GB Railfreight Limited | 2025

Towards a Sustainable Future

An ambitious Carbon Reduction Plan compliant with PPN 06/21

GB Railfreight

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Introduction

On Monday 20th March 2023, António Guterres, Secretary-General of the United Nations said, “the world is rapidly approaching catastrophic levels of heating with international climate goals set to slip out of reach unless immediate and radical action is taken”. “The climate time-bomb is ticking” and “humanity is on this ice – and that ice is melting fast.”

The report released by the U.N. Intergovernmental Panel on Climate Change (IPCC) draws on the findings of hundreds of scientists to provide a comprehensive assessment of how the climate crisis is unfolding. It concludes that the world is likely to pass a dangerous temperature threshold within the next 10 years, pushing the planet past the point of catastrophic warming unless nations drastically transform their economies and immediately transition away from fossil fuels.

Researchers found that the world is on the brink of 1.5 degrees Celsius of warming, meaning it is close to surpassing an internationally agreed-upon threshold for climate warming. The current trajectory is for a 2.2 to 2.4°C warming. Beyond that threshold, scientists have found climate disasters will become so extreme that people will not be able to adapt. In fact, this amount of warming will threaten coral reefs, melt ice sheets, and contribute to sea level rise. We will see heat waves, famines, and more infectious diseases spread, claiming millions of additional lives by the end of the century.

In 2019 the UK became the first major economy to pass a Net Zero emissions law, meaning the UK government is now legally required to reach Net Zero emissions by 2050. When the UK government published its procurement policy note 06/21 (PPN 06/21), it was clear that businesses should focus on building back the economy in a sustainable fashion.

Sarah Whurr

Head of Sustainability

Our Approach

GB Railfreight transports goods for a wide range of customers, moving over 52,000 trainloads each year alongside both passenger and charter operations, making us critical to the national economy.

Rail haulage, being more efficient than road, can help to cut the UK's carbon emissions by up to 76% per tonne-kilometre, whilst removing 40,584 lorries from our already congested highways per day.

At GB Railfreight, we continue with our commitment to reduce the environmental impact of our operations, whilst going beyond the footprint made by our rolling stock. Our purpose is to create a positive and lasting impact on the lives of our colleagues, customers, and communities. We continue to place the need for climate action at the forefront of our strategic decision making and recognise the need to create social value through our business, company culture, and strategic partnerships.

We remain focused on the most impactful and valuable areas for change, and our goal to be net zero by 2050 remains.

Corporate Responsibility and Accountability

GBRf is on a journey to create a sustainable future and we want to ensure that journey is transparent, credible, impactful, and measurable.

To ensure we achieve our aims, we have partnered with carbon consultancy Enistic for over 10 years, who calculate and track our carbon emissions in accordance with the GHG protocol.

Our Carbon Reduction Targets

GBRf is committed to a 100% reduction in all scope 1, 2, and 3 emissions by 2050.

2050

NET 0

enistic

All our emission reductions will be primarily achieved through carbon reduction projects and innovative technologies. The offsetting of carbon emissions will only be considered in cases of unavoidable emissions. Since the first version of our Carbon Reduction Plan, which was published in 2023, GBRf have established a yearly emissions reduction target, and the KPI will be integrated into our reporting system to ensure annual targets are met, or variances explained.

Emissions Categories

Currently, we measure all our scope 1 and scope 2 emissions following the GHG protocol, and we measure a subset of scope 3 emissions (PPN 06/21 requirement) following the Corporate Value Chain Scope 3 Standard.

GHG Scope	Emissions sources
Scope 1	Direct emissions resulting from sources that are owned and controlled by GBRf
Scope 2	Indirect emissions from purchase of electricity and onsite EV charging
Scope 3	Indirect emissions from other sources not included in Scope 1 and 2 categories

Our Driving Forces

1 Going above and beyond

At GBRf, we are not only committed to implementing sustainable practices throughout our business, but we are also determined to demonstrate that low-carbon methods of rail freight are feasible for business and critical for the UK economy.

Whilst the challenge of Net Zero is ours to own, GBRf will collaborate across both the logistics and rail industry, with SMEs and research institutions, to provide innovation and leadership to the challenge of decarbonising UK transport.

In so doing, we want to inspire others and provide sustainable, purposeful careers for the next generation.

2 Targeted reductions

Proving our devotion to the required effort needed to implement our carbon reduction programme, we have doubled the headcount within our Sustainability team, which includes our first dedicated Director to make sure our efforts and plans have the desired focus at board level.

3 Defined approach

To ensure the best results we use a defined approach and frameworks. Our carbon footprint is calculated using the GHG protocol standard, and the ‘operational control approach’ defined within this. The factors we use to calculate our footprint are sourced from the UK government.

Our approach is supported by a clear understanding of data, supported through the development of systems and industry partnerships.

GBRf Carbon Reduction Plan, in accordance with PPN 06/21 requirements

GB Railfreight

Commitment to Net Zero

GBRf is committing to becoming net zero by 2050. Our carbon reduction goals align with the IPCC's carbon reduction roadmap.

This report sets out a net zero roadmap, detailing the strategies we have put in place to achieve this goal.

Baseline Emissions

Baseline emissions are a record of the greenhouse gases that have been produced in the past – before introducing any strategies to reduce emissions – and are the reference point against which emission reductions can be measured.

Before 2021/2022, GBRf had not previously baselined emissions, nor had a complete GHG inventory (required for PPN 06/21 compliance). Therefore, the calendar year 2022 was selected as a baseline year, and this report covers the reporting years of 2023 and 2024.

Emissions	Total tCO2e for baseline period	Total tCO2e for previous period	Total tCO2e for reporting period	% change baseline and reporting period
Scope 1	133,815	146,712	141,705	**6%**
Scope 2	294	907	924	**214%**
Scope 3 (Including Sources)	32,770	37,325	37,953	**16%**
Total Emissions	**166,879**	**184,944**	**180,582**	**8%**

Baseline Year Calculation Assumptions

December 2022 locomotive fuel use was estimated by applying the same percentage difference between November and December 2021 (a factor of 0.87) to November 2022.

Emissions Breakdown

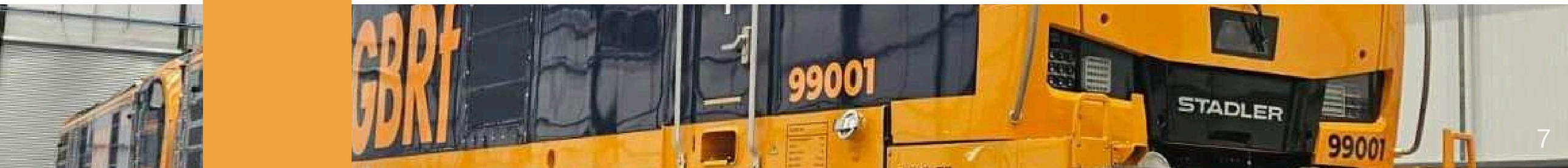
Scope 1	Total tCO2e for baseline period	Total tCO2e for previous period	Total tCO2e for reporting period	% change baseline and reporting period
1: Gas	15	9	8	-47%
1: Locomotive Fuel	131,795	144,786	139,343	6%
1: Company-Owned Road Vehicles	2,005	1,839	2,105	5%
1: Air Con Gas	-	78	249	-
Total Emissions Scope 1	**133,815**	**146,712**	**141,705**	**6%**

Scope 2	Total tCO2e for baseline period	Total tCO2e for previous period	Total tCO2e for reporting period	% change baseline and reporting period
2: Energy – Electricity	294	907	924	214%
Total Emissions Scope 2	**294**	**907**	**924**	**214%**

Scope 3	Total tCO2e for baseline period	Total tCO2e for previous period	Total tCO2e for reporting period	% change baseline and reporting period
3.03 Fuel and Energy related activities	30,322	34,429	35,213	16%
3.04: Deliveries (Upstream)	60	52	41	-32%
3.05: Waste generated in operations	252	11	104	-59%
3.06: Business Travel	1,074	1,153	860	-20%
3.07: Commuting and Home-working	1,056	1,857	1,733	64%
3.09: Deliveries (Downstream)	6	3	2	-67%
Total Emissions Scope 3	**32,770**	**37,325**	**37,953**	**16%**

Waste supplier information incomplete for 2023, this is due to challenges in obtaining external supplier information.

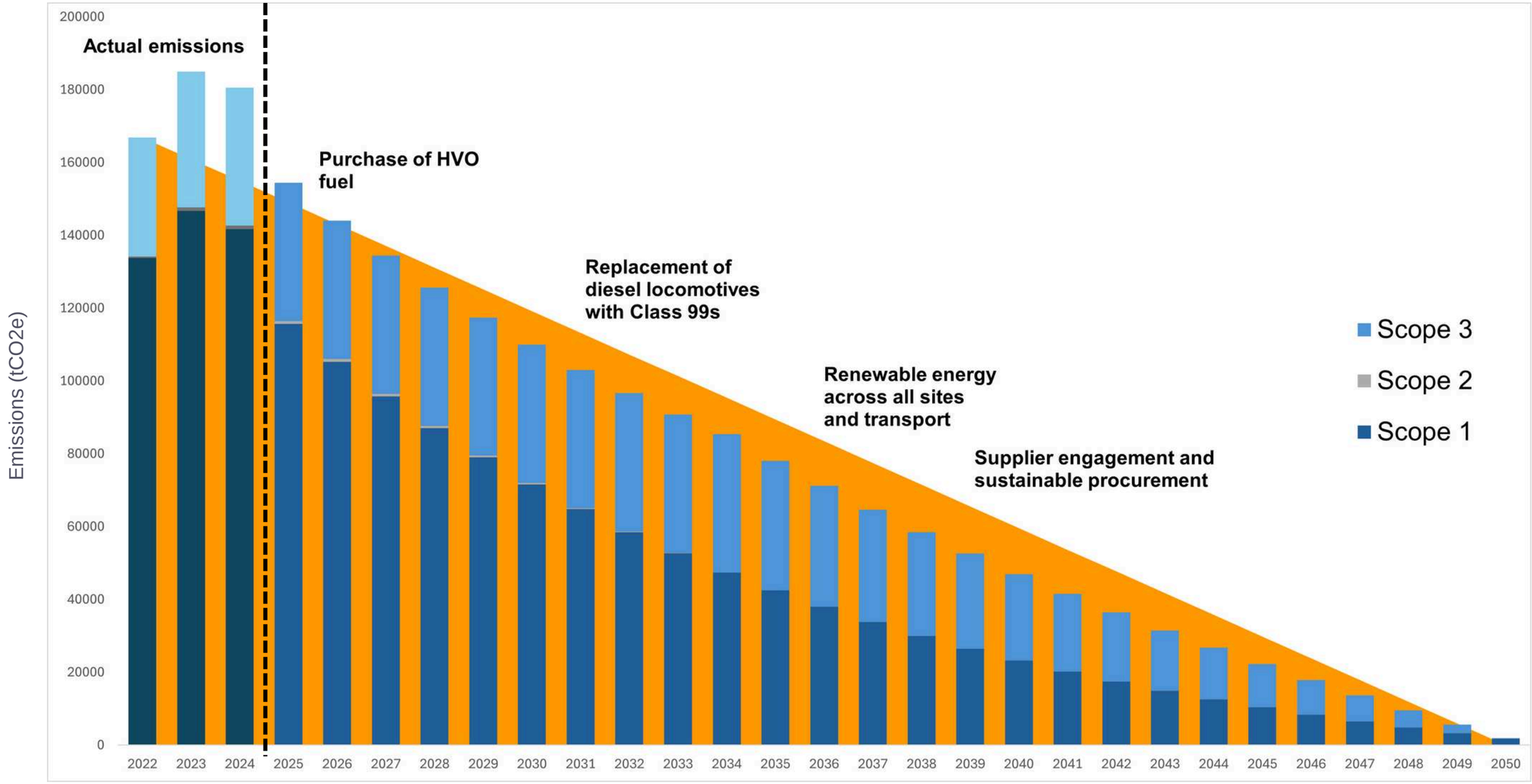
Intensity ratio	baseline period	previous period	reporting period
per million total diesel train miles (MTM)	27,267 tCO2e	27,746 tCO2e	25,803 tCO2e
per thousand gross tonne miles (KGTM)	0.0237 tCO2e	0.0247 tCO2e	0.0229 tCO2e



Emission Reduction Targets

Our first carbon reduction plan projected an absolute linear reduction in our emissions from our baseline year to net zero emissions by 2050. We recognised that this was our starting point and have since been able to make our reduction pathway more transparent and supported by knowledge-based assumptions. As projects are implemented, and new projects introduced, these targets could be subject to change.

The following graph depicts our target emissions and projected emissions based on the implementation of future carbon reduction projects. The orange area shows target emissions based on a linear reduction. The bar graphs are split by scope, and represent future emissions based on planned projects.



Current Carbon Reduction Projects

We aim to implement the following carbon reduction projects to reach our emission goals.

Replacing our diesel locomotives with Class 99s

With the first of our 30 Class 99's projected to enter service in late 2025, this will be the cornerstone of our early efforts into decarbonising GB Railfreight. Although the Class 99s will initially be additional to our fleet, these will start replacing our Class 66 diesel locomotives once they reach the end of their asset life. Government policy over electrification will also be a major determiner for how many of our diesel locomotives will be replaceable with overhead electric variants.

Class 99 locomotives are bi-mode, modular locomotives, meaning they can run via electrified lines and where the infrastructure is lacking, also utilise a Stage V diesel engine. This engine is the most efficient diesel engine of any freight locomotive, and we have already committed to powering our Class 99s with renewable diesel, as and when electrification is not available.

In addition, this engine is modular and designed so we will be able to replace the diesel engine with a battery once the technology matches the ambition. The Class 99 will then be the first freight locomotive capable of delivering a fully-electric service anywhere on the rail network.

In addition to significantly reducing our fleet's carbon and nitrogen dioxide emissions, the Class 99 also offers improved operational efficiency. Through smoother and more responsive instant torque, locomotives can reach quicker speeds with less force. In turn, this means taking up less 'space' on the rail network, allowing for future freight and passenger growth.

Reducing wasted locomotive fuel through idling

Since the production of our first carbon reduction plan, efforts have been made to make sure that the facilities we provide to our employees aid and promote good rest periods outside of the locomotive environment. This not also helps with wellbeing and culture, but also enables the locomotive to be switched off, saving fuel and subsequent emissions. To promote this we will continue to communicate the benefits via an open sharing of data with our staff.

We will also continue to dispel the belief that if switched off the engine may not restart and will use information from both our suppliers and internal engineering department to support this.

Switching some diesel services to alternative fuels

From January 2025, we have entered agreements with certain customers, which sees all of their services being powered by renewable diesel, currently HVO.

HVO is a diesel replacement fuel made from 100% renewable raw materials. HVO does not require any locomotive modifications, or any changes to be made to infrastructure.

At the moment, we have replaced approximately 10% of our fuel purchases with HVO, reducing our Scope 1 emissions by >9%.

Replacing diesel shunt engines with electric
Many of our sites require small shunt engines to operate. These have traditionally been diesel engines, many of which are becoming life-expired, providing a great opportunity for change. Working with Beacon Rail, we are testing battery-electric shunt engines at Whitemoor. We will be offering this option in future tenders for any customers who want to make the switch.

EV Salary Sacrifice Scheme
In 2023, we introduced a salary sacrifice scheme to our colleagues for the leasing of electric vehicles only. At the time of writing, our employees have leased in excess of 100 cars, which to date has saved c.140 tonnes of CO2e.

Reducing sole occupancy car commuting
Due to the nature of our business, with the majority of our employees working shifts and being based in remote locations, a high proportion of commuting is by private car. Similarly our main regional offices are not easily reached by public transport.

We have introduced a shuttle service between the main train station and our office in Peterborough, encouraging more people to travel to work by public transport where possible. Current statistics show that approximately 10 shuttle services are utilised each day, most with more than one person being collected, equating to what could be more than 20 single occupancy car journeys saved daily. Rolling this out to further locations is projected to remove even more cars from our roads and reduce the emissions that entails.

Encouraging our suppliers to make sustainable choices
We are taking a multi-pronged approach to our supplier policy and tracking. Currently, we are looking at implementing an ISO14001- and RISQS-compatible system for industry procurement, carbon management and Net Zero commitments, as well as another tool for non-industry suppliers.

We are also aiming to refresh our supplier questionnaire and request environmental data from suppliers as standard, which is required for Scope 3 Purchased Goods and Services emissions tracking. The majority of our emissions for this category is purchased services (such as maintainers and cleaners), rather than purchased goods.

Increase office recycling and reduce waste
In 2023 we rolled out recycling stations to all HQ offices and began working with our suppliers to deliver much higher rates of recycling. Stations include mixed recycling, paper, food and residual waste. Abiding with legislation change in 2025, this has now been rolled out to all sites and depots throughout the GB Railfreight portfolio. Whilst this will have a relatively small impact from a data perspective, we believe that encouraging better environmental practices at work can lead to a positive cultural change, which leads to a much wider impact.

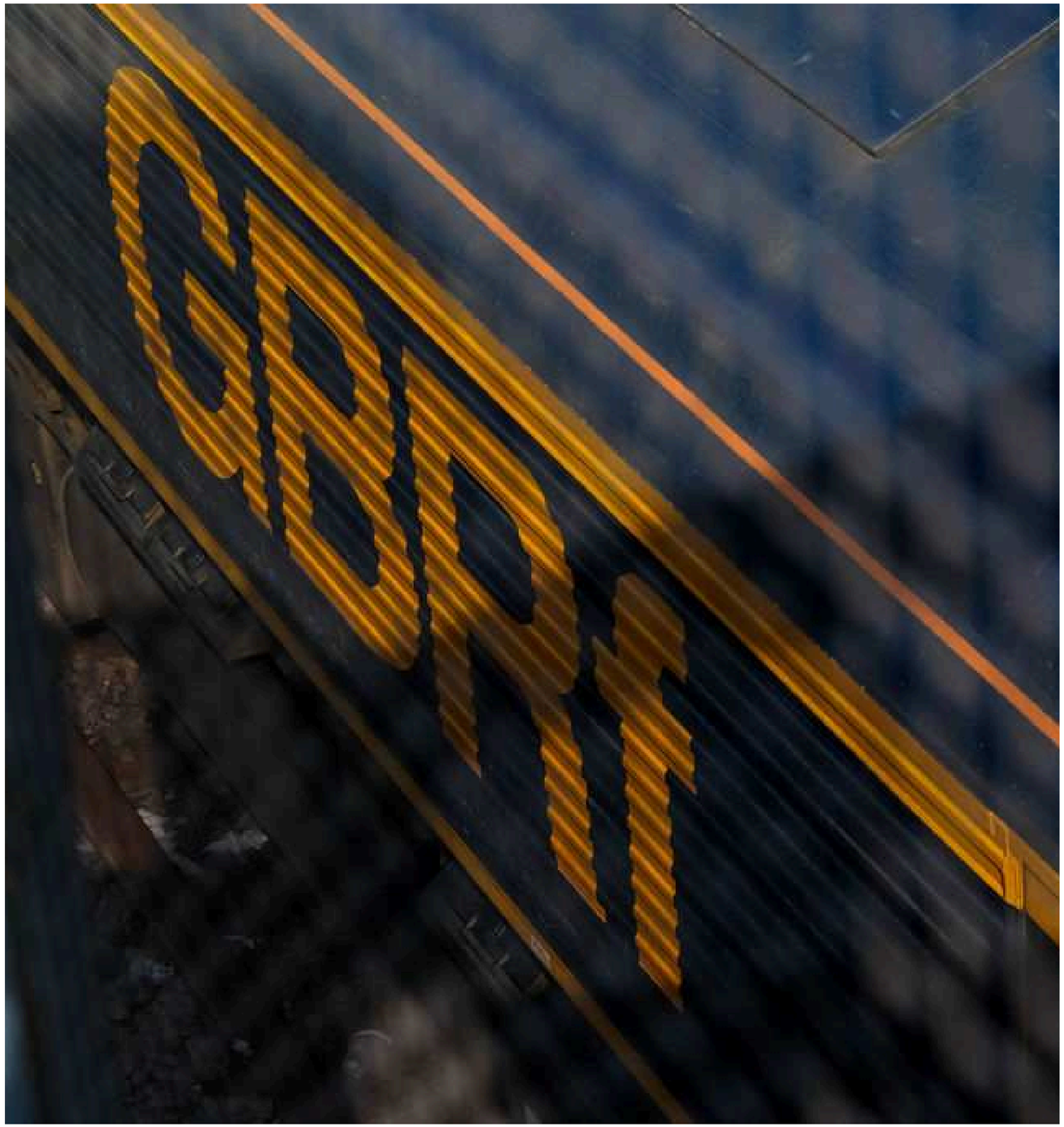
Renewable Energy procurement

2025 saw us change to 100% renewable electric energy for all the offices, depots and sites where we manage our own supply and usage.

As part of this, we will be adding additional solar PV panels on our Peterborough office and making sure the design of all new builds or refurbishments has renewable energy placed firmly at the heart of it.

Battery Storage

We are conscious that our plans to switch our road fleet to electric by 2032 will increase our requirements on the electricity grid, which is already an in-demand, critical resource. To counteract this, we are looking at installing battery storage facilities where solar paneling will be fitted, making the most of our natural resources, starting with our Peterborough HQ.



Future Carbon Reduction Projects

We aim to implement the following carbon reduction projects to reach our emission goals.

Eradicate single-use plastics

Since our first published plan we have made significant improvements to all our sites making sure that potable water is available for all at our sites and depots. In addition, we will be working with our suppliers to find a sustainable alternative to plastic bottles, while still allowing for stocks of water to be stored onboard our locomotives. We understand that our staff can be on shift for long periods of time without access to facilities, and the burden of carrying around large amounts of fluid may be detrimental to health and wellbeing.

Reduce office energy consumption

Alongside our facilities management company, and at sites and offices under our control, we are continuing to replace older lighting with LED fittings. We have energy monitoring in place at some of our locations to enable us to monitor usage peaks and educate our staff around the benefits of making sure lights and electrical items are switched off when not in use.

Carbon offsetting where eradication is infeasible

Although we will endeavour to eradicate as much carbon as possible from our greenhouse inventory, we will have to offset to reach Net Zero for emissions which are unachievable to eradicate – the vast majority of which is estimated to be from locomotive fuel. However, we will continue to work with innovators and new technologies to minimise the requirement to use carbon credits to reach Net Zero by 2050.

Other Environmental Projects

Biodiversity
Working alongside Wanderlands Europe, a consultancy that specialises in carbon reduction projects through biodiversity initiatives, we have identified areas within our property and land footprint to make nature-based improvements. Those improvements include gardens, bird and bat boxes, butterfly and insect corridors, which are currently underway at many sites.

These improvements also support the health and wellbeing of our colleagues, allowing them outside space to take their well needed rest periods. In addition, we will be adding cycle sheds where space is available encouraging a healthier mode of transport whilst reducing our emissions from commuting.

Recycling
Recycling stations have now been placed into all our sites, enabling the separation of waste into recycled, food (compostable), paper and residual.

Staff Engagement
The addition in 2024 of our Staff Engagement and Social Value Manager supports our commitment to wellbeing of our staff through engagement, communication, listening and feedback, alongside the improvement of facilities to enhance the working environment.

Eradicating plastic and single-use items from merchandising and events
We no longer purchase merchandise made from plastic, and do not buy single-use items. At events, we will work with suppliers to encourage the use of sustainable materials and avoid single-use items.

Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.
Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.
Scope 1 and Scope 2 emissions have been reported in accordance with the Streamlined Energy and Carbon Reporting (SECR) requirements, and the subset of Scope 3 emissions have been reported in accordance with the published standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.
This Carbon Reduction Plan has been reviewed and signed off by the Board of Directors for GB Railfreight Limited

Signed 

Position SAFETY AND SUSTAINABILITY DIRECTOR

Date 28 July 2025.

GB Railfreight