Empowering your journey to Net Zero

Wessex Internet

BEgin Net Zero

Carbon Footprint Audit Report

June 2023 - May 2024

Balanced ENERGY

Certified B Corporation

Contents

Executive Summary

Wessex Internet (WI) is on a rapid growth trajectory, expanding its full-fibre network across rural communities to bridge the digital divide. This essential infrastructure expansion naturally results in an increase in emissions, but this must be viewed in the context of long-term sustainability and operational efficiency. Unlike many industries, where carbon footprints remain stable year-on-year, WI's emissions are frontloaded—driven primarily by construction. However, once installed, full-fibre broadband has one of the lowest lifetime carbon footprints per user of any connectivity solution.

This report provides a transparent assessment of Wessex Internet's emissions for the reporting period **October 2023 – September 2024**, capturing the impact of its expansion while outlining a roadmap to decouple business growth from emissions.

The total carbon footprint (market-based) for the reporting period is recorded at **2,259.78 tCO2e. translating to 6.57 tCO2e per FTE.** Which Wessex Internet will be using as a metric to track performance whilst in the growth stage of the business. This represents an increase of 101.52% in tCO2e. By comparison to the previous period Wessex achieved a 17.37% reduction against baseline tCO2e/FTE

Key Highlights

✓ **Emissions in Context:** Wessex Internet's footprint reflects its investment in infrastructure. The more fibre it lays today, the greater its long-term energy efficiency and sustainability benefits.
✓ **Business Growth vs. Emissions:** As WI scales, it will transition from high-emission infrastructure build to an ultra-low-emission operational model.
✓ **Industry Leadership**: Compared to national telcos relying on traditional civil engineering, WI's soft-dig approach already reduces emissions per km of fibre installed.
✓ **Sustainability Commitments:** WI continues to implement carbon literacy training, transition fleet vehicles, and optimise operations for long-term efficiency.
✓ **Next Steps:** Strengthen supplier engagement, integrate lower-carbon materials, and develop a structured carbon investment strategy to hedge against future carbon pricing.

Intensity Metric: tCO_2e/FTE.
6.57 tCO_2e/FTE

Introduction

The role of broadband providers in the Net Zero transition is twofold: they must reduce their own operational footprint while enabling society to reduce emissions through digital connectivity. Wessex Internet is committed to both.
As a rapidly growing rural broadband provider, WI faces a unique sustainability challenge—balancing the urgent need to expand full-fibre networks with the imperative to reduce carbon emissions. Unlike service-based industries, where emissions are consistent over time, WI's footprint is frontloaded due to the materials, transport, and energy required in infrastructure deployment. However, the long-term benefits are clear:

- **Fibre-optic broadband is up to 80% more energy efficient than copper networks.**
- **Once laid, the infrastructure has a low lifetime footprint compared to mobile and satellite networks.**
- **Reliable high-speed internet reduces transport emissions by enabling remote work, e-health, and digital access to services.**

This report analyses Wessex Internet's emissions profile, provides insight into its sustainability progress, and outlines the pathway to long-term carbon efficiency and Net Zero alignment.

Business Data & Reporting Principles

Data	Count
Revenue	£4,779,804
Employees	344
Owned Buildings	0
Leased Buildings	5
Square Meterage	Office: 951; Total: 15,386

Reporting Period	October 2023 - September 2024
Baseline Period	October 2021 - September 2022
Boundary	Operational
Report Method	Market Based
Methodology	UK Government Reporting Guidelines
Data Confidence	Medium

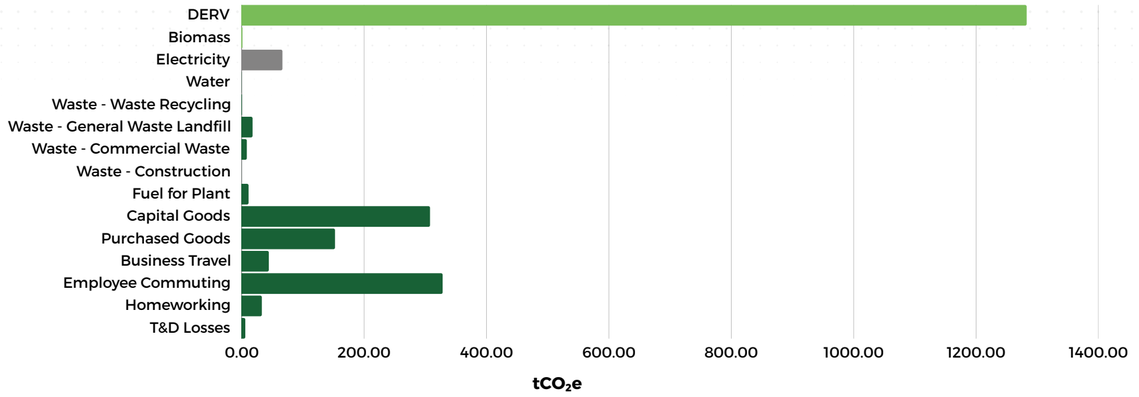
Emissions Inventory

Green House Gas (GHG) Inventory by Activity
October 2023 - September 2024

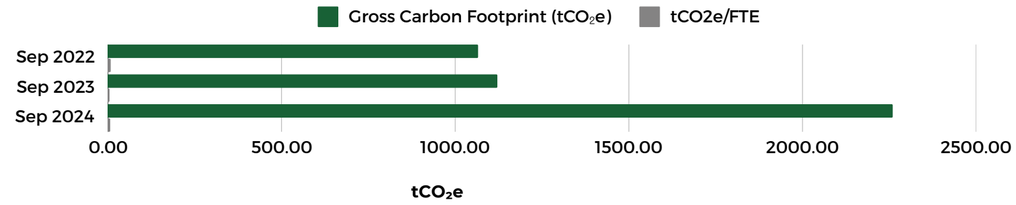
	Activity	Consumption	Unit	Carbon Emissions (tCO_2e)
	DERV	510,447.18	Litres	1,282.65
Scope 1	Biomass	99,060.00	kWh	1.12
	Biomass (Out of Scope) *	99,060.00	kWh	34.67
Scope 2	Electricity	321,364.71	kWh	66.54
	Water	1,026.00	m3	0.16
	Waste - Waste Recycling	132,020.00	Litres	0.51
	Waste - General Waste Landfill	132,020.00	Litres	17.72
	Waste - Commercial Waste	16.04	Tonnes	8.35
	Waste - Construction	61.82	Tonnes	0.06
	Fuel for Plant - Diesel	46.31	Litres	0.12
	Fuel for Plant - Petrol	5,305.43	Litres	11.06
Scope 3	Capital Goods	3,471,625.59	GBP	307.71
	Purchased Goods	495,287.65	GBP	152.44
	Business Travel	268,108.66	km	44.28
	Employee Commuting	1,967,088.33	km	328.33
	Homeworking	98,482.00	per FTE Working Hours	32.87
	Transmission and Distribution (T&D) Losses	321,364.71	kWh	5.88
TOTAL				**2,259.78**

WI's carbon footprint for the reporting year is 2,259.78 tCO2e, reflecting the continued expansion of its fibre network. This increase is primarily driven by higher fleet usage and material consumption for infrastructure deployment. However, as more customers connect, energy efficiency per user is improving, steadily reducing the carbon intensity per customer. Importantly, the emissions associated with construction are temporary, with long-term sustainability gains materialising once the network is fully in place and operational.

Intensity Metric: tCO_2e/FTE.
6.57 tCO_2e/FTE



Carbon Footprint Performance



	Carbon Emissions (Market Based) (tCO_2e)	% of Footprint
Scope 1	1,283.77	56.81%
Scope 2	66.54	2.94%
Scope 3	909.47	40.25%

Pathway to Net Zero

Wessex Internet's Net Zero strategy is designed to decouple business growth from emissions by shifting from infrastructure expansion to operational efficiency. The company recognises that while current emissions are necessary for growth, the long-term objective is to embed sustainability across all areas of the business.

Key Strategic Actions and Rationale

✓ **Pragmatic Fleet Decarbonisation Approach**
Fleet vehicles remain a major contributor to WI's footprint. While full electrification is currently unfeasible due to inadequate charging infrastructure in rural areas, a phased approach is recommended. Non-construction vehicles, such as cars, SUVs, and light trucks, should transition to EVs where possible. This demonstrates a proactive commitment to fleet decarbonisation while maintaining operational feasibility for essential work vehicles.
Why it matters: Balances sustainability with practical constraints, reduces fuel costs for non-construction vehicles, and signals commitment to future low-emission regulations.

✓ **Lower-Carbon Materials & Supply Chain Engagement**
WI's largest unmeasured impact lies in the embedded carbon of network materials. A key strategy to reduce this impact is prioritising direct buried methods over conventional hard dig approaches, minimising material usage while maintaining operational efficiency. Additionally, increasing supplier transparency and selecting lower-carbon alternatives will further drive emissions reductions.
Why it matters: Reducing material usage lowers embedded carbon, enhances efficiency, and strengthens environmental positioning. Supplier engagement ensures credible data, better reporting, and long-term sustainability benefits.

✓ **Carbon Literacy & Behavioural Change**
WI recognises the importance of Carbon Literacy training as a key step in embedding sustainability across the organisation. Introducing this across all teams will ensure employees are equipped with the knowledge to make informed, sustainable decisions at every level.
Why it matters: An engaged and informed workforce can drive internal efficiencies, enhance sustainability initiatives, and encourage clients to adopt greener choices.

✓ **Operational Efficiency Post-Expansion**
Once major infrastructure is laid, WI will transition to a low-emission operational model, reducing its footprint naturally.
Why it matters: Emissions will decline significantly as construction phases wind down, ensuring sustainability gains align with business maturity.

Sustainability Journey

Wessex Internet's sustainability journey is shaped by its mission to connect rural communities in the most environmentally responsible way possible. Over the past year, the company has made significant strides in reducing its operational footprint while balancing business expansion. As the company continues to grow, embedding structured carbon reporting and reduction targets will be crucial in achieving long-term sustainability goals.

Key Achievements:

✅ **Renewable Energy Integration**: Relocating the Core Comms room to an 80kW solar facility, reducing reliance on grid electricity and enhancing energy efficiency
✅ **Operational Energy Reduction**: Installed energy-efficient equipment, reducing HQ energy consumption.
✅ **Sustainable Construction Practices:** Continued using soft-dig techniques, minimising emissions per km of fibre laid.
✅ **Transparent Carbon Reporting:** Measured and tracked emissions for a third consecutive year, refining long-term reduction strategies.

Ongoing Focus Areas:

▶ Fleet electrification to drive transport-related emission reductions, with annual tracking to measure progress.
▶ Material efficiency improvements to reduce Scope 3 embedded carbon, including sustainable procurement strategies.
▶ Scaling UK-based carbon removals to hedge against long-term carbon pricing, incorporating structured carbon investments.
▶ Establishing formal emission reduction targets aligned with business growth, ensuring annual progress tracking and public reporting.
▶ Expanding carbon reporting across all business operations, ensuring accurate data collection to inform long-term sustainability strategies.

By embedding ongoing carbon reporting and targeted reduction goals, Wessex Internet can continue to drive efficiency, mitigate future costs, and strengthen its position as a sustainability leader in the rural broadband sector.

Conclusion

Wessex Internet continues to integrate sustainability into its business, reducing emissions while expanding rural connectivity. Through renewable energy investments, low-impact construction, and future-focused carbon reduction strategies, the company is proving that digital infrastructure can support both business growth and environmental responsibility. With a clear pathway to Net Zero, Wessex Internet is well-positioned to navigate evolving sustainability expectations while reinforcing its leadership in rural broadband expansion.

Key Achievements

✅ **Sustainable Network Deployment** – Direct buried ploughing reduces emissions per km of fibre laid.
✅ **Renewable Energy Integration** – Installed 160kW of solar panels, reducing reliance on grid electricity.
✅ **Resilient Digital Infrastructure** – Partnered with Dorset Council to decarbonise core operations through solar PV.
✅ **Sustainable Heating Solutions** – Biomass boiler powered by locally sourced materials cuts fossil fuel dependence.
✅ **Supporting Rural Decarbonisation** – High-speed internet enables remote work, smart farming, and low-carbon business practices.

Next Steps – Strengthening Long-Term Sustainability

▶ **Fleet Electrification** – EV adoption where feasible should be explored, prioritising non-construction vehicles such as cars, SUVs, and light trucks. This phased approach balances sustainability with infrastructure constraints while demonstrating a commitment to reducing transport emissions.
▶ **Phase out Fossil Fuels** - Utilise fuels such as HVO as alternative to the burning of fossil fuels.
▶ **Carbon Literacy Training** – Embed sustainability knowledge across all teams.
▶ **Scaling Carbon Offsetting Investments** – Secure UK-based future vintage removals to hedge against rising costs.
▶ **Enhanced Climate Resilience** – Adapt infrastructure to mitigate long-term climate risks.

Wessex Internet is demonstrating that sustainability and digital connectivity can work hand in hand. By embedding behaviour, culture, inspiration, and investment into its strategy, the company is helping to create resilient, future-proofed rural communities while leading the charge for a low-carbon digital future.

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	Elea Taffet		05/02/2025
Reviewer	Ashley Webber		10/02/2025

Wessex Internet

Certificate of Carbon Footprint Assessment

This is to certify that Wessex Internet has successfully completed a comprehensive carbon footprint assessment for the reporting period **October 2023 - September 2024**. Through this assessment, Wessex Internet 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): 2,259.78 tCO2e
Scope 1 Emissions: 1,283.77 tCO2e
Scope 2 Emissions: 66.54 tCO2e
Scope 3 Emissions: 550.48 tCO2e
Emission Intensity: 909.47 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.

Balanced ENERGY

Carbon Accounting Alliance Member

Key Facts

Company Information:

- Organisation: Wessex Internet Limited
- Head Office: The Old Laundry, Ranston, Blandford, Dorset, DT11 8PU, United Kingdom
- Customer Contact: Oscar Nicole, Bid Manager
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Reporting Overview:

- Baseline Year: October 21 - September 22
- Current Reporting Year: October 23 - September 24
- Baseline Emissions: 1065.85 tCO2e
- Current Reporting Emissions (2023/24): 2,259.78 tCO2e
- Intensity Metric:
  - tCO2e per full-time employee (FTE): 6.57

Carbon Management Approach:

- Approach Used: Operational Control
- Operational Scope Covered:
  - Fleet (Scope 1)
  - Biomass
  - UK Electricity Consumption (Scope 2)
  - Transmission & Distribution (T&D) Losses (Scope 3)
  - Purchased Goods
  - Capital Goods
  - Waste Management
  - Business Travel
  - Fuel Consumption
  - Employee Commuting
  - Homeworking
- **Organisational Boundary:**
  - Covers all UK-based facilities under operational control.
- Conversion factors from UK government for company reporting of GHG emissions and Climatiq

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.

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