Building tomorrow's railway



Sustainability Report 2019



At Porterbrook sustainability and innovation are integral to what we do

Contents

A message from Mary Grant, Chief Executive Officer	
Who we are	02
Our approach to sustainability	05
At the Heart of Britain's Railway	06
Innovation for a better railway and environment	07
Meet the FLEX Family	08
Innovation	12
Technology	14
Positively contributing to society	16
Our People	18
Governance and leadership	21
Corporate statements	23
Sustainability strategic outlook	24



A message from Mary Grant, Chief Executive Officer

This year we received our highest score from the Global Real Estate Sustainability Benchmark (GRESB), achieving a 5 Star rating.

For those of us tasked with keeping passengers and freight moving over the coming decades, climate change and the creation of a sustainable transport network is at the forefront of our minds. Porterbrook, as the owner of almost a third of Britain's passenger trains, takes this challenge seriously and we are committed to working with our customers and suppliers, as well as national and devolved governments, to deliver a carbon neutral economy with increased productivity at its heart.

Our industry has been challenged to decarbonise Britain's railway by 2040 (with Scotland by 2035), and Porterbrook is already working with its supply chain to ensure that this can happen without reducing capacity on an already busy network.

Over the last 25 years, being a sustainable and responsible business has been central to our vision, values and culture. Our track record of investment in new and existing fleets has delivered significant improvements in both passenger comfort and operational efficiencies. Our sector-leading commitment to innovation has already delivered new technologies that will contribute to improved air quality and a reduction in carbon usage across the network. This pace of change will continue as we look to invest more than £1 billion in Britain's railway. We cannot achieve this without the help of our employees and suppliers, as well as the customers and stakeholders that we serve. Porterbrook's commitment to collaboration and partnerships will help us to make a real change at a local level whilst supporting national endeavours that seek to address the global challenge of decarbonisation.

People are at the heart of our business and we are committed to fostering a safe, healthy and prosperous working environment. Our commitment to developing our people is reflected in our Investors in People accreditation, as well as our support for the TUC's Dying to Work Charter.

This year we received our highest score from the Global Real Estate Sustainability Benchmark (GRESB), achieving a 5 Star rating. We will seek to build on this and continue to embed Environmental, Social and Governance (ESG) considerations within all our decision-making.

In this Sustainability review we set out our activities and achievements over the last year and identify our future priorities. I look forward to working with our shareholders, customers, stakeholders, suppliers and employees as we help build tomorrow's railway.



Mary Grant Chief Executive Officer

Who we are

Porterbrook is a leading player in the rolling stock asset management sector, with a fleet of over 4,500 vehicles.







Our vision is to be the UK market leading provider of rail leasing and asset management support.

With offices in both London and Derby, Porterbrook is proud to be UK tax resident and employs over 130 people, more than a third of whom are engineers.

Since October 2014, the Porterbrook group of companies has been wholly owned and managed by six supportive long-term institutional infrastructure investors: AIMCO, Allianz, UTA, The Infrastructure Fund, RBS and EDF Invest. This shareholder group is aligned with the strategic opportunity for the business and fully committed to the future of the UK rail sector.

Over the last 25 years we have invested more than \pounds 3 billion in new trains, almost all of which have been built in Derby. We also spend more than \pounds 100 million annually with supply chain companies across the UK to maintain and upgrade our existing fleets. We plan to invest more than \pounds 1 billion over the coming years to help grow Britain's railway.

Our sustainable investment policy predates, but is aligned to, the Government's decarbonisation policies which includes reducing all greenhouse gas emissions to net zero by 2050, with the Scottish Government commitment to be achieved by 2045. Our commitment to innovation and new technology has seen us invest in both battery and hydrogen power, as well as NOx and particulate reduction technologies, to help reduce emissions, and improve network reliability.

We also manage the responsible decommissioning of life expired trains. By working with community and heritage groups we can often ensure that these former front-line assets enjoy a second lease of life in their retirement. Where this is not possible, redundant vehicles are placed with specialist contractors who manage their safe dismantling, with parts and materials redeployed and recycled where possible.

As part of our responsibility, we provide ongoing train maintenance services and our asset management role ensures an absolute focus on safety, performance, and whole-life asset cost.

As a socially responsible corporate citizen of Britain's railway, we are wholly committed to a business ethos that places sustainability at its heart, so that we can maintain shareholder principles by meeting our customers' needs and being mindful of the communities that they live in.

Over the last 25 years we have invested more than



in new trains, almost all of which have been built in Derby



Our mission and values

We will deliver high quality, safe rolling stock solutions that enable our customers to keep the UK moving every day.



Respect

For colleagues, customers and industry partners



Integrity

In all that we do



Excellence

In customer service, engineering innovation and asset management



Delivery

Adding value to our customers and shareholders



Sustainability

Inclusive, ethical, focused on the community and the environment



Our approach to sustainability

For Porterbrook, sustainability is first and foremost about remaining economically sustainable whilst minimising the environmental impacts of our operations and maximising any social benefits, creating social value at the same time.

We realised that we had to honestly identify which sustainability issues have the most potential to impact on the success of the business. This included environmental and social impacts, along with any risks associated with these. We commissioned independent research in 2019 to understand these issues, which formed a sustainability materiality assessment.

The research included benchmarking our performance, internal and external stakeholder interviews, review of existing activities and horizon scanning to identify key sustainability issues impacting on the business.

The results will allow us to:

- Gain a better understanding of what sustainability means for our business;
- Better integrate sustainability issues into our core business strategy;
- · Focus effort on the issues that matter;
- Be proactive towards emerging environmental/ social issues;
- Satisfy stakeholder and investor demands;
- Meet future sustainability reporting expectations by focussing on material issues; and
- Focus marketing/communications to highlight our sustainability achievements.

At the Heart of Britain's Railway

We will invest more than

£1bn

over the coming years

We have introduced over

2,300

new vehicles into passenger service

Our rolling stock includes over

4,500

vehicles

More than

33%

of our workforce are women We have been at the heart of UK rail for over

25 YEARS The number of reportable accidents we have had since 2012



We built and tested the world's first retrofit hydrogen train We created the UK's first full scale demonstrator for SME products

HYDRO Flex INNOVATION



Innovation for a better railway and environment

Rail is a naturally low-carbon form of transport and will play a major role in helping the UK reduce all greenhouse gas emissions to net zero by the Government's target of 2050 (the Scottish Government's target is 2045¹). Over the last 10 years, there has been a 50% decline in emissions per passenger km². Despite this progress, rolling stock faces two primary environmental challenges:

- 1. The contribution of diesel engines to emissions which can lead to poor local air quality; and
- 2. The carbon contribution of powering trains which affects climate change.

In response to this, we have invested in innovative engineering solutions to reduce emissions and decarbonise Britain's railway. By funding projects dedicated to tackling decarbonisation, we are contributing to the modernisation of our rail network, reducing energy consumption and creating a better passenger environment.



Our approach is based on three core pillars:

Over the last 10 years, there has been significant investment in electrifying Britain's railway. According to the Rail Industry Decarbonisation Taskforce:



of Britain's railway is electrified

Equivalent to **8,106km** of track ³

However, there are still large parts of the rail network which are still reliant on diesel passenger vehicles.

Scottish Government (2019) *Climate Change*. Available at: www.gov.scot/policies/climate-change/reducing-emissions/ (Accessed on 02 December 2019)

2 and 3

RSSB and Rail Industry Decarbonisation Taskforce. (2019) *Final report for the Minister for Rail*. Available at: www.rssb.co.uk/en/Research-and-Technology/Sustainability/Decarbonisation/Decarbonisation-our-final-report-to-the-Rail-Minister (Accessed on 18 November 2019)

Meet the FLEX Family

A key feature of our sustainability strategy is dedicated to modifying our fleet to positively improve our impact on society and the natural environment. We also recognise the importance of plugging the electrification gap in a cost-effective way.













In line with the Rail Industry Decarbonisation Taskforce's recommendations, we are working proactively to reduce the carbon footprint of our trains by collaborating with academic institutions and the supply chain to deliver sustainable fleets that combine lower emissions with improved performance.

Porterbrook's FLEX Family is our pioneering upgrade of existing trains with alternative low emission traction technology designed to reduce carbon, nitrogen oxides and emissions.

FLEX is a retrofit electric train with a battery pack and low emissions engine. By improving operational flexibility across electrified and non-electrified routes, FLEX helps to make the case for incremental electrification of the railway. Porterbrook has taken the lead in delivering solutions in response to growing environmental awareness and concerns about air-quality. Our FLEX Family of re-powered and upgraded rolling stock can operate in electric mode on electrified routes and in self-powered mode on non-electrified routes. As well as delivering greater operational flexibility, these fleets have a reduced carbon footprint and lower emissions. Our ElectroFLEX and BatteryFLEX products offer zero emissions at the point of use and we are also working with innovative third party suppliers to reduce NOx and particulate emissions from our existing Turbostar fleet.

Porterbrook will be supplying the Rail Operations Group with bi-mode FLEX trains to support their move into the light logistics sector, a market currently not served by rail. With a growing shortage of HGV drivers and increasing road congestion, shipping firms are turning favourably to rail as a key part of their logistics chain. This increasing 'modal shift' has the added potential to lower the number of delivery vehicles on the roads – helping reduce vehicle emissions and local air pollution.



FLECTRO





Porterbrook is trialling the fitment of battery technology to some of our existing Electrostar trains. This will enable elimination of diesel trains from non-electrified routes. As well as improved air quality there are also operational benefits from standardising on the Electrostar platform – which with batteries fitted will be able to operate both 'on' and 'off' the third-rail network.



In a UK first, Porterbrook partnered with the University of Birmingham to build and deliver HydroFLEX. This involved retrofitting an existing electric train with a hydrogen powered fuel cell. The train now has the potential to achieve zero-emissions operations (at the point of use) on long distance non-electrified routes.

"This partnership between the University of Birmingham and Porterbrook has been a trailblazer for academia and industry accelerating ideas into practical application on the railway. We look forward to the next phase of this project which will take this technology onto the UK railway."

Alex Burrows, Director at Birmingham Centre for Railway Research and Education



UNIVERSITY^{OF} BIRMINGHAM

entering cities, benefiting passengers,





By using the latest battery technology, we can

extend electrification without needing overhead

wires. Based on the highly reliable Class 350/2

EMU, BatteryFLEX can run on both electrified

and non-electrified routes. This application of

battery technology will be of particular interest

extend electrification and accelerate removal

to the transport authorities as they look to





HybridFLEX





of diesel-only trains.

Innovation

As a business we are continually looking ahead to predict future needs and proactively develop our rolling stock assets.











We see small and medium-sized enterprises (SMEs) as a key contributor to the advancement of our industry. Of approximately 5,000 companies that support the rail industry in the UK over 4,000 are SMEs, of which 500 solely support the rail sector. Despite their integral role, smaller suppliers often face barriers to entry to demonstrate new ideas and innovations in a real train environment.

In response to this issue, Porterbrook launched the Innovation Hub in June 2019. In an industry first, the initiative gives smaller suppliers the opportunity to demonstrate their technologies in a real train environment for free. Based at Long Marston in Warwickshire, the Innovation Hub (a four-car Class 319 train) is a working environment for brand new technologies and passenger-facing improvements to be tested and showcased, including:

- Environmentally friendly manufacturing processes;
- Improved passenger facilities;
- New uses of data and connectivity;
- System monitoring.

Technology

While the majority of transport emissions arise from road vehicles, we recognise that our industry can further reduce its carbon footprint by removing unnecessary waste, improving efficiencies and considering alternative technologies.











In August 2018 we entered into a strategic partnership with Elastacloud, the leading Microsoft Data and Artificial Intelligence Partner, to build innovative data solutions for the rail sector. Together we have already identified over thirty KPIs across the rolling stock sector that will be improved by combining the large volume of data our industry produces with Artificial Intelligence. When using this approach to analyse the data we can make real improvements to both customer fleets and passenger journeys by improving predictive maintenance and increasing capacity on the tracks with smart signalling.

In collaboration with South Western Railway and Eminox, we are also trialling groundbreaking, emissions-reducing technology which has the potential to be rolled out to hundreds of diesel trains across the UK's rail network. The partnership aims to reduce diesel emissions by fitting a catalyst that will reduce NOx emissions by over 70% and carbon monoxide and hydrocarbons by over 90% from current levels.

Positively contributing to society

Having a positive impact on our local community is central to being a socially responsible corporate citizen. From supporting community initiatives to upskilling our local workforce, we strive to ensure the rail sector is fit for the future and delivers maximum benefit for local communities.

As a business, and as individuals, we endeavour to support local community initiatives located close to our UK offices in London and Derby. Seven charities have benefited from our employee fundraising programme and we have made charitable donations amounting to £23,500 in 2019.

Supporting The Railway Children Charity

The Railway Children Charity was founded in 1996 and aims to create and enable sustainable change in the lives of individual children, communities and in the wider policy and practice that affects all children living alone on the streets across the UK, India and East Africa.

The Three Peaks Challenge

Now in its 15th year, The Three Peaks Challenge by Rail is the only event that involves a train to complete the Three Peaks – the highest mountains in England, Scotland and Wales. With a total walking distance of 23 miles, walkers ascend 3,064 metres to fundraise and raise awareness on behalf of The Railway Children Charity. We are proud of our involvement in The Three Peaks Challenge and in 2019 Porterbrook was the lead sponsor. We will continue to support the event in 2020.

"What makes this challenge unique is the fact that it is the only one using rail as the prominent means of travel between the peaks. Support and encouragement including from The Railway Children Charity and individuals who volunteer for the event is fantastic."

Nick Taylor Head of Maintenance Services





Supporting our local communities for over 25 years













Investing in future skills

Plugging the gap in rail skills is a major priority for our industry. During our annual Supplier Conference in 2019, speakers from the Department for Business, Energy and Industrial Strategy, the Department for Transport, the National Skills Academy for Rail (NSAR), Northern Rail and Unipart set out the scale of the issue, with an estimated 100,000 vacancies opening up over the next ten years. Mary Grant, our CEO, has served on the Board of NSAR since September 2018.

We also support a wide range of initiatives to encourage young people to consider a career in the rail industry. Our staff regularly deliver workshops at primary and secondary schools as well as universities to raise awareness about the many different career opportunities in rail. Supporting this initiative is our Ambassador for Young People, Tom Scott, a Fleet Engineer who joined Porterbrook as a graduate in 2017. As our Ambassador he now actively educates school pupils about the different career paths in our industry.

2019 iRail Grand Challenge

Porterbrook sponsored the 2019 iRail Grand Challenge, the competition designed to encourage young people to consider a future in rail. Organised by the Rail Forum Midlands, iRail sees students in schools from across both the East and West Midlands in England participate in a range of engineering challenges. We will continue to support this initiative in 2020 as we recognise the value of engaging with our schools to stimulate an interest in rail as a career.

The teams participating in the iRail Grand Challenge are judged by a panel drawn from both public and private sectors, with engineering and operating expertise. The judges for 2019 included Mary Grant, along with other industry leaders and policymakers.















Our People

Our comprehensive HR Strategy is in place to ensure that we have an engaged and highly motivated team.







"Porterbrook supported me through my Level 4 NVQ in Engineering, encouraging me to attend relevant railway training courses to progress my career. From my personal experience Porterbrook has greatly encouraged and supported me throughout my time as a Higher Engineering Apprentice."



Jen Gaskin Fleet Support Engineer

In 2019 we were delighted to achieve Investors in People accreditation, an internationally recognised standard for people management. We will continue to work towards achieving Investors in People Platinum status by 2021.

Apprenticeships

NSAR has highlighted the significant skills shortage across the industry caused by an increased demand for rail balanced against an aging workforce, greater use of technology and a lack of diversity compared to other sectors. Research suggests that the cost to businesses could reach £300 million per annum and a cost to the Government of £3,380 million per annum by 2024⁴. The Rail industry is working collaboratively to address this skills shortage and at Porterbrook we are also creating roles for young people to enter the industry through our apprenticeship and graduate schemes. Roles are offered in engineering, along with finance, commercial and planning. Our Graduate scheme offers placements with the supply chain and train operating companies, delivering a well-rounded individual for the industry. Our own staff are also undertaking apprenticeship qualifications in line with their job roles.

Investing in our employees

We invest in comprehensive training and development programmes to help our employees become future leaders. For example, our engineers have access to the Managed Professional Development Scheme qualification, accredited by the Institution of Mechanical Engineers, which enables them to fulfil the competency requirements for registration. We currently have five graduates on the scheme. We are proud that over the last 18 years, 20 graduates have successfully completed the initiative. 2020 will see a considerable investment in the personal development of all of our people, including a leadership development programme.

Diversity and fairness

As an equal opportunities employer, we recognise the value of employing people from all backgrounds. Currently female employees account for 33% of our workforce which is over 50% higher than the industry average.⁵

Wellbeing

At Porterbrook we recognise the need for a healthy work-life balance and offer a range of flexible working and leave options. Even at the most senior level we promote a flexible approach. For example, our Innovation and Project Director role operates as a job share. We are a signatory to the Trades Union Congress' Dying to Work Charter. The Charter is a cross-party campaign seeking additional employment protection for terminally ill workers. Personal wellbeing is supported with the provision of Health Shield and Mental Health First Aid Training.

4 The National Skills Academy (2017) Rail Sector Skills Delivery Plan. Available at: https://www.nsar.co.uk/wp-content/uploads/2018/11/ Rail-Sector-Skills-Delivery-Plan_2017_V8.pdf (Accessed on 05 December 2019)

5 Women in Rail (2015) *Women in Rail: Industry Survey*. Available at: https://womeninrail.org/wp-content/uploads/2014/04/WR-Industry-Survey-Report-December-2015.pdf (Accessed on 18 November 2019)

Our People

The health and safety of our colleagues, customers and the travelling public are integral to everything Porterbrook does.

We are proud of our safety performance across the business and have had no reportable accidents since 2012. We are committed to providing safe and healthy working conditions for all our employees and to provide appropriate training as needed to enable the fulfilment of these aims. This extends beyond engineering and operations teams, with all employees actively keeping up to date with the latest developments. For example, in 2019 our internal all staff *Lunch and Learn* training programme included core health and safety sessions on passenger safety in railway operations and the impact of diesel exhaust emissions.



"At Porterbrook, safety is absolutely critical to our success as a business. We continuously update our systems and processes to ensure that we not only comply with health and safety legislation, but also lead the way with best practice, according to the very latest industry standards."

Julie Bignell Head of Safety and Operations

Our approach to safety is focused on five guiding principles



To select and manage competent suppliers who understand their safety obligations

~_4
<u>x</u>

To provide specifications and procedures which are clear and unambiguous



To implement effective management of ongoing activities



To implement effective management of change



To carry out relevant checks and audits with our supply partners and customers



Governance and leadership

Porterbrook benefits from a senior management team with unparalleled experience in the transport sector.



Mary Grant Chief Executive Officer



Peter Coates Chief Financial Officer



Stephen McGurk Chief Commercial Officer



Jason Groombridge Director, Engineering Services



Chris M^CClure General Counsel



Andy Pitt Non-Executive Director



Haydn Abbott Non-Executive Director

Roles and responsibilities



Governance and leadership

Sustainability governance

Chris M^CClure, General Counsel, has overall responsibility for sustainability governance. Any ESG-related misconduct, penalties, incidents or accidents are raised within 24 hours of the occurrence to the CEO or a member of the Executive Management Team. In addition, any issues will also be raised with our shareholders as part of our regular Board Meetings. Details of incidents are reported and any resulting action plans agreed to ensure a repeat does not occur.

The Head of Audit and Risk regularly conducts ESG Risk assessments to ensure that any potential issues are reviewed and action is taken to avoid these becoming a reality.

We operate a number of internal policies to help ensure that we are conducting business in an ethical and transparent manner.

These include:

Policy	Purpose	
Safety	Our health and safety policy is a critical component of our day-to-day operations as a business. It enables safe and healthy working conditions for all employees and contractors for the benefit of our customers and the travelling public and includes appropriate training.	
Environment	This policy outlines the four sustainable and environmental objectives that Porterbrook will direct its business activities towards.	
Code of Practice	This is a voluntary code setting out Porterbrook's business philosophy and the company's core working values.	
Code of Conduct for suppliers	This code sets out the standard of behaviour expected of suppliers to our business.	
Anti-slavery and Human Trafficking	Reflects our commitment to acting ethically and with integrity in all our business relationships.	
Whistleblowing	A policy to ensure that all employees know that they can raise concerns about how colleagues are being treated, or practices within our business or supply chain, without fear of reprisals.	
HR	There is a full suite of modern and progressive HR polices in place which comply with UK legislation and in many cases, go beyond the statutory minimum. Our HR polices underpin our engaged and motivated workforce.	



Corporate statements

Modern Slavery and Human Trafficking Statement

We are committed to doing all that we can to combat slavery and human trafficking and realise that slavery and human trafficking can occur in many forms, such as forced labour, child labour, domestic servitude and workplace abuse ("Modern Slavery"). We have a zero-tolerance approach and our Modern Slavery and Human Trafficking Statement sets out the steps that Porterbrook has undertaken, and is continuing to take, to ensure that Modern Slavery is not taking place within our business or supply chain.

Tax Strategy

All entities in the Porterbrook Group are UK resident for tax purposes. The Group complies with the tax law and practice of the UK. Compliance for the Group means paying the right tax at the right time which involves the following points:

- an open dialogue with HMRC to disclose relevant facts and circumstances relating to significant tax matters;
- having appropriate tax governance and tax accounting arrangements in place;
- applying tax legislation within the spirit and intention of Parliament, noting that this may not always be clear and the Group's view could differ from HMRC's;
- seeking tax efficiency to maintain the Group's competitive position by claiming tax reliefs and incentives where available.

Stakeholder engagement

Porterbrook is committed to being a positive and proactive corporate citizen of Britain's railway. Our stakeholder engagement programme is designed not just to promote the business, but also to help identify how our access to long-term private capital, and asset management skills can help deliver tangible benefits to rail users and the communities that the railway serves. We work collaboratively with our customers, suppliers, statutory bodies and the third sector to help transform perceptions of the railway whilst maintaining shareholder value.

Green Bond

In October 2019 Porterbrook successfully refinanced its October 2020 public bond with a dual issuance including a Samurai loan and Green Private Placement. The Green Private Placement was for an amount of £150m and was subscribed by a group of US, Swiss and Canadian institutional investors.

The Green Private Placement was issued under Porterbrook's Green Financing Framework, which details the environmental commitments for any debt issued under it such as, that funds raised must be used to finance eligible activities and assets that produce clear environmental and social benefit. Porterbrook's Green Financing Framework adherence to International Capital Market Association's green bond principles was independently validated by specialist consultant DNV GL. The issue of a Green Private Placement reinforces Porterbrook's commitment to environmental sustainability.

Sustainability strategic outlook

Over the coming year we will further develop our approach to sustainability and will publish an action plan setting out our areas of focus. To fulfil our sustainable and environmental objectives, we will focus our efforts to ensure that within our business activities we will:

- Identify and implement measures to address our contribution to and readiness for climate change;
- Continue to look for ways to reduce the contribution of our fleet to local air pollution;
- Reduce our impact through the assessment and control of waste generated by the operation of our assets or the conduct of our business;
- Identify and implement arrangements to optimise the performance of our assets to minimise the effects caused by noise, vibration and electromagnetic interference;
- Improve our data collection and reporting on diversity issues;
- Work with our supply chain to ensure they are helping to address our values and targets;
- Aim to achieve Gold level of accreditation from Investors in People by 2020 and Platinum by 2021;
- Implement a formal environmental management system certified to ISO14001;
- Achieve the Sustainable Procurement Management System standard ISO20400;
- Improve the feedback measured through our customer survey in the area of our sustainable performance; and
- Create innovative ways to engage our staff in sustainability initiatives including the launch of our Volunteering Scheme.

Building tomorrow's railway



Sustainability Report 2019

