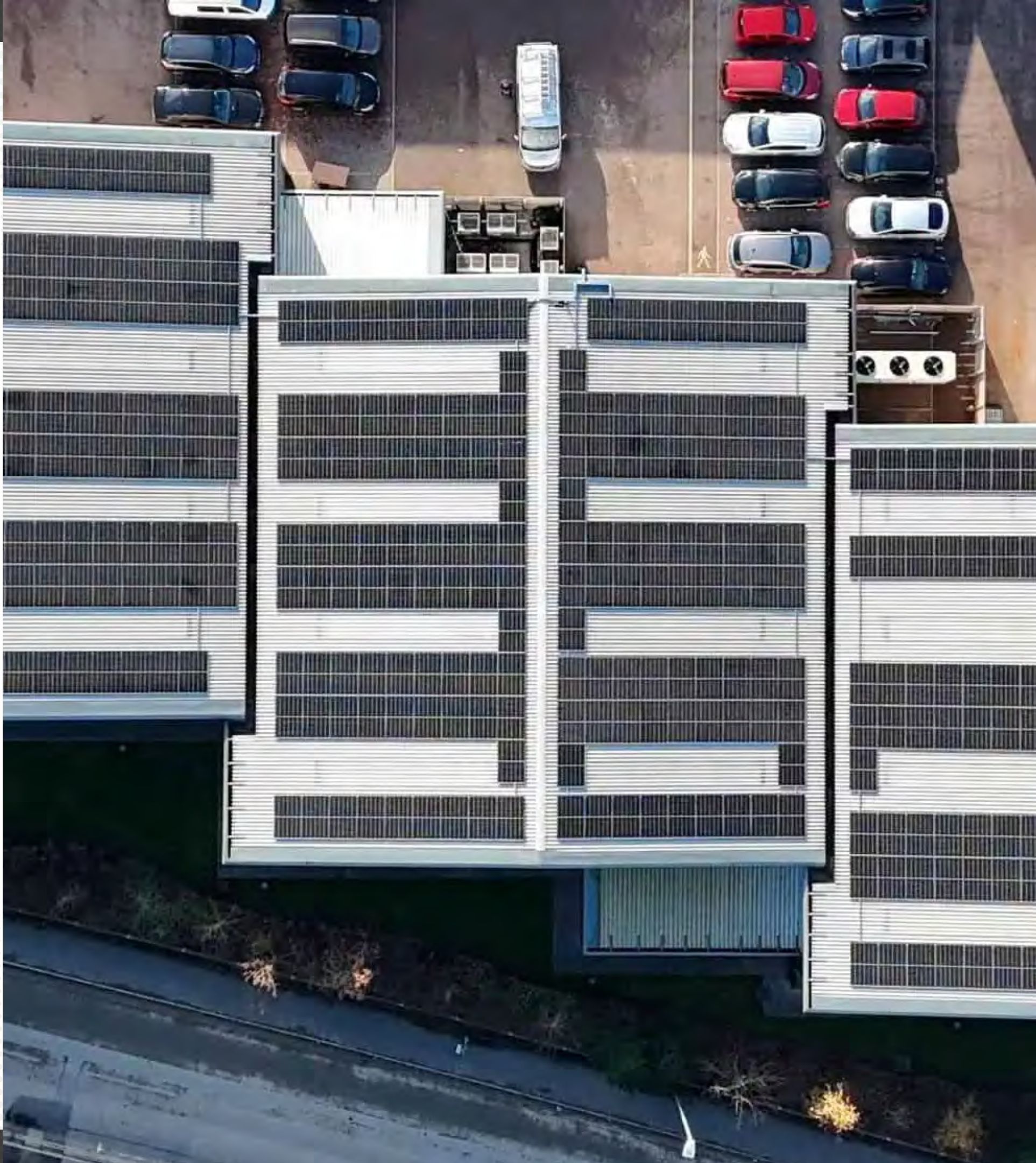
This report analyses Redbridge & Sons carbon footprint for June 2023 – May 2024, providing insights into their carbon footprint, key achievements, challenges, and future pathways to achieving Net Zero.

Business Data

Data	Count
Revenue	£3,300,000
Employees	14
Leased Buildings	1
Square Meterage	162
Owned Vehicles	12
Leased Vehicles	~
Plant	~

Reporting Principles

Reporting Period	June 2023 - May 2024
Baseline Period	June 2023 - May 2024
Boundary	Operational
Report Method	Market Based
Methodology	UK Government Reporting Guidelines
Data Confidence	Meduim



Emissions Inventory

Green House Gas (GHG) Inventory by Activity June 2023 - May 2024

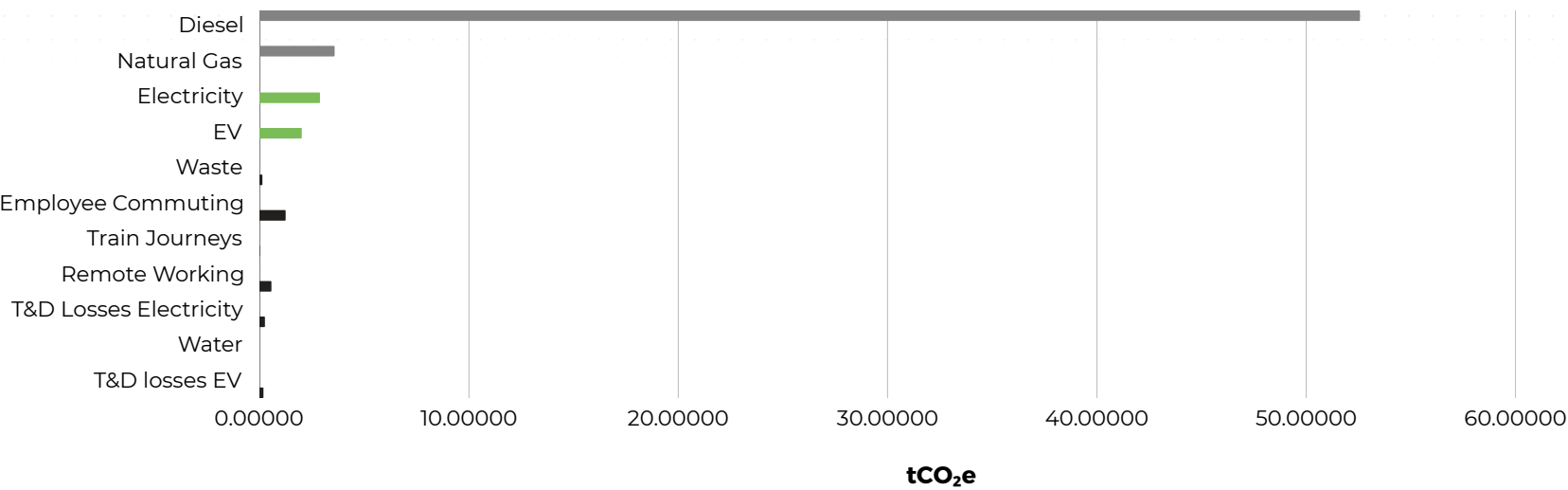
	Activity	Consumption	Unit	Carbon Emissions (tCO ₂ e)
Scope 1	Diesel	20,923	Litres	52.56
	Natural Gas	19,600	kWh	3.58
Scope 2	Electricity	13,902	kWh	2.87
	EV	25,300	Miles	2
Scope 3	Waste (Waste to Energy)	9.6	tonnes	0.13
	Employee Commuting	5824	Miles	1.24
	Remote Working (2 FTE)	2	Days per week	0.55
	Business Travel - Train	170	Km	0.006
	Water	3.8	M3	0.001
	T&D losses (Electricity)	13,902	kWh	0.25
	T&D Losses (EV)	25,300	iles	0.17
TOTAL				63.357

Redbridge & Sons carbon footprint for the reporting year is **63.357 tCO₂e (Market Based)**, with the vast majority stemming from Scope 1 emissions related to fleet operations.

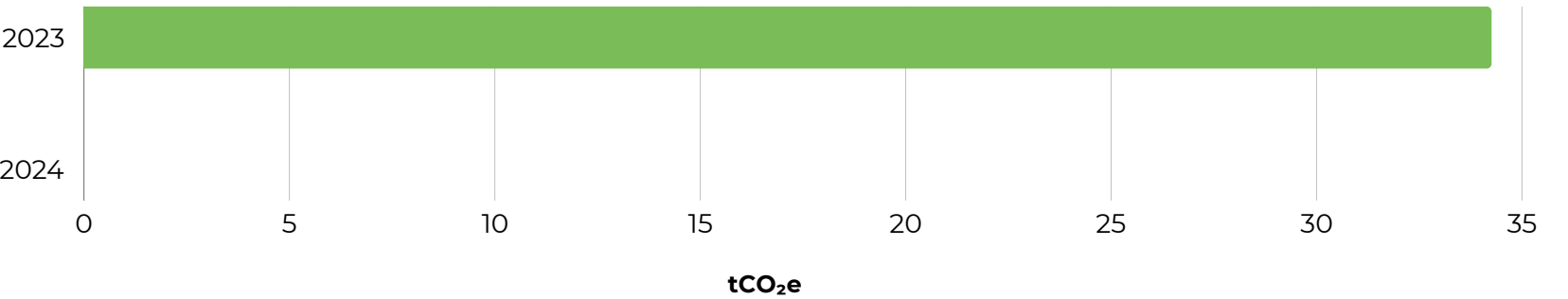
INTENSITY METRIC.

The company revenue reported in the reporting period was £3,300,000

19.19 tCO₂e/per Million £



Carbon Footprint Performance



	Carbon Emissions (Market Based) (tCO ₂ e)	% of Footprint
Scope 1	56.14	88.6
Scope 2	4.87	7.68
Scope 3	2.36	3.72

Pathway to Net Zero

With constant inquiries from both commercial and domestic clients looking to reduce their energy consumption, Redbridge has grown month on month. Their pathway is the next step on their company journey as they look to address their own carbon emissions and potentially enter new markets.

Failing to act risks higher operating costs, reduced competitiveness, and supply chain exclusion. Action now means long-term resilience, financial stability, and market leadership.

The Cost of Inaction

✗ **Regulatory & Compliance Risks** – Stricter carbon reporting means businesses without clear reduction strategies may struggle to win contracts or government funding.

✗ **Market Demand Shift** – Clients are actively seeking low-carbon suppliers. Businesses without verifiable carbon strategies risk losing commercial opportunities.

✗ **Financial Exposure** – Fuel and energy price volatility will continue. Businesses that fail to reduce reliance on fossil fuels face higher operational costs and uncertainty.

Strategic Actions for Commercial & Environmental Success

✓ **Continuous Fleet Electrification** – More EVs = lower fuel costs, reduced emissions, and enhanced credibility in tenders.

✓ **Proactive Supply Chain Engagement** – Understanding and reducing supplier emissions ensures transparency, competitive advantage, and regulatory preparedness.

✓ **Carbon Investment & Budgeting** – Strategic UK-based offsetting and carbon budgeting lock in lower prices now, avoiding future cost spikes.

✓ **Embedding Carbon Literacy** – A sustainability-driven workforce delivers better client engagement, stronger environmental leadership, and smarter decision-making.

A Business That Leads by Example

Redbridge & Sons have taken their first step towards a more sustainable future. With a consistent drive towards their sustainability goals, Redbridge can position itself as a market leader.



Sustainability Journey

Redbridge & Sons sustainability journey has just begun. Redbridge first year report showcases their commitment to understanding their environmental impact and beginning to build a robust plan to reduce where possible.

Having sustainability credentials isn't just a "nice to have"—it's becoming a business necessity in their industry. By demonstrating environmental responsibility, Redbridge can win more business, enhance reputation, attract talent, and future-proof their operations.

At Balanced Energy, we have developed a comprehensive roadmap to achieve Net Zero emissions. We are highlighting the annual reduction needed to meet the Net Zero target by 2050.

We believe that this will help Redbridge & Sons create a tailored, short, medium, and long-term emission reduction targets that are measurable and trackable. By using this pathway, it will enable Redbridge to take effective action towards sustainability and safeguard their business for the future.

Key Achievements in 2023-24

- ✓ **Baseline Report Established**
- ✓ **Exploring relocating office to more energy efficient premises** - to facilitate growth and reduce energy consumption and consider employees commute
- ✓ **Introduction of EV** - Redbridge & Sons have introduced 2 EV into their fleet to reduce related emissions

Why This Matters

- ◆ **First step towards sustainability** - Redbridge have undergone data collection and achieved their first carbon report.
- ◆ **Renewable Leadership Drives Trust** - Clients choose partners who walk the talk, making Redbridge & Sons a go-to provider for net-zero solutions.
- ◆ **Future-Proofing Against Costs & Regulations** - With energy security risks and compliance tightening, investing in sustainability now is a competitive advantage.



Offsetting with Purpose – The Strategy for Net Zero

Redbridge has begun to develop their pathway to Net Zero, but the evolving carbon market presents both risks and opportunities. While reducing emissions remains the primary focus, achieving true Net Zero requires offsetting unavoidable residual emissions.

Instead of viewing offsetting as a sunk cost, Redbridge & Sons can leverage it as a strategic financial tool, ensuring cost predictability, regulatory preparedness, and long-term business resilience. The approach involves purchasing verified carbon removals now while simultaneously securing future credits at today's lower prices—a hedge against price inflation and future supply constraints.

To address this year's emissions of **63.357 tCO₂e**, Redbridge can purchase verified UK-based carbon removals. The current market price for nature-based UK removals is £33 per tonne, equating to a **total investment of £2,112 for full offsetting**.

✓ **Immediate Impact:** Neutralises current emissions footprint, ensuring sustainability claims remain credible.

✓ **Regulatory & Market Readiness:** Positions Redbridge & Sons ahead of compliance requirements.

✓ **Stakeholder Trust:** Demonstrates tangible climate action, reinforcing their new sustainability commitments.

However, with offset prices projected to rise due to increased demand and tightening regulations, relying solely on purchasing offsets annually exposes Redbridge & Sons to long-term financial risks.

Carbon markets are rapidly evolving, and high-integrity removals—particularly engineered solutions like Bioenergy with Carbon Capture and Storage (BECCS) and Direct Air Capture (DAC)—are forecasted to increase in price by 80-150% by 2035.

To mitigate this risk, Redbridge & Sons should allocate a portion of its offsetting budget toward securing future vintages of high-quality removals at today's prices. This "carbon savings plan" locks in lower prices while building a diversified portfolio of nature-based and technological removals.



Offsetting with Purpose – The Strategy for Net Zero

Example: Hedging Future Offsets

If Redbridge & Sons purchases 15% of this year's footprint (9.5 tCO₂e) in 2030 BECCS removals at today's price of \$350 (£275) per tonne, this would cost £2,750 today, 0.083% Percentage of revenue:

- By 2030, if BECCS credits increase to £500 per tonne, the same investment would cost £5,000.
- Securing credits today locks in significant cost savings and ensures future compliance without exposure to price spikes.

Expanding the Portfolio with UK-Based Nature Solutions

Alongside BECCS, Redbridge & Sons can also invest in UK-based nature-based removals, priced around £45-£55 per tonne. By securing a mix of both long-lived engineered removals (BECCS/DAC) and natural carbon sinks (peatland restoration, afforestation), Solarsense ensures:

- ✓ **Diverse risk mitigation**—spreading investments across different carbon storage mechanisms.
- ✓ **Stronger ESG impact**—nature-based solutions enhance biodiversity and local community benefits.
- ✓ **Market differentiation**—a forward-thinking offset strategy positions Redbridge & Sons as a sustainability leader.

The voluntary carbon market is tightening, and companies waiting until their Net Zero deadlines will face:

- **Severe price inflation**—costs could double or triple within the next decade.
- **Supply shortages**—high-integrity carbon removals will become harder to access.
- **Regulatory risk**—governments are increasingly mandating stricter reporting and offset requirements.

By implementing a blended offsetting strategy—balancing immediate removals with future credit investments— Redbridge & Sons transforms carbon offsetting into a financial asset rather than a liability. This proactive approach locks in lower costs, safeguards business growth, and enhances credibility in an industry where sustainability leadership is paramount.



Conclusion

The analysis of Redbridge & Sons carbon footprint for the reporting period from 1st June 2023 to 31st May 2024 highlights the company's current environmental impact. While this is the company's first carbon footprint report, the data reveals significant challenges, particularly in Scope 1 emissions from fuel emissions.. However, it also offers a unique opportunity to set a solid foundation for future sustainability efforts.

Next Steps – Strengthening Business Resilience

- ▶ Immediate focus on Renewable energy procurement, source energy from 100% renewable energy suppliers.
- ▶ Fleet Electrification – Continue expanding EV adoption, prioritising commercial vans should current range technology meet the company's demand.
- ▶ Carbon Literacy Training – Embed sustainability knowledge across all teams.
- ▶ Scaling Carbon Offsetting Investments – Secure UK-based removals now to hedge against rising costs.
- ▶ Supply Chain Transparency – Engage solar panel manufacturers to improve carbon reporting.

The recommendations call for a strategic approach that tackles Redbridge & Sons unique challenges. By focusing on both reduction and offsetting, combined with a transparent and phased approach, the company can lay down a robust framework for achieving substantial emission reductions.

While the road to decarbonisation might seem complex, the integrated strategy outlined above can turn challenges into opportunities. By aligning its business practices with sustainability goals, Redbridge & Sons has the potential to become an industry leader in environmental stewardship.

In conclusion, Redbridge & Sons first steps in carbon accounting set a strong foundation for future sustainability initiatives, leveraging technological innovation, strategic planning, collaboration, and transparency to reduce its carbon footprint and contribute to the global effort to combat climate change, making it a stronger more resilient business.



Verification

Balanced Energy is committed to delivering the highest standards of accuracy and integrity in carbon reporting and sustainability management. This report has been prepared in accordance with internationally recognised methodologies, including the Greenhouse Gas (GHG) Protocol ensuring compliance with best practices and industry standards.

As part of our rigorous verification process, this report has been independently reviewed and quality checked by an IEMA-qualified expert in carbon management, ensuring the accuracy and reliability of the data presented. This verification process provides confidence to Studio Illicit and its stakeholders that the emissions data and recommendations reflect an accurate, transparent, and actionable sustainability strategy.

The verification process includes:

- **Data Integrity Check:** Ensuring all activity data sources, including energy consumption and business operations, align with recorded evidence.
- **Emission Factor Validation:** Applying the latest emission factors to ensure consistency and accuracy in calculations.
- **Review of Assumptions:** Assessing key assumptions and methodologies used to quantify emissions and reduction pathways.
- **Quality Assurance:** Cross-checking figures, calculations, and recommendations against Balanced Energy’s internal quality standards to ensure precision and transparency.

Role	Name	Signature	Date
Author	Harry Stannett		28/01/2025
Reviewer	Elea Taffet		29/01/2025



Certificate of Carbon Footprint Assessment

This is to certify that Redbridge & Sons Limited has successfully completed a comprehensive carbon footprint assessment for the reporting period **June 2023 – May 2024**.

Through this assessment, Redbridge & Sons Ltd has demonstrated a strong commitment to measuring and managing their environmental impact in alignment with best practices and industry standards.

Total Carbon Footprint (Market Based): 63.357 tCO2e
Scope 1 Emissions: 56.14 tCO2e
Scope 2 Emissions: 4.87 tCO2e
Scope 3 Emissions: 2.36 tCO2e
Emission Intensity: 19.19 tCO2e/£m revenue

This assessment was conducted following the principles of the GHG Protocol and verified by an IEMA-qualified expert in carbon management, ensuring the highest levels of accuracy and transparency.



Key Facts

Company Information:

- Organisation: Redbridge & Sons
- Head Office: Redbridge & Sons, 20 Spinnaker Road, Hempsted, Gloucester, GL2 5FD
- Customer Contact: Lee Derbridge
- Email: lee@redbridgeandsons.co.uk
-
- Balanced Energy Contact: Harry Stannett
- Email: harry@balanced-energy.co.uk
- Phone: 01278 258020 / 07575503055

Reporting Overview:

- Baseline Year: June 2023 - May 2024
- Current Reporting Year: June 2023 - May 2024
- Baseline Emissions: 63.357 tCO₂e
- Total Emissions (2023/24): 63.357 tCO₂e
- Intensity Metric:
 - tCO₂e per £ million turnover: 19.19
 - tCO₂e per full-time employee (FTE): 4.53

Carbon Management Approach:

- Approach Used: Operational Control
- Operational Scope Covered:
 - Fuel Consumption
 - UK Electricity Consumption (Scope 2)
 - Transmission & Distribution (T&D) Losses (Scope 3)
 - Water Consumption
 - Waste Management
 - Purchased Goods (Paper Usage)
 - Diesel (Litres)
 - Business Travel
 - Employee Commuting
 - Homeworking
- **Organisational Boundary:**
 - Covers all UK-based facilities under operational control.



Who are Balanced Energy

Balanced Energy is a Net Zero consultancy dedicated to creating impactful, data-driven strategies for a sustainable future. We harness the power of behavior, culture, and robust data to craft compelling narratives that inspire action. Our approach not only reduces emissions but also strengthens businesses—making them resilient, profitable, and aligned with their long-term goals. At Balanced Energy, we believe that a sustainable business is a better business, ensuring our clients are not just prepared for the future but leading it.

Our Mission

Creating a greener future for business; making it easier for organisations of all sizes to have a positive impact on the planet.



Balanced
ENERGY



www.balanced-energy.co.uk
hello@balanced-energy.co.uk
01278 258020