BEgin Net Zero

Annual Carbon Footprint Report

October 2022 - September 2023

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November 2024

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EXECUTIVE SUMMARY

The carbon report for Wessex Internet outlines a comprehensive analysis of the company's greenhouse gas emissions for the reporting period from 1st October 2022 to 30th September 2023. The company's revenue for the reporting period was £3,327,564 and the Full-Time Equivalent (FTE) was 246. The total carbon footprint (market-based) for the reporting period is recorded at **1,121.36 tCO2e**, translating to 336.99 tCO2e per million pounds in revenue. This represents an increase of 5.21% in tCO2e.

A breakdown of emissions reveals:

Scope 1 emissions: 54.91%, from DERV.
Scope 2 emissions: 2.35%, from electricity.
Scope 3 emissions: 42.74%, mainly from capital goods, commuting, and homeworking.

Key Findings:

DERV (Diesel Engine Road Vehicle) Emissions: The largest contributor to overall emissions, substantially increased from 377.43 tCO2e to 614.64 tCO2e (62.85%). This rise underscores the need for alternative fuel options, such as HVO (Hydrotreated Vegetable Oil), to curb emissions.
Electricity Consumption: An increase of 10.86 tCO2e due to a 58.90% rise in consumption from the baseline year. This highlights the importance of energy efficiency initiatives to manage and reduce consumption.
Capital Goods: Experienced an 18.24% decrease.
Business Travel: Increased by 18.5 tCO2e, a considerable growth of 114.69%. This trend points to the need for prioritising sustainable travel options.

In correlation with a slight increase in revenue of 3.99% and a remarkable 83.58% increase in FTE, the company's carbon footprint has increased by 55.51 tCO2e (5.21%). However, Wessex Internet has made progress in terms of its carbon intensity metric, showing a decrease of 18.28 tCO2e/£m (5.15%) despite the company's growth.

Recommendations:

Develop a Formal Carbon Reduction Plan: Implementing and updating a structured plan will provide clear steps towards achieving further emission reductions and staying aligned with net-zero targets by 2050. This plan should address both direct emissions from operations and indirect emissions.
Offsetting Strategy: Establishing a strategy focused on future-bought carbon removals, particularly those aligned with the Oxford Offsetting Principles, will help manage costs and ensure the effectiveness of offsets. The strategy should prioritise high-integrity carbon credits and longer-term sequestration projects to mitigate against predicted market constraints.
HVO and EV Use: DERV remains the leading source of emissions. However, substituting diesel with HVO (Hydrotreated Vegetable Oil) can significantly reduce emissions, achieving a total reduction of 605.93 tCO2e for this reporting period. Integrating Electric Vehicles (EVs) can also significantly reduce emissions from fleet.
Sustainable Travel: With business travel emissions rising, it is important to consider the use of HVO instead of diesel for company vehicles, which could reduce emissions by 33.22 tCO2e. Encouraging car sharing among employees or implementing green travel days where possible can play a vital role in lowering commuting emissions, though office locations may present some integration challenges.

INTRODUCTION

- Climate change, fuelled by activities such as burning fossil fuels and deforestation, presents significant threats to the global economy, society, and environment. Businesses, especially SMEs, must adapt and mitigate these impacts to enhance resilience and operational efficiency, promoting a healthier planet in the process.

- A strategic approach to emission reduction is essential. This involves:
    - Systematic tracking of direct and indirect emissions across business operations.
    - Engaging in voluntary carbon footprinting to pinpoint improvement areas and showcase environmental stewardship.

- Prioritising emission reduction and sustainability not only combats climate change but also yields considerable economic benefits. By integrating these strategies, companies enhance their competitive edge, improve stakeholder relationships, and support a sustainable future, ensuring long-term success and stability.

Business Data

Data	Count
Revenue	£3,327,564
Employees	246
Owned Buildings	0
Leased Buildings	4
Square Meterage	Office: 927; Total: 14,346

Reporting Principles

Reporting Period	October 2022 - September 2023
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 2022 - September 2023

	Activity	Consumption	Unit	Carbon Emissions (tCO$_2$e)
Scope 1	DERV	244,674.28	Litres	614.64
	Biomass	103,010.00	kWh	1.11
	Biomass (Out of Scope) *	103,010.00	kWh	36.05
Scope 2	Electricity	127,273.14	kWh	26.35
Scope 3	Water	1038	m3	0.18
	Waste - Waste Recycling	32.38	Tonnes	0.69
	Waste - General Waste Landfill	0.62	Tonnes	0.32
	Waste - Commercial Waste	17.26	Tonnes	8.58
	Fuel for Plant - Diesel	947.96	Litres	2.38
	Fuel for Plant - Petrol	7,434.61	Litres	15.59
	Fuel for Plant - Unknown	65.57	Litres	0.15
	Capital Goods	2,809,312	GBP	171.85
	Purchased Goods	533.05	Tonnes	15.17
	Business Travel	149,863.74	km	34.63
	Employee Commuting	1,062,983.48	km	177.13
	Homeworking	150,696	per FTE Working Hours	50.30
	Transmission and Distribution (T&D) Losses	127,273.14	kWh	2.28
TOTAL				**1,121.36**

£ Intensity Metric: tCO$_2$e/million pound revenue
336.99 tCO$_2$e/million pound revenue

£ Intensity Metric: tCO$_2$e/FTE
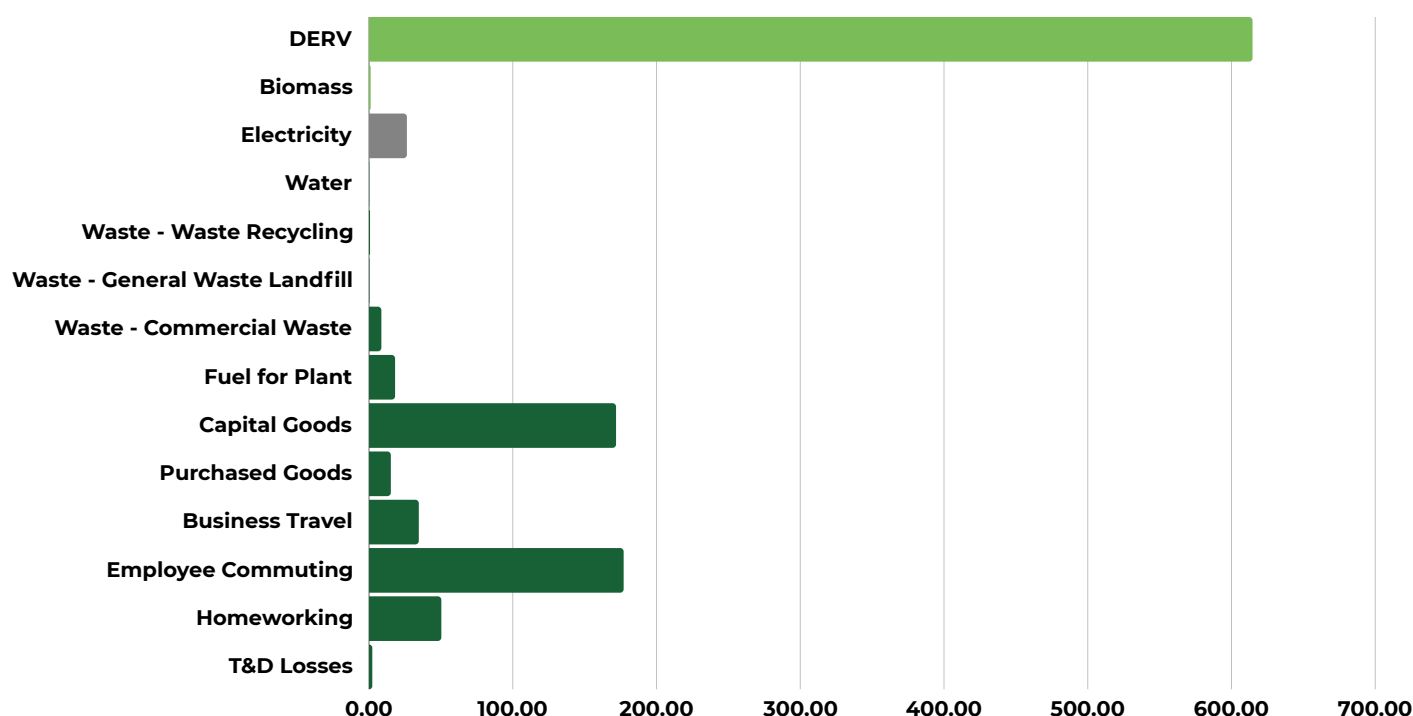**4.56 tCO$_2$e/FTE**

DERV: Diesel Engine Road Vehicle
Biomass Out of Scope not included in carbon footprint but must show on GHG statement
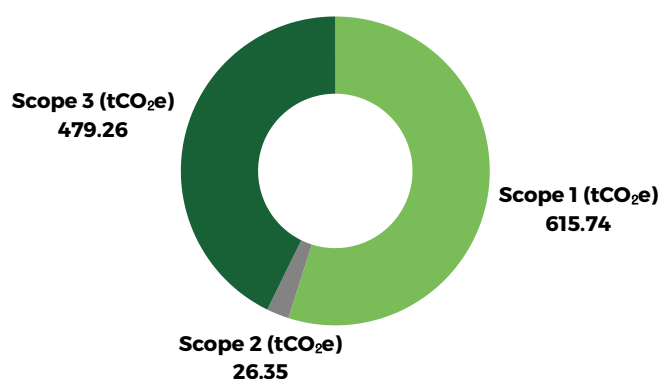
EMISSIONS INVENTORY

Green House Gas (GHG) Inventory by Scope & Activity
October 2022 - September 2023

GHG Emissions (tCO$_2$e) by activity (Market Based)
Scope 1 + Scope 2 + Scope 3

Activity	
DERV	(green bar ~615)
Biomass	
Electricity	(grey bar ~26)
Water	
Waste - Waste Recycling	
Waste - General Waste Landfill	
Waste - Commercial Waste	
Fuel for Plant	
Capital Goods	
Purchased Goods	
Business Travel	
Employee Commuting	
Homeworking	
T&D Losses	

(x-axis: 0.00, 100.00, 200.00, 300.00, 400.00, 500.00, 600.00, 700.00)

	Carbon Emissions (Market Based) (tCO$_2$e)	% of Footprint
Scope 1	615.74	54.91%
Scope 2	26.35	2.35%
Scope 3	479.26	42.74%

Scope 3 (tCO$_2$e) 479.26
Scope 1 (tCO$_2$e) 615.74
Scope 2 (tCO$_2$e) 26.35

PERFORMANCE TRACKING

Green House Gas (GHG) Inventory Comparison

■ **tCO₂e/£million Turnover**

■ **Gross Carbon footprint tCO₂e**
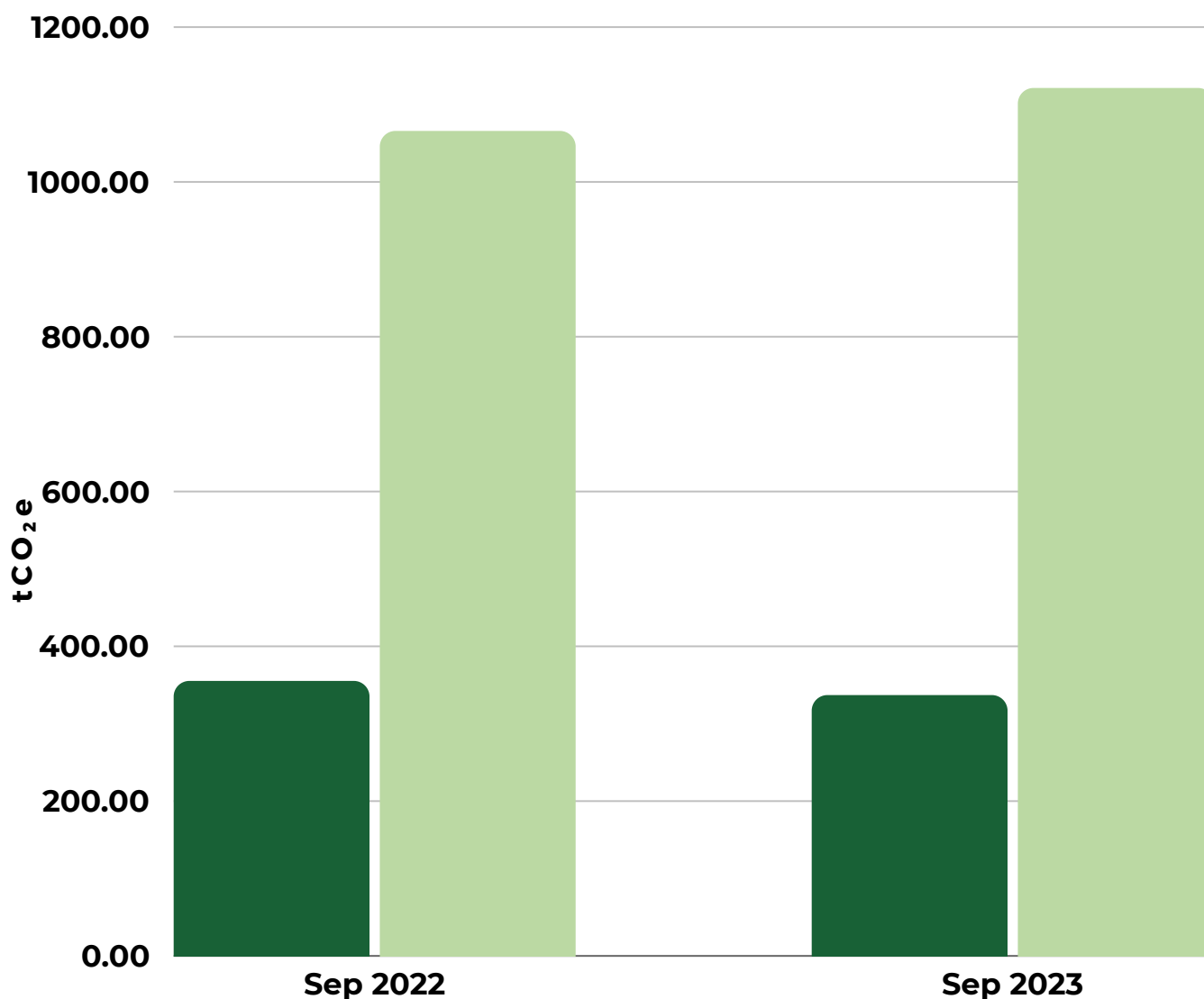
The current emissions inventory for Wessex Internet is comprehensive, covering a wide range of sources to enhance transparency and support the company's strategic focus on reducing environmental impacts. However, certain purchased goods were excluded from the Scope 3 boundary due to the complexity and inconsistency of the available data. By refining data collection processes for these goods, Wessex Internet can further improve its emissions tracking and align more closely with sustainability standards in future inventories.
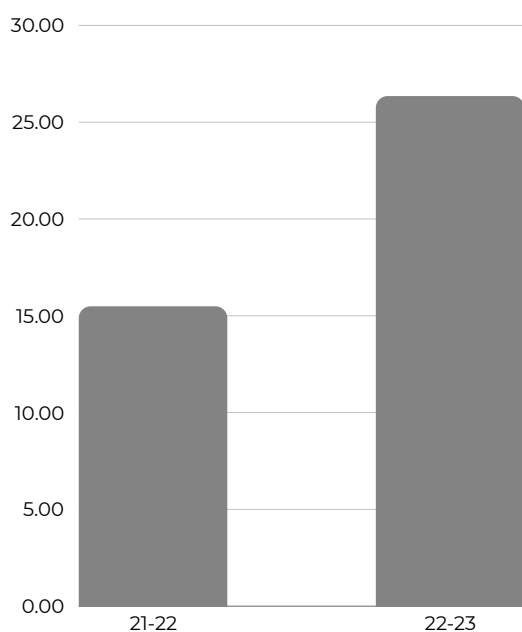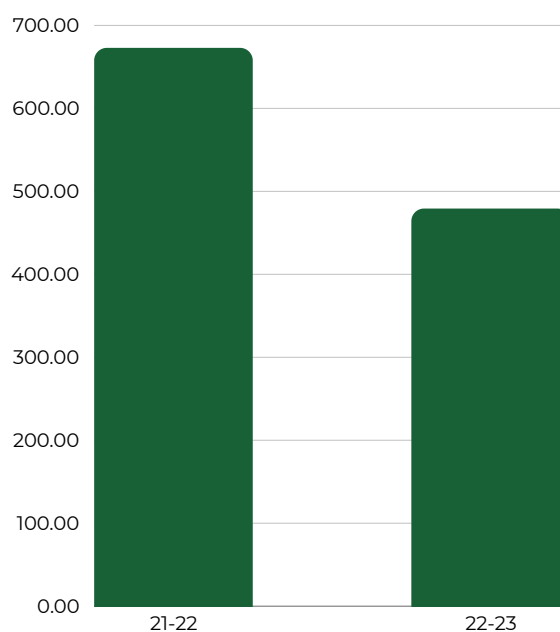
PERFORMANCE TRACKING

Emissions/FTE
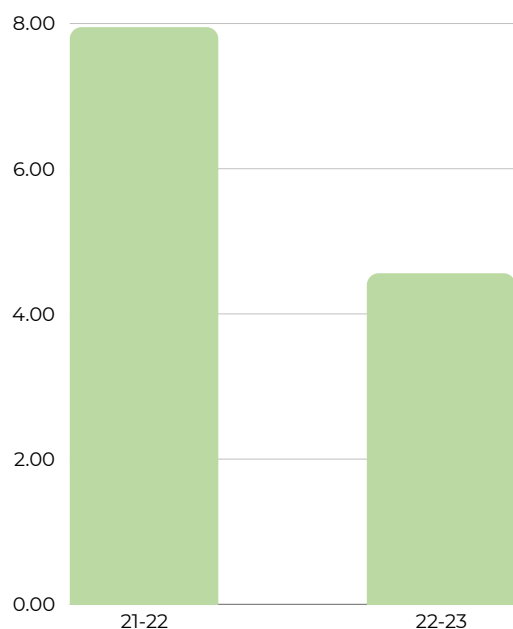
Scope 1 Emissions (tCO2e)
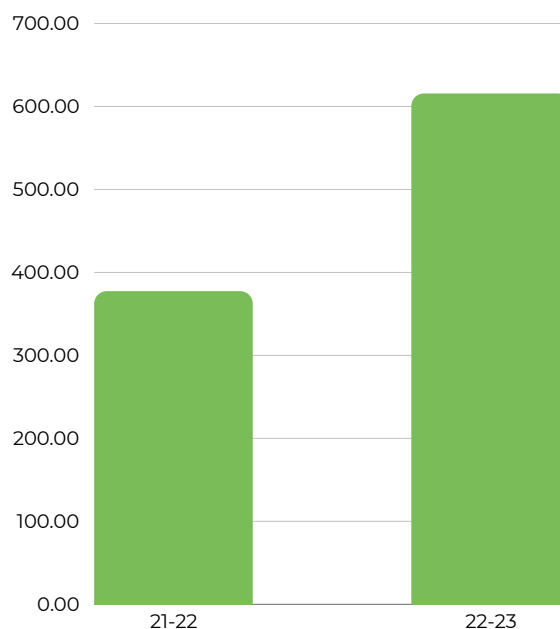
Scope 2 Emissions (tCO2e)

Scope 3 Emissions (tCO2e)

Performance since baseline: +55.51 tCO2e
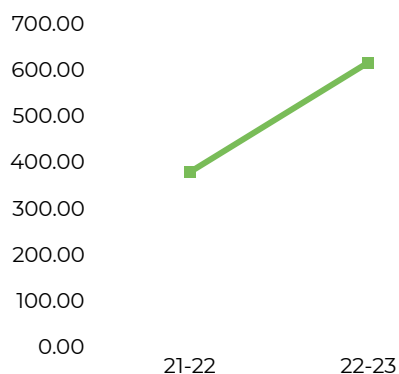**Intensity metric (tCO2e/FTE) reduction of 42.66%**

PERFORMANCE TRACKING
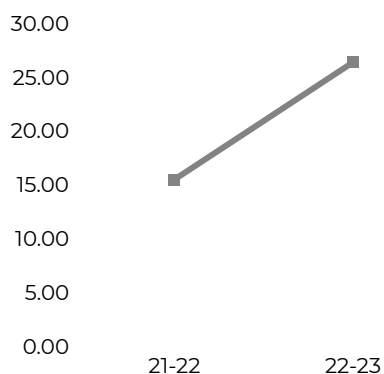
Emissions Tracking - By Activity (tCO2e)
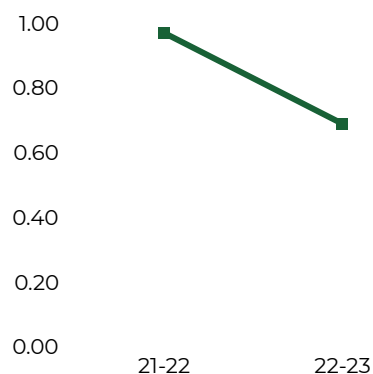
Scope 1 Emissions Tracking

DERV
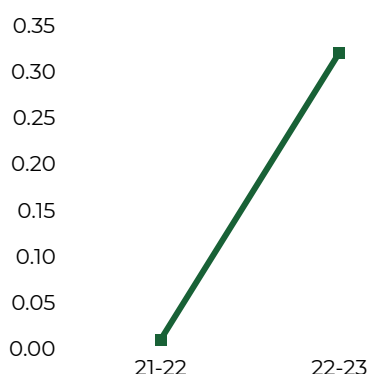
Scope 2 Emissions Tracking

Electricity

Scope 3 Emissions Tracking
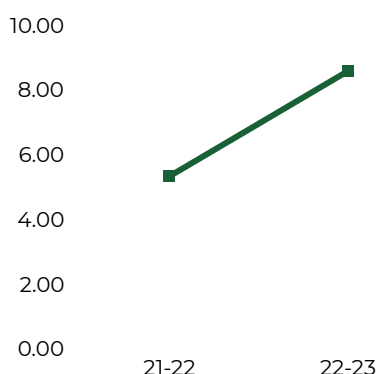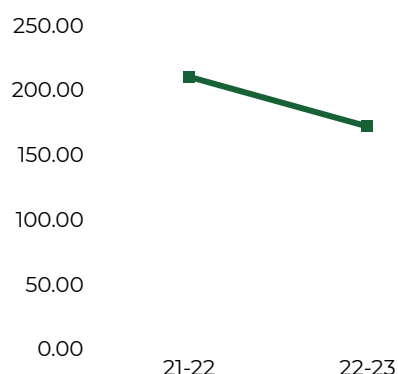
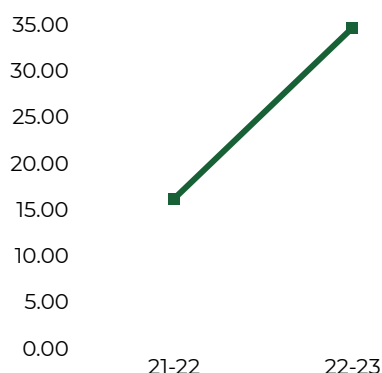#### Waste Recycling

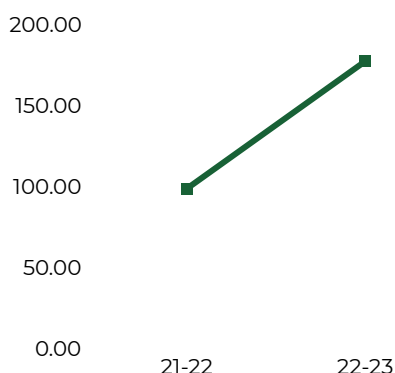#### General Waste Landfill

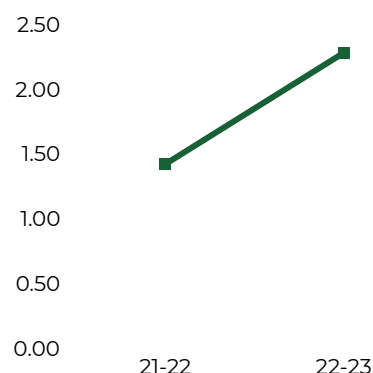#### Commercial Waste

Capital Goods

Business Travel

Employee Commuting

T&D Losses

PATHWAYS TO NET ZERO

Taking meaningful action to reduce emissions is a crucial step in mitigating the devastating effects of climate change. For organizations committed to reducing the carbon footprint of their operations, setting clear targets is key to establishing direction and accountability.

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 Wessex Internet create a tailored, short, medium, and long-term emission reduction targets that are measurable and trackable. By using this pathway, it will enable Wessex Internet to take effective action towards sustainability and safeguard their business for the future.
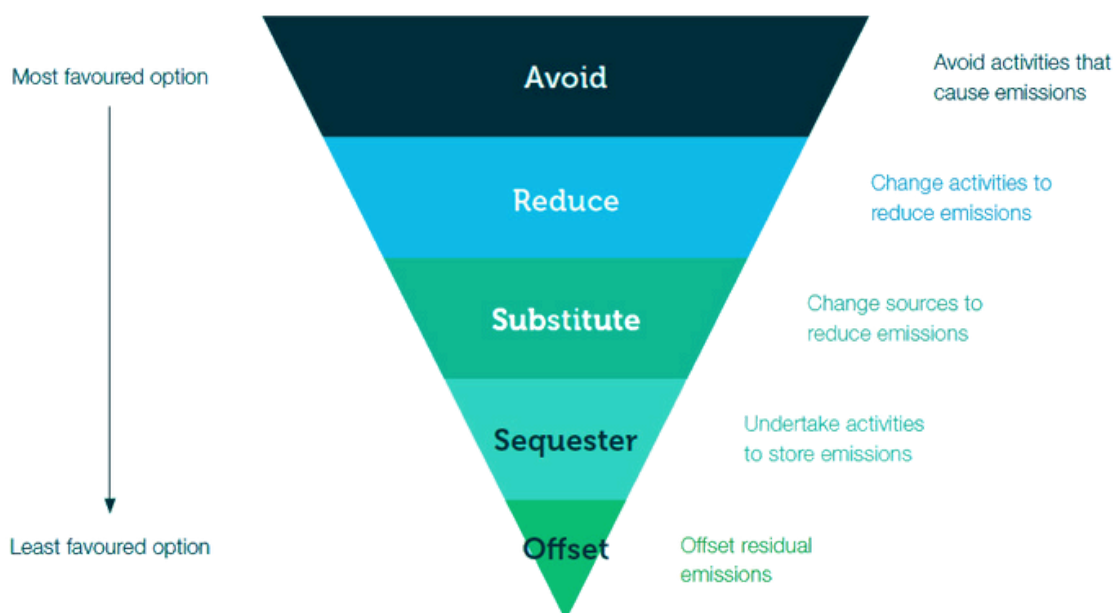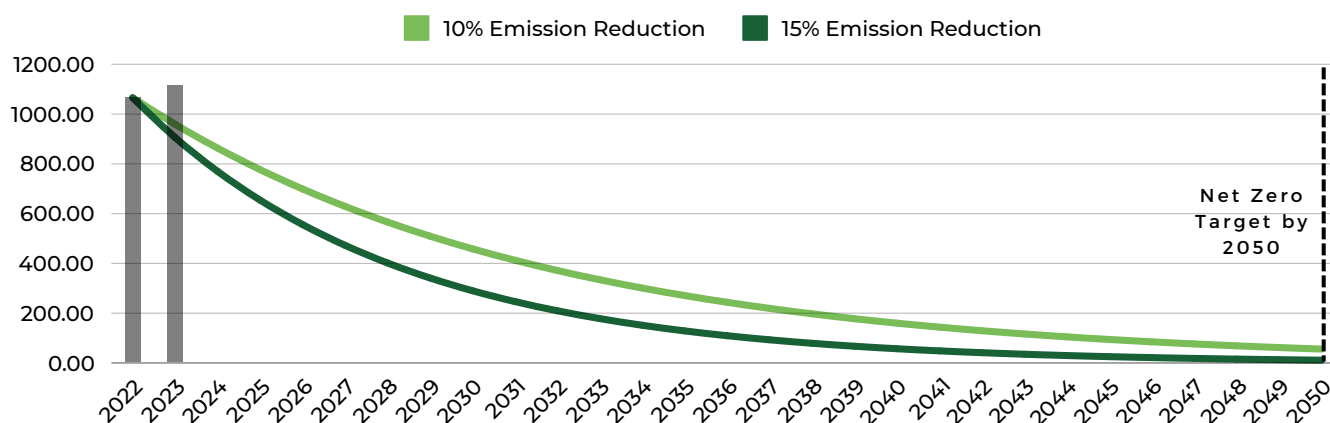
OFFSETTING STRATEGY FOR NET ZERO

Principles of a High-Integrity Offsetting Portfolio
To ensure a robust approach to carbon offsetting, a strategy grounded in the Oxford Offsetting Principles is recommended. This involves developing a portfolio that begins with a balanced mix of reduction and removal credits and progressively shifts towards an increasing proportion of carbon removals with long-lived storage. These principles serve as a guide to prioritise long-term environmental sustainability and integrity in offsetting efforts.

Strategic Investment in Carbon Removals
Investing in carbon removals now is critical for supporting the ongoing development of both technology and infrastructure necessary for effective carbon management solutions. Early investments not only contribute to the advancement of these technologies but also secure positions in projects that are expected to increase in value. As the market demand for carbon credits is predicted to outstrip supply, initiating investments today safeguards against future price surges and secures financial stability.

**Portfolio Considerations and Project Selection**
When building a carbon offset portfolio, it is crucial to select projects that adhere to stringent verification standards. Projects should be:
- Certified by recognized registries and no older than five years to ensure relevance and efficacy.
- Rated by credible agencies (BBB, A, AA, AAA), reflecting their reliability and potential impact.
- Free from associations with Enhanced Oil Recovery (EOR) to avoid controversial practices.
- Compliant with human rights policies, demonstrating social responsibility alongside environmental impact.

Protecting Against Market Volatility
By investing in a diversified portfolio that includes a mix of nature-based solutions (NBS) and engineered removals, particularly those with long-lived storage, Somerlap can mitigate risks associated with market volatility. Avoiding mono-culture projects and focusing on those enhancing biodiversity ensures that investments contribute to broad environmental benefits. This strategy not only aligns with global sustainability goals but supports commercialty, positioning a company favorably in a market where eco-conscious practices are increasingly valued by consumers and stakeholders.

Illustrative breakdown of a net zero aligned portfolio under the Oxford Offsetting Principles
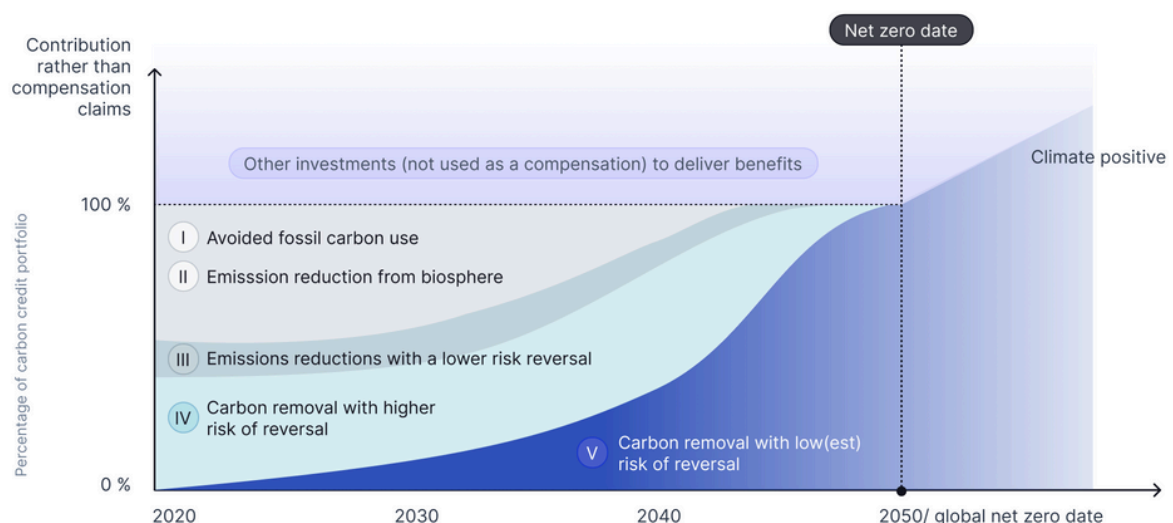
Source: Oxford Principles for Net Zero Aligned Carbon Offsetting (revised 2024)

CONCLUSION

The analysis of Wessex Internet's carbon footprint for the reporting period from 1st October 2022 to 30th September 2023 offers a detailed insight into both the achievements and challenges faced by the company in its journey towards sustainability. The efforts to reduce capital goods and purchased goods emissions are commendable, with Wessex Internet achieving a 5.21% reduction against baseline tCO2e/£m. However, the data reveals the persistence of significant challenges, particularly with respect to capital goods and employee commuting.

The following recommendations provide a strategic pathway to enhance the company's sustainability efforts:

- **Develop a Formal Carbon Reduction Plan:**
  - **Short-Term Commitments:** Focus on targeting areas where emissions can be reduced, specifically switching from diesel to HVO for company vehicles and encouraging car sharing or green travel days. However, cost and compatibility may pose a challenge in integrating HVO use. Introducing Electric Vehicles (EVs) in the fleet may also play a significant role in reducing fuel emissions.
  - **Medium-Term Commitments:** Invest in carbon literacy training for staff to strengthen Wessex Internet's sustainability culture and support long-term environmental goals by embedding a shared commitment to reducing emissions. Consider investing in carbon offsets, purchasing future vintages to ensure the company is well-positioned to meet its net zero target by 2050.
  - **Long-Term Commitments:** Plan a phased reduction in dependency on diesel and other high-emission fuels, aligning with global standards and technological advancements for sustainable transportation and infrastructure.

- **Implement a Transparent Offsetting Strategy:**
  - **Assessment and Identification:** Determine the emissions that are unavoidable at present, and identify credible offsetting opportunities, such as investing in certified carbon offset projects or renewable energy initiatives. Purchasing future vintages -- offset credits generated in upcoming years -- not only supports long-term carbon sequestration and renewable infrastructure but also offers cost savings as prices rise.
  - **Integration with Overall Strategy:** Ensure that offsetting is part of a broader strategy rather than a standalone solution. It should be implemented in conjunction with reduction efforts rather than as a substitute.
  - **Continue Monitoring and Reporting:** Publish performance and reporting mechanisms to provide transparency and demonstrate real and verifiable progress.

The recommendations underscore a targeted approach that addresses the unique challenges faced by Wessex Internet. The focus on both reduction and offsetting, combined with a transparent and phased approach, provides a robust framework for achieving substantial emission reduction. While the road to decarbonisation might seem complex, the integrated strategy outlined above can turn challenges into opportunities. By aligning sustainability with growth and leveraging innovation, Wessex Internet has the potential to set an industry standard for environmental stewardship.

In conclusion, Wessex internet's commitment to net zero offers a strong foundation upon which to build. Through a combination of technological innovation, strategic planning, collaboration, and transparency, the company can achieve its sustainability goals, reduce its carbon footprint, and contribute meaningfully 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 in carbon reporting and management.

As part of this process this report has been verified and quality checked by an IEMA qualified expert in carbon management.

Author: Elea Taffet

Signature:

Date: 18/11/2024

Reviewer: Ashley Webber

Signature:

Date: 25/11/2024

Wessex Internet

Signature:

Date: 28/11/2024

APPENDICES
Appendix I - GHG Protocol

Carbon footprinting is the process of measuring and reporting the greenhouse gas emissions associated with a company's operations, products, or services. The methodology for carrying out a carbon footprint of a company involves six steps:

- **Establishing the inventory boundary** - Define the analysis scope (Scopes 1, 2 and 3), including emissions sources and activities. Identify all emissions sources, including direct and indirect emissions, as well as emissions from the value chain.
- **Identifying emissions sources** - A combination of top-down and bottom-up approaches can be used to identify GHG emissions sources. Top-down approaches use national or sectoral emission factors, while bottom-up approaches collect detailed activity data and apply emission factors at the facility or product level.
- **Collecting activity data** - Requires gathering information on all emissions-generating activities within the inventory boundary, such as energy consumption, transportation, waste generation, water use, and other relevant activities.
- **Choosing emission factors** - Emission factors convert activity data into greenhouse gas emissions estimates, based on recognized standards such as IPCC or country-specific emission inventories.
- **Calculating greenhouse gas emissions** - Once activity data has been collected and emission factors have been chosen, companies can calculate their greenhouse gas emissions for each source and scope category using appropriate calculation tools such as spreadsheets or specialized software.
- **Reporting results** - Companies should transparently report their carbon footprint results using recognized reporting frameworks like CDP or GRI.
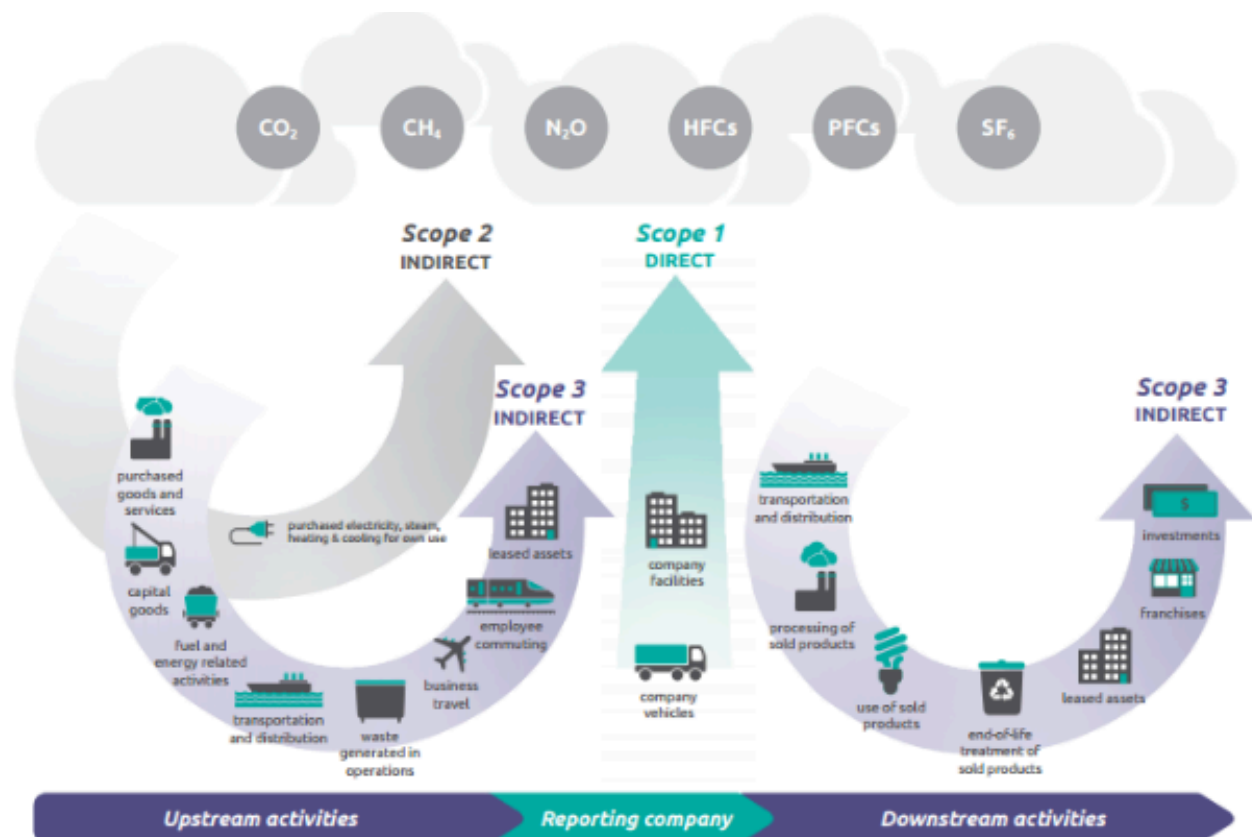
APPENDICES
Appendix II - Wessex Internet

Wessex Internet is a UK-based internet service provider specialising in delivering ultrafast full fibre broadband to rural communities across the British countryside.

Wessex Internet, founded in 2010, operates from Cranborne Chase to the Dorset coast, South Somerset, and the New Forest, delivering fast, reliable, and affordable broadband to its customers, including those in remote countryside communities.

The company began by connecting local friends and neighbours with wireless broadband and has since grown to build extensive full fibre networks, striving to bridge the digital divide in underserved rural areas. Wessex Internet continues to enhance connectivity and improve digital access for rural communities across the region.

APPENDICES
Appendix III - Balanced Energy

**Balanced
ENERGY**

Our mission is to make it easier for organisations of all sizes to become more sustainable.

The climate crisis is worsening and every business has an urgent social responsibility to contribute towards the future of our planet.

For many, demonstrating effective progress towards Net Zero goals has become a legislative or commercial requirement – yet we all increasingly need to play our part.

Balanced Energy is a Net Zero consultancy offering you effective strategies and practical solutions to achieve your low carbon future.

A sustainable business is a better business.

**Certified
(B)
Corporation**

KEY FACTS

Key Information: Wessex Internet Limited, The Old Laundry, Ranston, Blandford, Dorset, DT11 8PU, United Kingdom

Baseline Year: October 2021 - September 2022

Reporting Year: October 2022 - September 2023

Baseline Emissions: 1065.85 tCO2e

Baseline Intensity Metric: 355.28 tCO2e per £ million/turnover

Change since baseline emissions: +54.40

Approach: Operational Control

Operational Scope: DERV, UK electricity, T&D Losses, Water, Waste, Fuel for Plant, Capital Goods, Purchased Goods, Business Travel, Employee Commuting, Homeworking.

Boundary: All entities and facilities either owned or under operational control.

External Verification: future Net Zero Standard

Carbon Reduction Target: Carbon Neutrality

Balanced Energy Contact: Ashley Webber
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Customer: Wessex Internet
Customer Contact: Oscar Nicole
Customer Email: oscar.nicole@wessexinternet.com

The data for this GHG Inventory was provided by Bid Manager/Business Analyst, Oscar Nicole.

Data Source

DERV	Internal Log
Electricity	Internal Log
Water	Internal Log
Waste	Invoice Summary
Fuel for Plant	Invoice Summary
Capital Goods	Internal Log
Purchased Goods	Internal Log
Business Travel	Internal Log
Employee Commuting	Internal Log
Homeworking	Internal Log

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E N E R G Y

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ACKNOWLEDGMENTS

Below, a list of sources acknowledging the sources to this report.

https://www.balanced-energy.co.uk/ - 15/02/2023

https://sdgs.un.org/goals - 15/02/2023

https://unfccc.int/climate-action/race-to-zero-campaign - 15/02/2023

https://sciencebasedtargets.org/how-it-works - 15/02/2023

https://www.iema.net/ - 15/02/2023

https://ghgprotocol.org/ - 15/02/2023

https://www.futurenetzero.com/un-race-to-zero/ - 15/02/2023

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