



DELIVERING THE GREEN GATEWAY:
**OUR 2020/21
ESG REPORT**

2020/21

OUR PURPOSE

At HS1 Ltd, our aim is to be the world's leading high-speed rail experience, providing the most sustainable option for transport across the UK and Europe.

To support our goal, HS1 Ltd has created a 2030 Vision based around four key pillars - "Contemporary; Agile; Sustainable and Trusted".

Within the 'Sustainable' pillar sits our Sustainability Strategy – the plan that helps us to deliver the sustainable element of the 2030 Vision.

The 2030 Vision and the Sustainability Strategy are also underpinned by HS1's values. 'Punching above our weight' and 'Winning by inches' are integral elements of our approach as the only railway in the UK operating solely on renewable electricity. Demonstrate our approach to making changes with our sector and our business. Small things matter as much as big ones.

We truly believe we have an important role to play in addressing the climate emergency and are continuing our great work to achieve our targets.

[View our Sustainability Strategy](#)



OUR PURPOSE

To be the world's leading high-speed rail experience

OUR 2030 VISION

Contemporary

Agile

Sustainable

Trusted

OUR STRATEGY

Protect

Evolve

Grow

OUR VALUES



Safety is no accident, we all play our part



Punching above our weight



Personal feel, professional delivery



Winning by inches

ROADMAP TO 2030 TRANSPARENCY



To underpin all our sustainability targets we will have monitoring systems set up & in operation.



Ensure we are 100% compliant with relevant environmental regulatory requirements.



Report annually on our progress to inform investors, partners and stakeholders.

Being transparent is important and we will demonstrate our leadership in the rail sector through our published sustainability strategy. To deliver against our ambition and targets we are developing a reporting approach to include all key metrics, we will also work with our supply chain to implement this across our business. These metrics will support the development of our annual ESG reporting and be part of the pathway to our Task Force on Climate-Related Financial Disclosures (TCFD) in 2022.

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

TCFD requires us to improve and increase reporting of our climate-related financial information by 2022. We will report the following:

Governance	Strategy	Risk Management	Metrics & Targets
On our climate-related risks and opportunities	Actual and potential impacts of climate-related risks & opportunities in our business, strategy, and financial planning	Our process to identify, assess and manage climate-related risks	Assess and manage our climate-related risks and opportunities



2020 We publish our first sustainability report.

Resilience Plan reporting embedded into reporting systems TCFD reporting requirements (governance, strategy, risk management, metrics & targets) assessment completed.

2021 /2022

2022 /2023

TCFD framework set up and first TCFD-aligned disclosures report published.

Customer and supplier sustainability charters published.

2023 /2024

2024 /2025

TCFD compliant

Reassess and identify further best practice (linked to procurement and green financing).

2025 /2026

Our ambition to be transparent clearly links and contributes to the United Nations Sustainable Development Goals (UN SDGs) both strategically and operationally.

Our transparency roadmap contributes to **Goal 16 Peace, Justice and Strong institutions** through compliance, reporting and our employee objectives.



2027 /2028

Implement further best practice.

2030



ROADMAP TO 2030 CLIMATE CHANGE

CLIMATE CHANGE & ADAPTATION OUTCOMES



Traction energy (used to power trains) to be net zero-carbon impact by 2030.



HS1 non-traction energy use (wider estates and buildings) to be net zero-carbon impact by 2030.

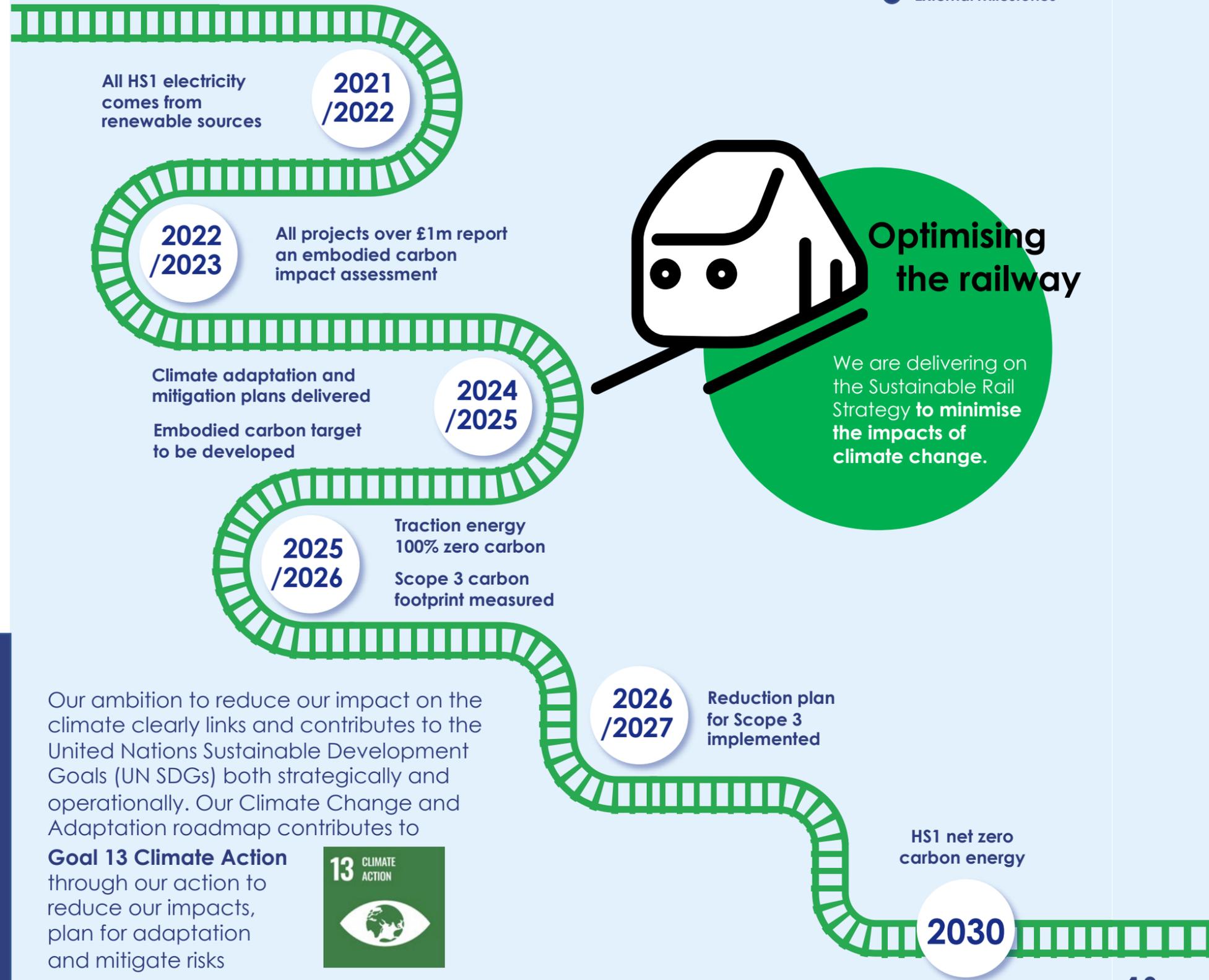
We have developed a green energy procurement strategy which is part of our pathway to net zero. This strategy includes a mix of options such as energy reduction, efficiency and sourcing energy from renewable generation. We report our zero-carbon emissions for the electricity used to power trains and stations. We will produce a Climate Change Risk Assessment and Report based on the requirements of ARP3 as required by the Climate Change Act 2008, which will enable us to develop adaptation plans for our infrastructure.

INSIGHT: OUR CARBON IMPACT



We have assessed our carbon footprint in 2021 assessing our full carbon impacts. The Task Force on Climate-Related Financial Disclosures requires us to improve and increase reporting of our climate-related financial information by 2022/23.

● External Milestones



Our ambition to reduce our impact on the climate clearly links and contributes to the United Nations Sustainable Development Goals (UN SDGs) both strategically and operationally. Our Climate Change and Adaptation roadmap contributes to

Goal 13 Climate Action through our action to reduce our impacts, plan for adaptation and mitigate risks



ROADMAP TO 2030 ENERGY USE

-  Reduce traction (train movement) energy per passenger journey by 25% by 2030.
-  Reduce traction energy per train journey by 10% by 2030.
-  Reduce non-traction (estates and buildings) energy drawn from the grid by 10% by 2030.
-  Reduce non-traction energy consumption per m2 in our estates by 10% by 2030.

Traction energy is our biggest power consumption and impact, and our primary focus and driver for procuring a low carbon energy supply. We are also looking at reduction through implementation of regenerative braking for trains.

Across our estate and stations, we are working with our partners to identify and implement energy efficiency measures, for example upgrading to more efficient LED lighting, updating air handling units and optimisation to boiler and building management system (BMS).

We will develop standards outlining principles of energy minimisation in construction, operation and maintenance.

INSIGHT: TRACTION ENERGY



We will embed energy efficiency and granular monitoring requirements into all future estate refurbishment projects to better understand our energy use through monitoring and enabling us to develop more robust energy reduction plans.

● External Milestones

Energy efficiency and monitoring requirements set in projects & tenant fit out guide

2021 /2022

TOCs move towards best practice for energy efficient trains

Evidence-based energy reduction plan in action across traction & all business functions

Energy targets progress published (ongoing)

Tenant energy performance reported and league tables implemented

Estate-wide performance reported

2023 /2024

All new trains incorporate energy monitoring

Commercial relationships developed to incentivise energy minimisation on new train stock

2025 /2026

TOCs sign sustainability charter & agree to best practice

TOCs set energy efficient targets & report progress

Regen braking impacts measured & published

2026 /2028



Carbon Smart

We are working to achieve **net zero greenhouse gas emissions** by 2030.

Our ambition to be reduce our energy consumption contributes to the United Nations Sustainable Development Goals (UN SDGs) both strategically and operationally. Our energy reduction roadmap contributes to

Goal 12 and Goal 13 through reducing energy use for traction and across all our stations/ estates.



2028 /2030

Energy use is clearly reported and minimised across our track and estates

25% per passenger journey, 10% per train journey, 10% non-traction energy, 10% per m2 reduction in estates

beyond 2030

ROADMAP TO 2030 RESOURCES

RESOURCE USE & WASTE



Zero non-hazardous waste to landfill from regular operations & projects by 2022.

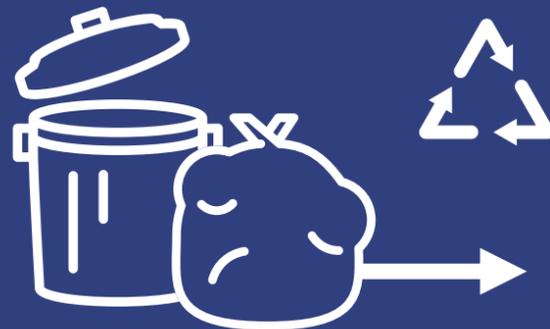


90% recycling of operations and project wastes by 2023.

We will improve our resource use and reduce our waste by a review of our waste portfolio throughout 2021 and develop standards for our project suppliers so that all our non-hazardous waste can be diverted from landfill.

We will minimise any waste produced, making use of established best practice in waste minimisation.

INSIGHT: WASTE MINIMISATION



We will work with our stakeholders to reduce waste from our operations through resource efficiency and increasing recycling

External Milestones

Analysis to understand our waste profile completed

Site waste managements plans required on all projects over £1m

Water use quantified and potential high risk sources of water contamination assessed

Materials specification revised and set in procurement and sustainability charter

All construction / fit out projects over £1m implemented a sustainability assessment method

Common campaign with TOCs to encourage in-station & on-train waste reduction by passengers and to meet DfT requirements established

Progress against resource use & waste targets (incl zero to landfill & 80% recycling)

2025 /2026 Broader circular economy opportunities identified and assessed

2030 onwards: Our resource use is minimised, all preventable waste is avoided and we actively select lower-impact resources

2021 /2022

2022 /2023

2023 /2024

2025 /2026

beyond 2030

Our environmental impact

Making the transition to the circular economy and Protection and conversation of GB water resources.

Our ambition to be resource efficient clearly links and contributes to the United Nations Sustainable Development

Goals Goal 6, 9, 11, & 12 through assessing, measuring and reducing our environmental impacts.



ROADMAP TO 2030 BIODIVERSITY



To deliver a 'Biodiversity Net Gain' (BNG) by 2030/31, based on the 2020/21 baseline.



To further support our 2030/31 target, we will assess the quality of the 136 areas of habitat, known as 'tiles', that we have for HS1.

Each will be rated 'good', 'moderate' or 'poor' and the approach will be:

- Good to be maintained as good
- ↑ Moderate to be moved to good
- ↑ Poor to be moved to moderate

We manage a diverse estate, from central London to the Garden of England (Kent). We are committed to maintaining a healthy and diverse natural environment.

Under the requirement of the Channel Tunnel Rail Act 1996 we have an obligation to protect and enhance the lineside habitat. Our partners Network Rail (High Speed) and Kent Wildlife Trust will survey our natural assets in 2021/22 and develop a baseline on which to deliver a net-gain by 2030/31.

The full survey will identify if BNG by 2030/31 is achievable and if not, what can be delivered. Monitoring will be carried out based on the habitat type and will range between one to five years.

INSIGHT: OUR APPROACH TO AIR QUALITY

We will assess our contribution to air pollution in and around our stations & trackside, to develop a plan to reduce and mitigate abrasion and particulate pollutants.

Our target is zero land pollution incidents, which we will continue to monitor.

Biodiversity action plan & GIS/recording system agreed
BNG metric agreed & gap analysis undertaken
Landscape focus areas habitat surveys completed

2021
/2022

2022
/2023

Pollution reduction plan/pathway implementation underway
Biodiversity baseline set (file assessment & partnership assessment)
Update plan for moderate files to good, and poor files to moderate quality developed

2023
/2024

St. Pancras to Ebbsfleet habitat survey complete

2024
/2025

Biodiversity no net loss assessed, and further enhancement plan agreed

2025
/2026

Report annually on BNG through to 2030

2027
/2028

Second round of improvement actions completed

2030
/2031

BNG reviewed against 2022/23 baseline

BNG plan in place and regularly measurable
beyond 2030

Our ambition to deliver a biodiversity net gain contributes to the United Nations Sustainable Development Goals (UN SDGs). Our biodiversity roadmap contributes to **Goals 14 and 15 Life** below, Water and Life on Land through enhancing the biodiversity of the area on and around our track and stations.

Our reduction on our contribution to air pollution contributes to **Goal 3** Good Health and Wellbeing.



● External Milestones

Enhancing Biodiversity

We are working towards a sustainable **increase in wildlife habitats and diversity** across the GB rail network and **improving air quality.**



ROADMAP TO 2030 SOCIAL IMPACTS



Contribute 700 hours of staff time each year to local communities and charity activities related to HS1's activities by the end of 2022/23.



Report measurable social impacts delivered by 2025/26.

We demonstrate our leadership by providing a positive contribution to the communities in and around our stations and lineside, by giving our time and expertise to enable those communities to flourish.

We will continue to contribute time, expertise and resources in order to build and sustain a thriving urban neighbourhood that is a good place to work, live and do business.

We work to understand our noise impacts and put a mitigation plan in place to reduce the noise levels and impact on our neighbours.

INSIGHT: OUR SOCIAL IMPACT

1

We will continue our current work with organisations such as Urban Partners which HS1 Ltd helps fund as one of its members.

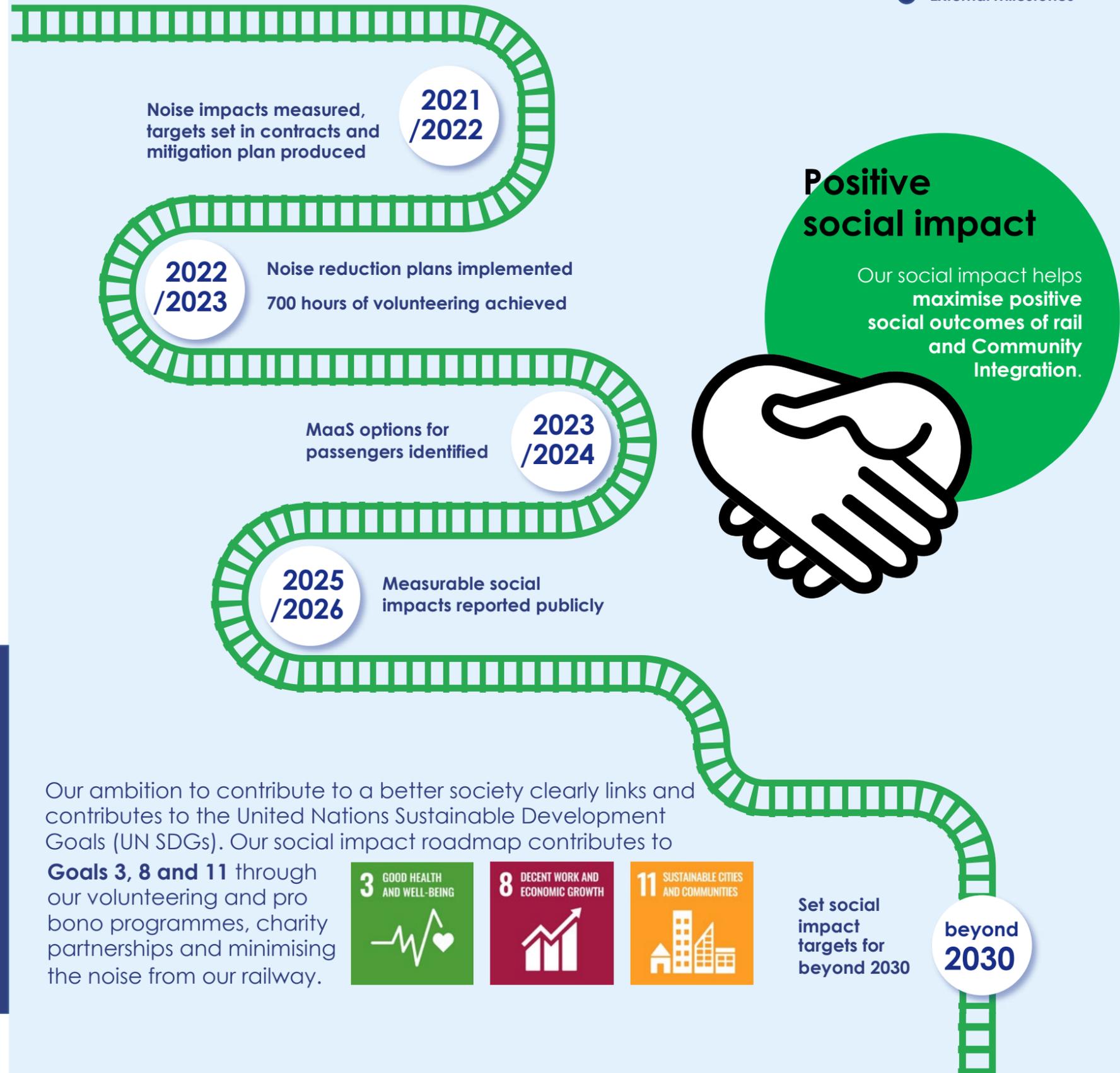
2

We will identify additional partner charities which align to our Sustainability Strategy and support the work they do.

3

We will look to identify a suitable social impact methodology to report our impacts against beyond just the hours we contribute.

External Milestones



Our ambition to contribute to a better society clearly links and contributes to the United Nations Sustainable Development Goals (UN SDGs). Our social impact roadmap contributes to

Goals 3, 8 and 11 through our volunteering and pro bono programmes, charity partnerships and minimising the noise from our railway.



Set social impact targets for beyond 2030