BGEN LTD

CARBON ASSESSMENT REPORT 2023/24

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ABOUT BGEN LTD

We are in a Climate Emergency and as a business we need to play our part to reduce carbon emissions and limit the global impacts of climate change.

Our mission is to create a lasting legacy through the consistent, safe and sustainable delivery of our engineering solutions and to help define the next generation of the company. Understanding the sources of carbon emissions produced as part of our business activities is key to identifying where our reduction efforts should be focused and where we can have the most impact. This Carbon Assessment builds on our baseline year data, providing a second year of verifiable data and a further step to achieving Net Zero. The data in this report tells us that we need to focus on our vehicle fleet; identifying more efficient and sustainable transport and logistics options and our downstream supply chain. This will require collaboration with our suppliers and subcontractors, to ensure that our goals are accomplished, and the impacts of climate change are minimised.

It is important to note that BGEN Ltd was acquired by M Group on the 30th October 2024, and this branded report was finalised after the acquisition date. M Group have carbon reduction targets for Scopes 1 , 2 and 3, that have been validated by the Science Based Targets initiative. Following the acquisition of BGEN Ltd, a re-baselining activity may be triggered by M Group, to incorporate BGEN Ltd's carbon emissions into their carbon emissions data and reduction targets. As a result our application to the SBTi with proposed carbon reduction targets, as BGEN Ltd, has been paused.

INTRODUCTION

BGEN Ltd is committed to transparency and sustainability in reducing its carbon footprint. This report details their greenhouse gas (GHG) emissions for the 2023/24 financial year, calculated in line with the **ISO 14064-1 standard** and verified by Tunley Environmental. It forms the basis of BGEN Ltd's **carbon reduction targets** in line with the Science Based Targets initiative methodology.

Working closely with Tunley Environmental, they have expanded their emissions assessment to cover all three scopes—direct emissions (**Scope 1**), indirect emissions from energy use (**Scope 2**), and other indirect emissions throughout our supply chain (**Scope 3**). This thorough evaluation ensures that all relevant Scope 3 emissions are accurately accounted for, providing the insights needed to drive targeted reduction strategies.

Aligned with the **GHG Protocol** and the **Corporate Value Chain Standard**, their emissions data is reported in **carbon dioxide equivalents** (CO_2e) to ensure consistency and clarity. This data further builds on all of the previous work that had already been initiated by BGEN Ltd. The work began in 2019, leading to an official **baseline in 2022/23** that enables a **comparison** to this **reporting year 2023/24**.

This report provides a clear snapshot of BGEN Ltd's emissions, highlighting opportunities for improvement, and supports their commitment to setting science-based targets that align with global climate goals. By understanding and addressing their full carbon footprint, they are taking meaningful steps toward a sustainable, Net Zero future.

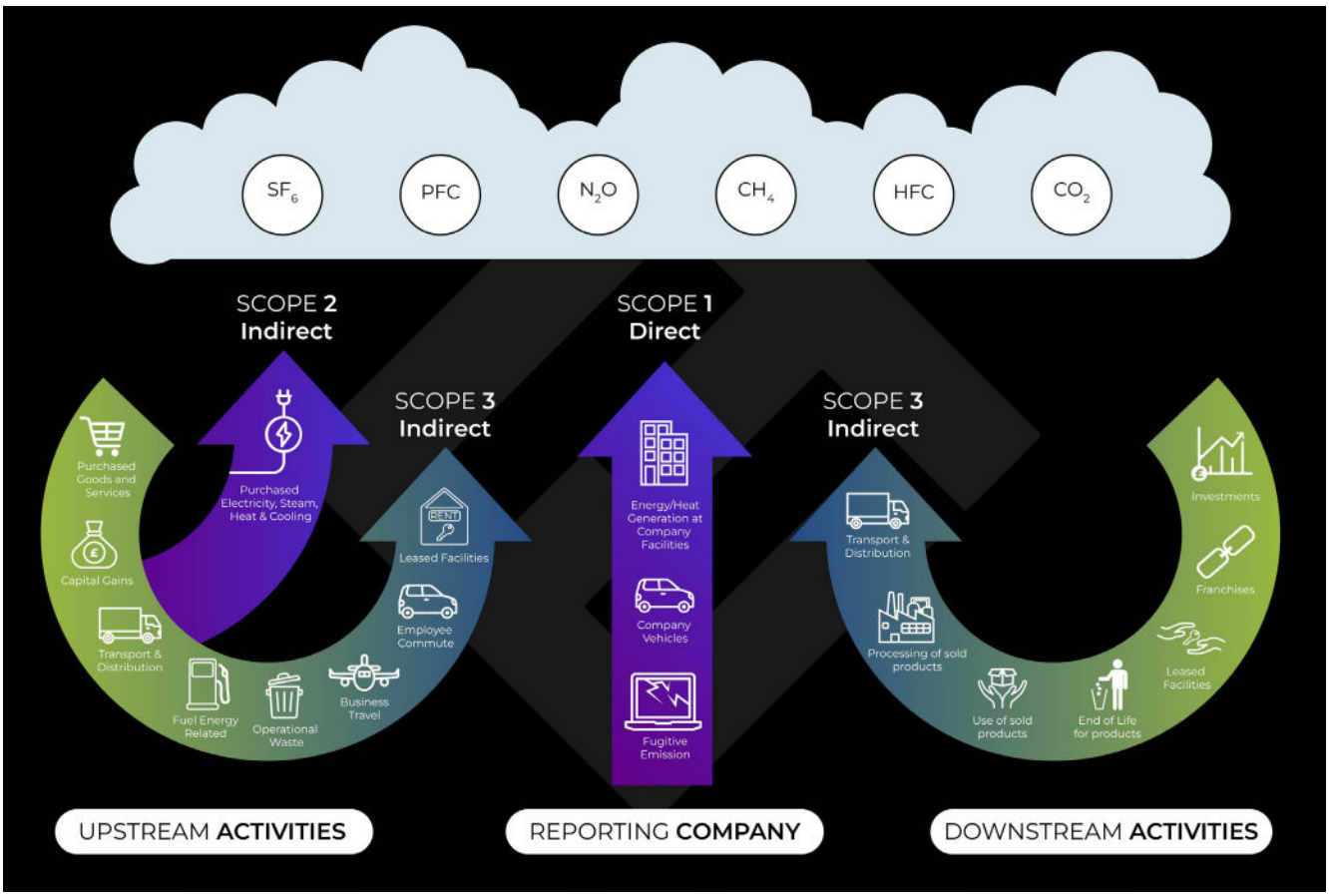

Figure 1: An overview of the GHG Protocol scopes and emissions across an entire value chain.

REPORTING BOUNDARY

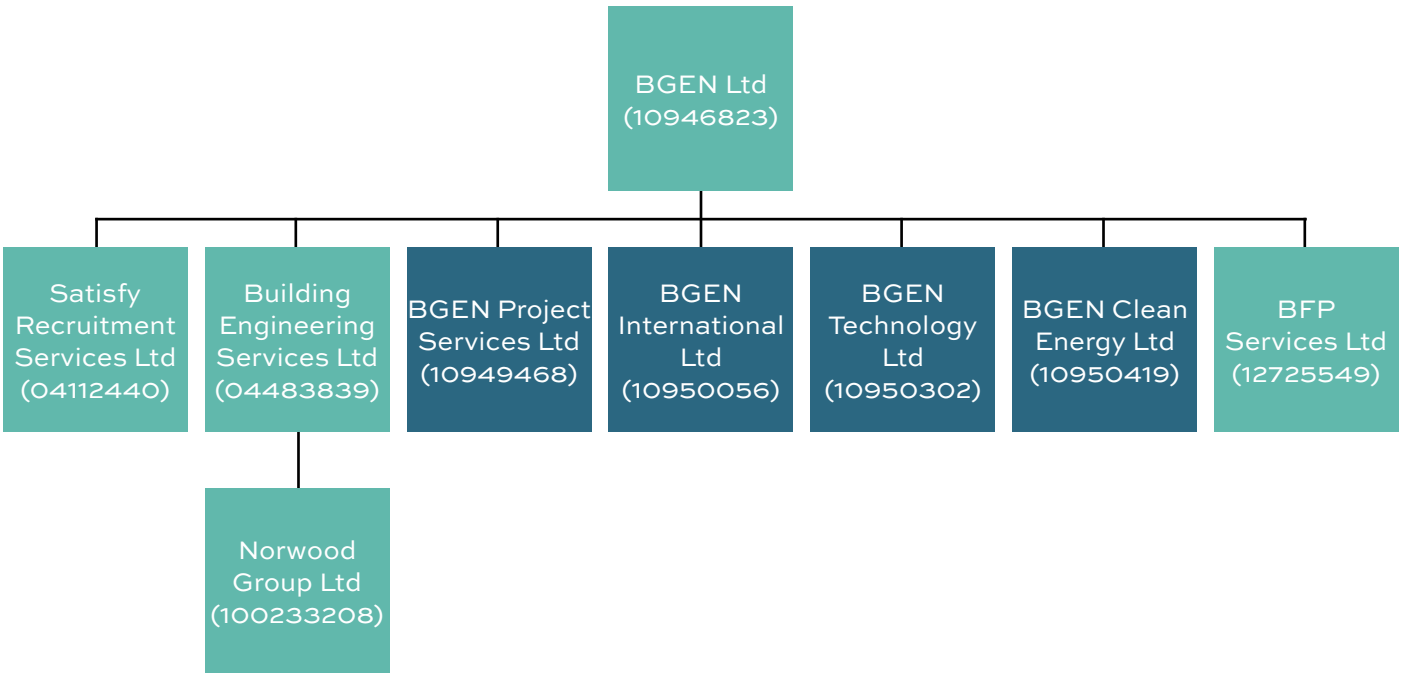

Figure 2: The BGEN Ltd Group comprises a diverse range of companies, each contributing to the overall emissions footprint. Understanding the relationship between these entities is key to accurately assessing and managing greenhouse gas (GHG) emissions across the entire organisation. It is, therefore, important to set an emissions scope boundary for BGEN Ltd in accordance with the operational control.

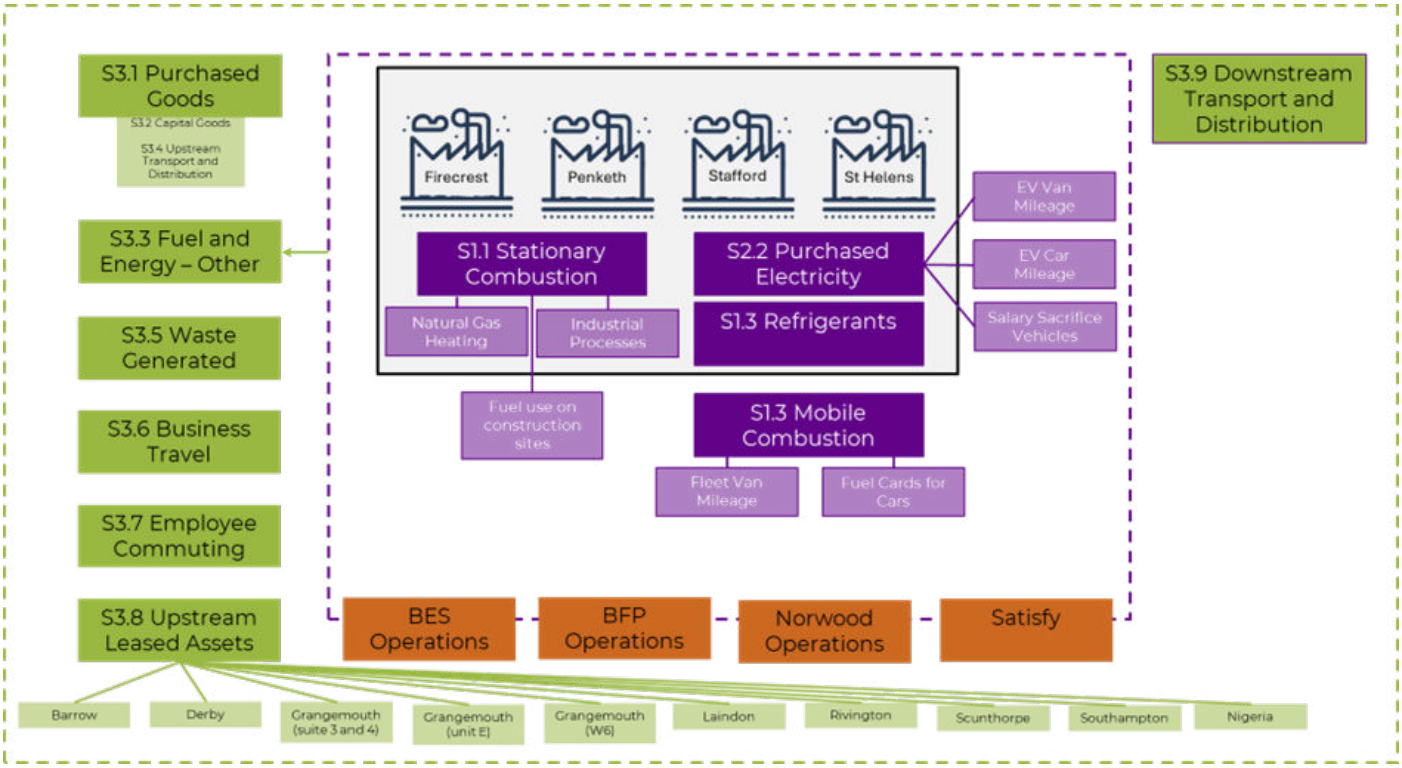

Figure 3: The reporting boundary for BGEN Ltd's Carbon Assessment

GHG RESULTS

For the reporting baseline year 2023/2024, the total carbon footprint was **23,927 metric t CO_2e**. This is equivalent to driving over 60 million miles in an average car, or the distance from Earth to Mars.

The company's emissions are categorised according to the **GHG Protocol**, which distinguishes between three types of emissions:

- **Scope 1:** Direct emissions from owned or controlled sources (e.g., fuel combustion in vehicles or boilers).
  - o **1,325 t CO_2e** (5.54% of total emissions)
- **Scope 2:** Indirect emissions from the generation of purchased electricity, heat, or steam consumed by the company.
  - o **182 t CO_2e** (0.76% of total emissions)
- **Scope 3:** All other indirect emissions that occur in the company's value chain, such as business travel, waste disposal, and purchased goods and services.
  - o **22,420 t CO_2e** (93.70% of total emissions)

BGEN Ltd's primary carbon footprint is associated with Scope 3 emissions, underscoring the importance of addressing emissions across the entire value chain as part of the company's ongoing sustainability efforts.

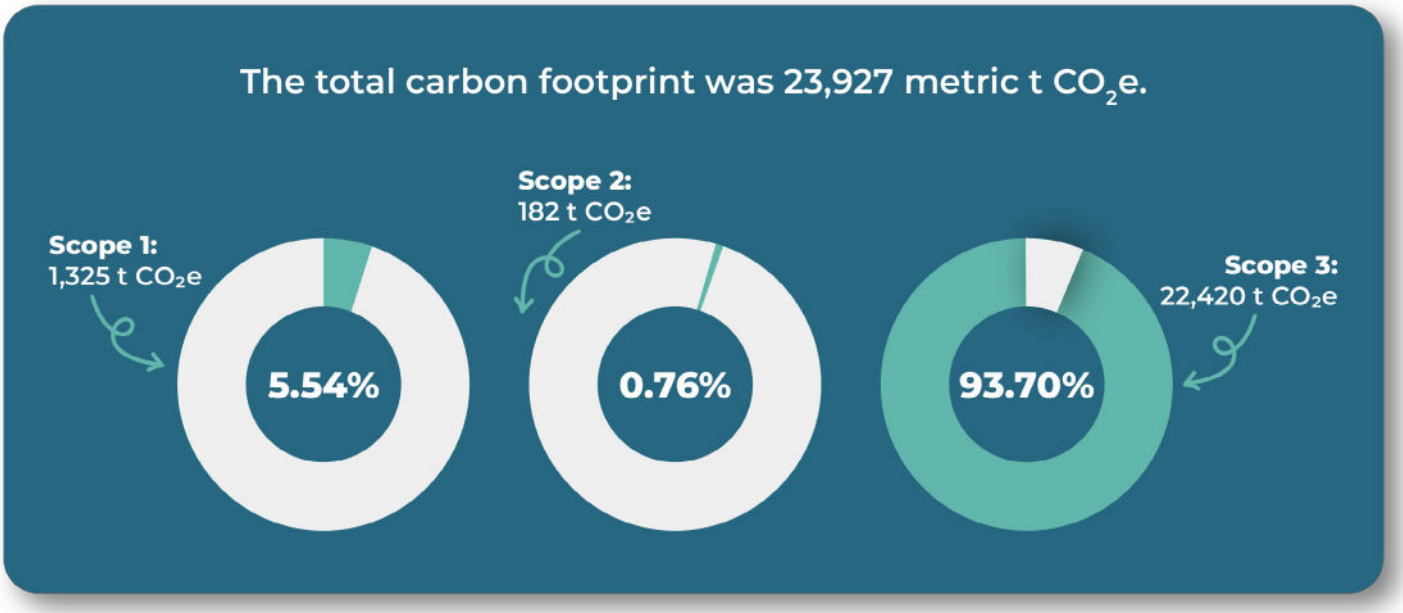

Figure 4: Percentage contributions of three scopes.

Scope	Category	2022/23 t CO_2e	2023/24 t CO_2e	Out of Scopes
S1.1	Stationary combustion	271	278	5.87
S1.2	Mobile combustion	782	1,046	5.12
S1.3	Refrigerants	10	0	0.00
S2.1	Purchased heat	0	0	0.00
S2.2	Purchased electricity	206	182	62.3
S3.1	Purchased goods and services	19,296	20,019	
S3.2	Capital goods (e.g., assets, machinery, etc.)	0	0	
S3.3	Fuel and energy related activities not included in S1 or S2	296	388	
S3.4	Upstream transportation and distribution	240	0	
S3.5	Waste generated in operations	51	13	
S3.6	Business travel	568	383	
S3.7	Employee commuting	1,490	1,484	
S3.8	Upstream leased assets	37	37	
S3.9	Downstream transportation and distribution	48	96	
Total		23,297	23,927	73.29

Table 1: Emission data for BGEN Ltd's business operations, including biogenic emissions from biomass use in Scope 1 and 2. These biogenic emissions, from materials like wood and biofuels, are considered outside the GHG Protocol scopes as they do not increase net atmospheric CO_2 levels.

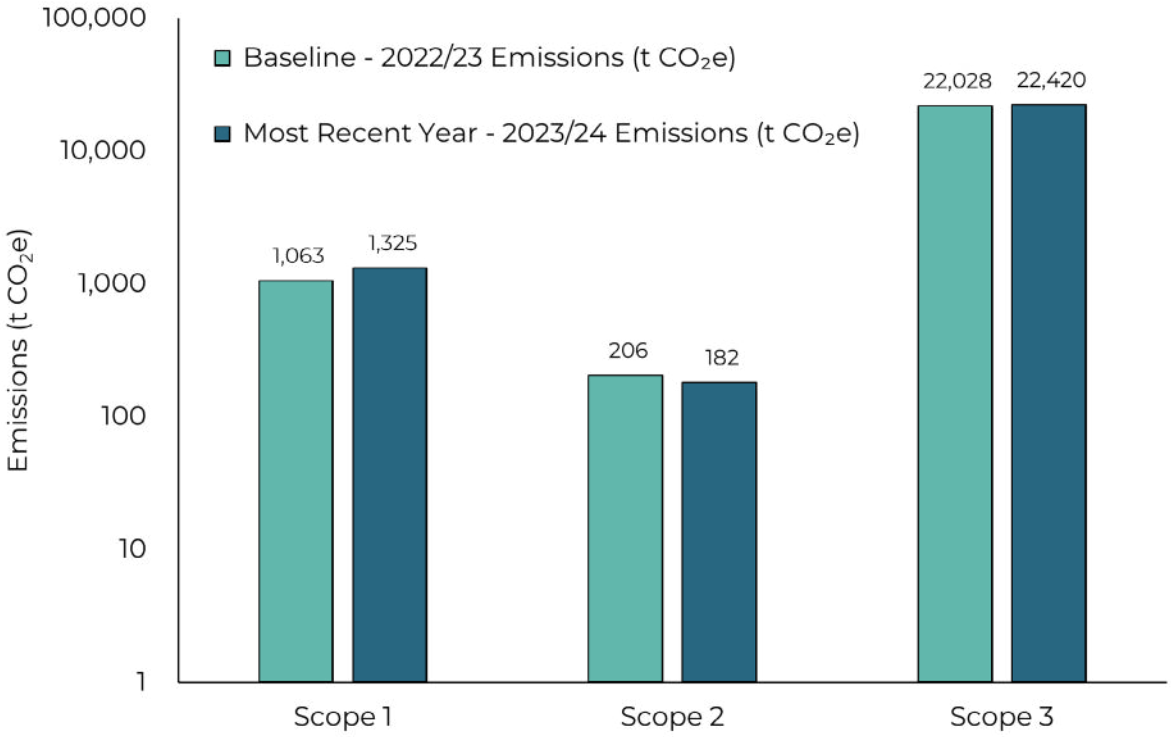

Figure 5: The GHG emissions in the baseline year (2022/23) in comparison to the reporting year (2023/4) per Scope of emissions. Please note the Y-Axis log scale.

Scope 1 – Direct Emissions

In this reporting year of 2023/24, BGEN Ltd emitted **1,325 t of CO_2e** from direct activities, from:

- **Fuel combustion** in boilers and generators for heating.
- **Industrial processes** using bulk fuels and welding gases.
- **Mobile combustion** in company-owned vans and vehicles.
- **Refrigerant leakage** from air conditioning units.

In **comparing** the baseline year (**2022/23**) to the most recent report (**2023/24**), there is a noticeable **increase** in both the **distance travelled** and the **emissions produced by** BGEN Ltd's **van fleet**. In **2022/23**, the fleet travelled over 1.6 million miles, **emitting 616 t CO_2e**, which accounted for 57.9% of direct emissions and 2.64% of the total carbon footprint. By **2023/24**, the van fleet's mileage rose to over 2.5 million miles, **resulting in 954 t CO_2e**, representing 72.0% of direct emissions and 4.10% of the total carbon footprint. This significant rise underscores the growing environmental impact of the van fleet, emphasising the need for BGEN Ltd to reconsider its reliance on a large, inefficient fleet and explore alternative transport options to support its net-zero goals.

In 2023/24, BGEN Ltd's van fleet covered over 2.5 million miles, emitting 954 t CO_2e, up from 616 t CO_2e in the previous year. This increase highlights the substantial impact of the fleet on direct emissions and underscores the need to explore more efficient transport options to meet net-zero goals.

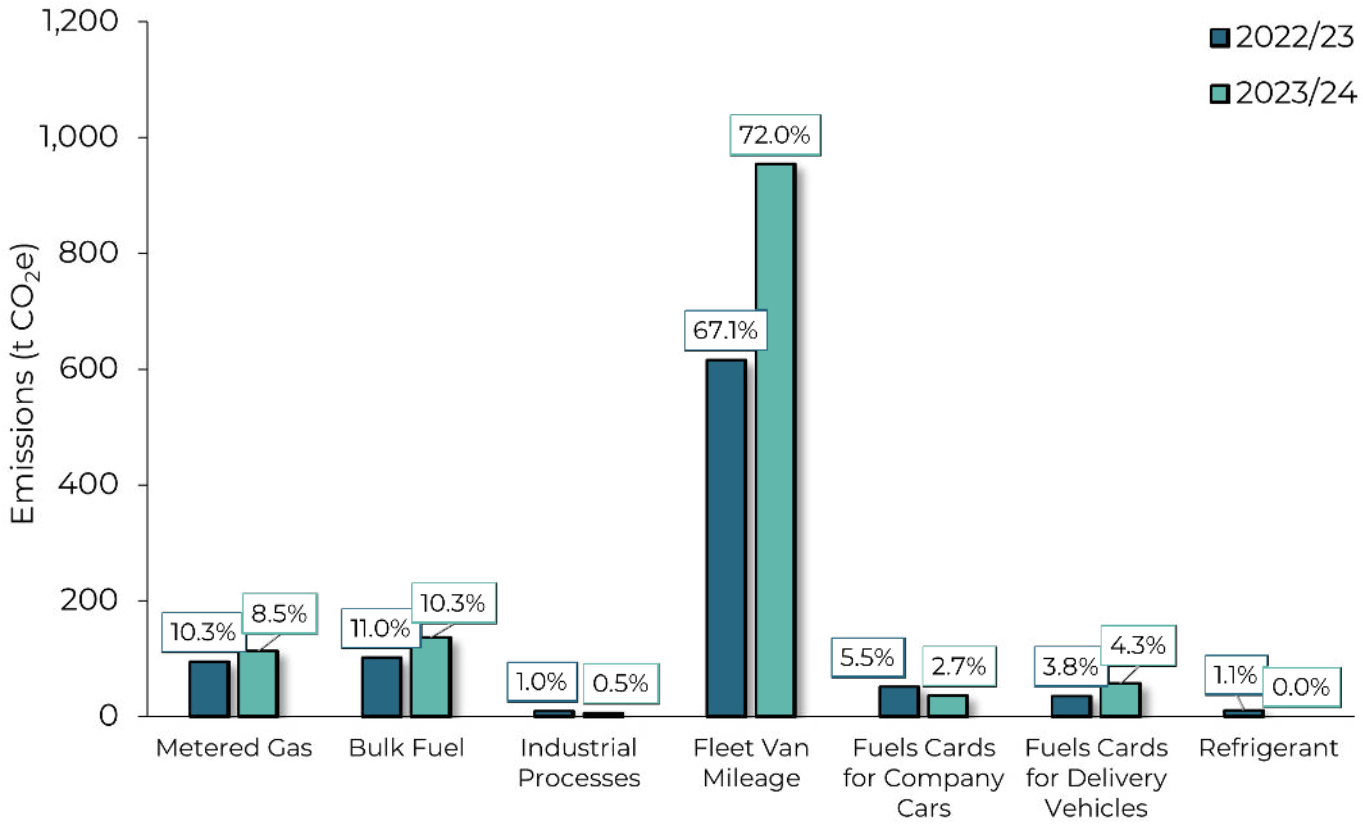

Figure 6: A breakdown of the direct emissions released by BGEN Ltd in the baseline year 2022/2023 and 2023/2024.

Scope 2 – Indirect Emissions from Energy

The total emissions released from generating the electricity used by BGEN Ltd was **182 t CO_2e**. This is from purchasing 629,512 kWh of electricity and driving 72,760 miles in an electric vehicle. This is a reduction of 24 t CO_2e in comparison to the baseline year emissions.

Scope 3 – Indirect Emissions

The GHG emissions produced indirectly from BGEN Ltd (excluding Scope 2) are their Scope 3 emissions. This includes all business activities from both upstream and downstream business activities as per the fifteen subcategories given by the GHG protocol.

Scope 3 emissions represent the largest portion of BGEN Ltd's carbon footprint, accounting for **93.7% (23,420 t CO_2e per year) in 2023/2024**, compared to 94.4% (22,028 t CO_2e) in 2022/2023. Within Scope 3, **purchased goods and services contributed 20,019 t CO_2e, an increase from 19,296 t CO_2e** in the previous year.

Per Location

Another way of looking at the greenhouse gas emissions from BGEN Ltd is to compare the emissions from each location owned and controlled by the company. This can help understand how different facilities and activities contribute to the overall emissions and the potential opportunities for reduction.

Firecrest Head Office has replaced the traditional gas boilers with Heating, Ventilation, and Air Conditioning (HVAC) systems that use electricity instead of natural gas for heating and cooling. This renewable energy reduces the total amount needed from the national grid, contributing to overall carbon reductions.

The chart clearly shows that **St Helens (Fabrication)** is the largest emitter of GHG among the locations owned by BGEN Ltd for two years in a row. The facility consumes more natural gas and electricity than any other site, producing **84 t CO_2e per year** from heating and **57 t CO_2e per year** from purchased electricity in the current reporting year 2023/24. This suggests that St Helens has a high potential for reducing emissions by improving energy efficiency, switching to renewable sources, or implementing other mitigation measures. BGEN Ltd should prioritise St Helens as a key project for achieving its carbon reduction goals.

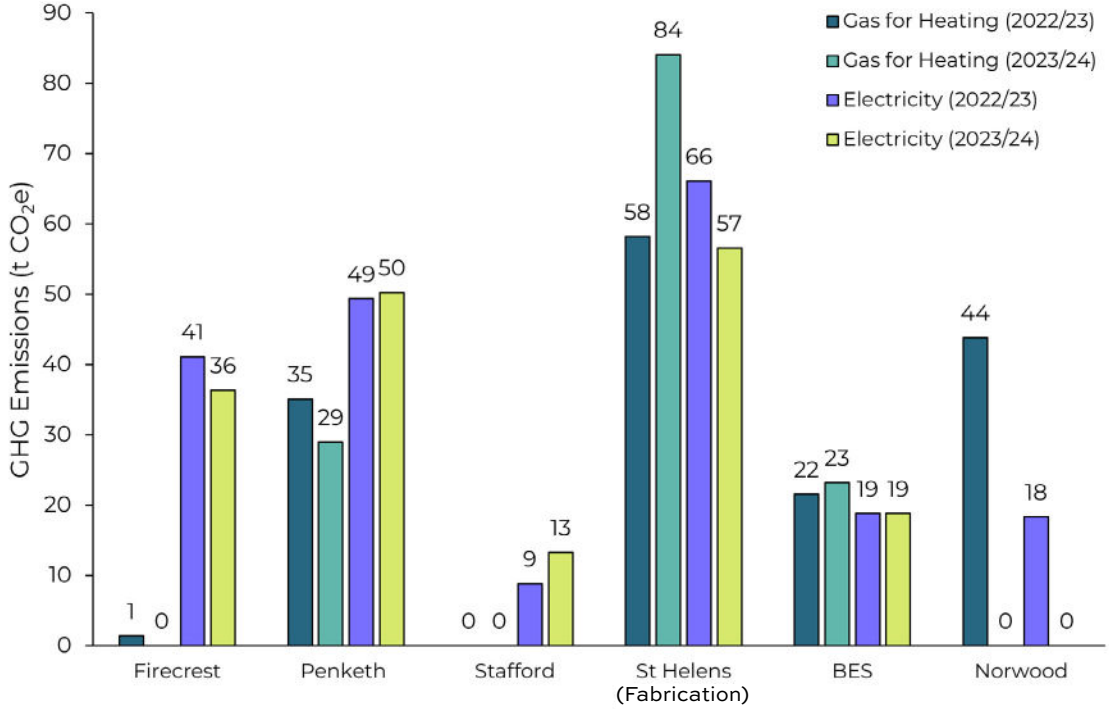

Figure 7: The emissions from gas heating and purchased electricity at each location for the baseline year 2022/2023 and the reporting year 2023/2024.

Tracking Emissions Efficiency: Intensity Ratio

To better understand their environmental performance in relation to business growth, BGEN Ltd have chosen to compare GHG emissions annually based on business performance using per million pound of turnover as an intensity ratio. This ratio allows to assess the company's progress in reducing emissions while continuing to scale their business.

Calculation Method	FY 22/23	FY 23/24
Carbon Footprint (t CO2e)	23,297	23,927
Total Annual Turnover (£M)	187	225
Carbon Intensity (t CO2e/£M)	125	106

Table 2: BGEN Ltd's carbon intensity ratio.

A ROADMAP TO NET ZERO

Procure Renewable Electricity

- Ofgem Certified Eco-Tariff to Reduce Market-Based Emissions.
- **Estimated to Reduce Scope 2 by over 90%.**
- BGEN shall also follow Energy Use Intensity Targets to reduce the amount of energy used and correspondingly be responsible for reducing location based emissions as well as the decarbonisation of the national grid.

Reduction Compared to Baseline	Total Reduction
0.9%	0.9% | 23,086 tCO_2e

Replace Natural Gas Boilers with Electric Alternatives

- Options to use electric heating systems or produce bio-gas as a renewable energy source.
- **Estimated to Reduce Scope 1 by 10%**
- Research has confirmed the use of green gas tariffs that will result in further savings.

Reduction Compared to Baseline	Total Reduction
0.8%	1.8% | 22,910 tCO_2e

Reduce Emissions from Employee Travel

- Continue the Employee Transition to EV's and Incentivise Cycle to Work Schemes and Car Sharing.
- **Estimated to Reduce Scope 3 by 10%**

Reduction Compared to Baseline	Total Reduction
4.9%	6.7% | 21,774 tCO_2e

Replace ICE Company Owned Vans with EV's

- Primary focus for BGEN, to reduce emissions from the Van Fleet by beginning with a comprehensive audit of the fleet.
- **Estimations show it can reduce emissions from Scope 1 by 67%**
- Conduct a comprehensive audit of the vehicle fleet to identify the optimal number and type of vehicles needed. Implement a vehicle milage reduction programme. Transition to electric vehicles (EVs) that run on renewable electricity.

Reduction Compared to Baseline	Total Reduction
3.4%	10.1% | 20,978 tCO_2e

Supplier Engagement

- Lack of granularity from EEIO Spend Based Model. A supplier engagement plan to analyse and engage with supplier to calculate emissions and sign up to SBTi shall ensure a reduction in supply chain emissions.
- **Targeting 85% of suppliers by spend is estimated to reduce Scope 3 emissions by 45%**

Reduction Compared to Baseline	Total Reduction
35.1%	45.3% | 12,778 tCO_2e

Near Term Target 2030

Total Reduction
42.0% | 13,540 tCO_2e

Aligning Net Zero to MGroup

The net zero target will be aligned with MGroup following re-baselining activity.

CONCLUSION

From May 1, 2023, to April 30, 2024, BGEN Ltd's total greenhouse gas emissions amounted to **23,927 t CO_2e**. This carbon footprint analysis, conducted by **Tunley Environmental**, is based on comprehensive data provided by BGEN Ltd.

This report includes a detailed breakdown of emissions and **actionable recommendations** to help BGEN Ltd reduce its carbon footprint. By implementing these strategies, BGEN Ltd can take meaningful steps toward **achieving its sustainability goals and enhancing its environmental performance.**

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