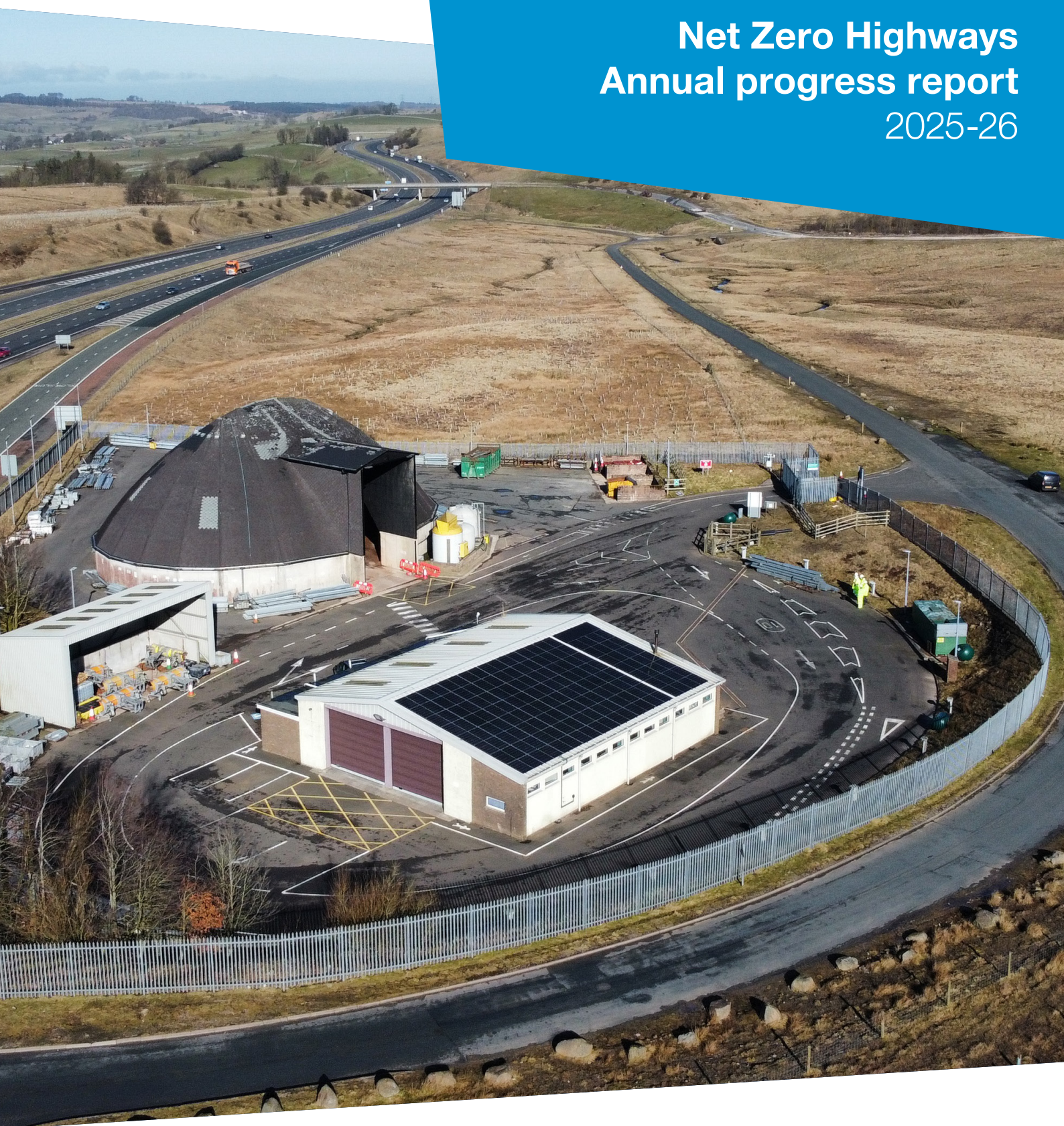


Net Zero Highways

Annual progress report

2025-26



Executive Summary

This fifth annual progress update since our Net Zero Plan in 2021 demonstrates continued momentum towards achieving our net zero goals during the financial year April 2025 to March 2026, with year-end variations reported transparently.

A Net Zero Plan for the Road Investment Strategy (RIS) 3 period is scheduled for publication in summer 2026. To provide a consistent approach, this annual progress report is based on progress made since the last reporting period 2024/25 and is aligned to the ambitions established in the 2021 Net Zero Plan. Future annual progress reports will align to the RIS3 Net Zero Plan.

Our **corporate carbon** emissions have decreased by 8% since last year (2024/25). This was driven by decreases in carbon across all our initiatives, except corporate purchases, which increased due to the purchase of more electric cars to accelerate the electrification of our fleet and the introduction of an updated methodology for calculating emissions from professional services. Key achievements include:

- 61% of our road lighting are now upgraded to LEDs (from 51% in 2024-25).
- 100% of our light fleet is made up of plug-in hybrid or electric vehicles, with 39% of our light fleet now zero emission.
- a further 27 depots have received energy efficiency upgrades (in addition to the 40 depots which have already received upgrades)

Our **maintenance and construction** emissions increased by 1% compared to the previous reporting year. This rise was primarily due to changes in our construction programme. Key achievements include:

- retaining PAS 2080:2023 accreditation for our management system to reduce carbon during design, construction and operation of England's strategic road network, with 93% of our suppliers also achieving accreditation, on track to becoming accredited or aligned with PAS 2080 principles.
- funding 11 Low Carbon Demonstrator schemes, resulting in whole life carbon savings of 4,449 tCO₂e and sharing insights with our suppliers.
- a major review and update to our Standards to allow acceleration of low carbon innovation in construction

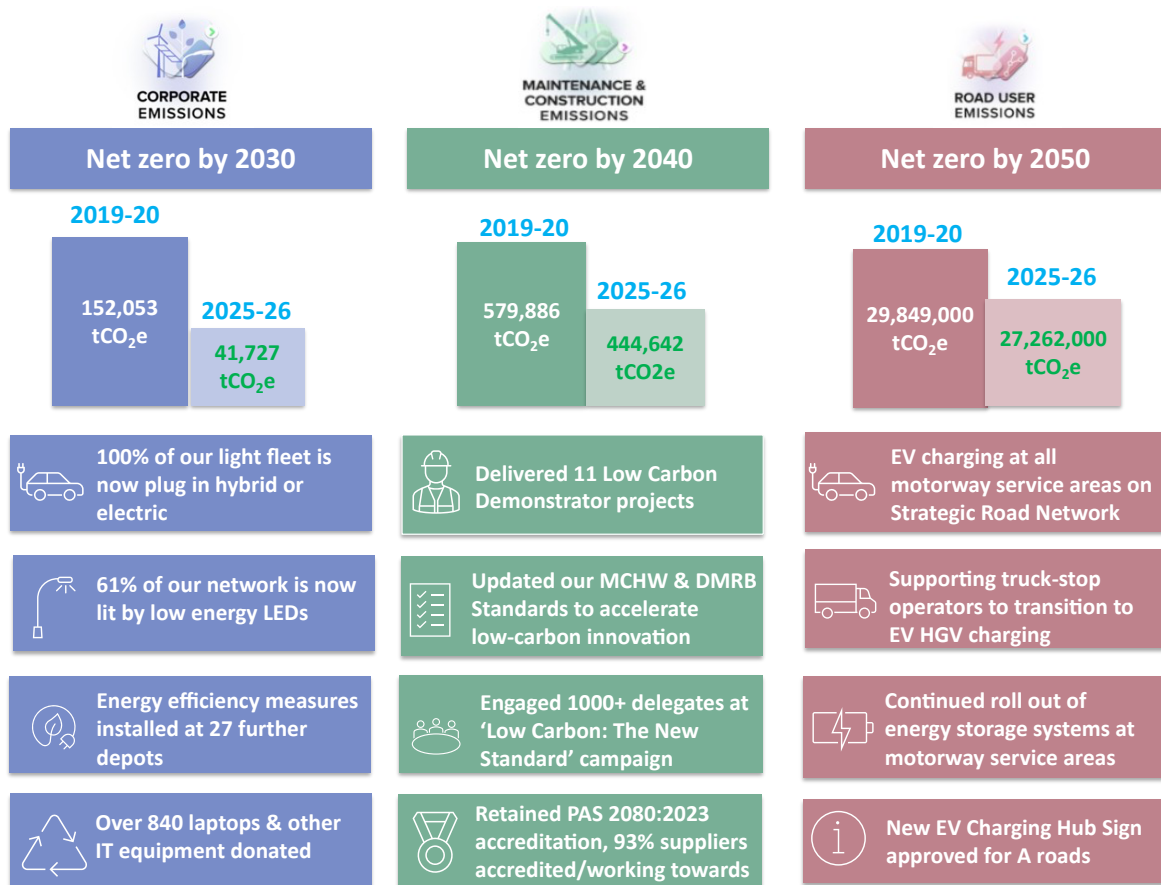
Road user emissions on our network have continued to decrease due to ongoing improvements in vehicle efficiency and the increased adoption of Electric Vehicles (EV). Key achievements include:

- Every motorway service area on the Strategic Road Network now offers electric vehicle charging, making it easier to travel in a light EV with confidence.
- Maintaining our Strategic Charging Infrastructure (SCI) portal page providing practical guidance, lessons learned and resources for all stages of charge-point installation to help charge-point operators (CPOs), contractors,

distribution network operators (DNOs) and operators of motorway service areas and truck-stops in accelerating the roll-out of such infrastructure on our network.

- We secured approval for a new non-prescribed EV Charging Hub sign that operators may use on our A Roads.

Progress update on our 2030 / 2040 / 2050 plan



1. Introduction

In 2021, we published *Net Zero Highways Plan*, setting out our plan to reach net zero. This report highlights our key achievements from April 2025 to March 2026. An updated RIS3 Net Zero Plan is scheduled to be published in the summer 2026.



Corporate Emissions: Net zero for our own operations: This area covers energy used to light and power our network, travel by our traffic officers and the energy used in our offices and other travel. We also include the carbon locked in trees and plants on our road verges and the land surrounding our roads in the target. It includes Scope 1 and 2 emissions and some Scope 3



Construction & Maintenance: Net zero for our construction and maintenance activities by 2040: This target covers the greenhouse gases emitted in making the materials we use to keep our network in good condition. This includes cement, steel and asphalt. We also include the transport of materials to where we use them and emissions from construction on our sites



Road User Emissions: Net zero for road user emissions by 2050: The largest source of emissions comes from vehicles driving on our network. Government's latest emissions projections to 2050 see an ambitious reduction in emissions from road transport. Our plan will enable this transition by providing the infrastructure needed for zero carbon motoring on the strategic road network

2. Our 2025-2026 emissions

This table shows our Greenhouse Gas (GHG) emissions for 2025-26. Emissions are reported against the requirements of GHG Protocol and Science Based Targets Initiative Net Zero Standard, in line with Global Reporting Initiative Standard 305.

Emissions Source	Scope	Baseline tCO ₂ e	Reporting year tCO ₂ e	Progress	Intensity ratio
Corporate		2019/20	2025/26		tCO₂e / full time equivalent employees
Vehicle fuel	1	10,431	4,987	↓	0.72
Buildings gas	1	1,252	1,075	↓	0.16
Electricity	2	85,644	2	↓	0
Corporate purchases	3	27,174	20,035	↓	2.95
Business Travel	3	3,536	2,546	↓	0.37
Leased Assets	3	24,014	12,812	↓	1.86
Total	N/A	152,053	41,727	↓	6.07
Maintenance and Construction		2019/20	2025/26		tCO₂e. / £mil spent on maintenance and construction
Cement and concrete	3	167,768	61,046	↓	24.85
Material transport	3	120,440	87,216	↓	35.51
On-site plant	3	67,611	63,719	↓	25.94
Steel	3	58,957	37,678	↓	15.34
Asphalt	3	88,074	106,615	↑	43.40
Other materials and aggregates	3	49,367	71,070	↑	28.93
Supply chain operational energy	3	10,927	13,484	↑	5.49
Purchased goods and services	3	14,777	1,850	↓	0.75
FBS Depot	3	1,965	1,965	→	0.80
Total	N/A	579,886	444,642	↓	181
Road User		2019/20	2025/26		tCO₂e. / billion km travelled on network
Light fleet	3	19,947,000	17,463,000	↓	
Heavy fleet	3	9,902,000	9,799,000	↓	
Total	N/A	29,849,000	27,262,000	↓	189,858
Carbon removals	N/A	-15,000	-15,000	→	N/A

3. Corporate Carbon Emissions

We are committed to achieving net zero for our own operations by 2030

This year, our total corporate emissions were 41,727 tCO₂e. This represents an 8% decrease from last year (45,241 tCO₂e). Compared to our 2020 baseline (152,053 tCO₂e), we have reduced carbon emissions by 73%. The decrease this year was due to reductions in carbon across all our corporate initiatives, except for corporate purchases, which increased due to the purchase of more electric cars to accelerate electrification of our fleet and an updated methodology calculation for professional services.

Corporate Carbon – 25/26 Key Achievements:

- ⌚ Transitioned 100% of our light fleet to electric and plug-in hybrid vehicles, with Traffic Officer vehicles at 16% electric and 84% ultra-low emission and the remaining light fleet at 89% electric and 11% ultra-low emission.
- ⌚ Installed a further 8,960 LED lights between April 2025 and March 2026. To date, 61% of our network is now lit by LED technology, with almost 34,000 lights upgraded since 2024.
- ⌚ We installed energy efficiency measures at a further 27 depots, in addition to the 40 depots already upgraded, including improved lighting and heating systems at 12 depots, the installation of solar PV with batteries at 23 depots and a total of 443 electric vehicle charge points across our estate. We are on track for a one-third reduction across our office estate by 2027
- ⌚ Our travel and expenses policy and sustainable travel hierarchy continue to encourage staff to prioritise sustainable travel and there was a 34% reduction in domestic flights in 2025-26 compared to 2024-25
- ⌚ To date, 395 (almost 6%) members of staff at NH have joined the green car salary sacrifice scheme
- ⌚ As part of our transition to zero-emission HGVs, one-third of our gritter fleet has switched to sustainable, certified Hydrotreated Vegetable Oil (HVO)
- ⌚ A well-established programme to donate IT equipment, with over 840 laptops and other IT equipment donated to schools and charities to date.

3.1 Corporate Carbon Case Study

Over the past two years, we've successfully transitioned our entire fleet of 191 highways inspector vehicles to fully electric, a major milestone in our Net Zero Carbon programme. We have introduced a mix of electric cars and light commercial vehicles to ensure the fleet can meet our operational needs.



National Fleet Manager Martin Edgecox said: “Our journey to decarbonisation is very important to us and our Electric Vehicle transition is a key step in reducing operational emissions. We will continue to work with manufacturers and our end users to understand how we can sustainability transition the remaining fleet”.

In total, 326 light vehicles, including 16% of our Traffic Officer vehicles, have switched to electric. We continue to work with industry and expand our charging infrastructure to ensure that our remaining fleet transitions smoothly.

4. Maintenance and Construction Emissions

We are committed to achieving net zero for our maintenance and construction activities by 2040.

This year, our total emissions were 444,642 tCO₂e. This total represents a 1% increase from last year (438,961 tCO₂e.). Compared to our 2019/20 baseline we have reduced carbon by 135,244 tCO₂e. The carbon intensity, measured by calculating the tCO₂e per million pounds spent on maintenance and construction, also increased from 159 T/£m in 24/25 to 181 T/£m in 25/26¹.

Factors which led to slight emissions increase include:

- ⌚ A combination of scheme-level activity and carbon intensity for 4 major construction projects: A428 Black Cat to Caxton Gibbet, M3 Junction 9, A47 Tuddenham to Easton and A47 Blofield to North Burlington.
- ⌚ Further data improvements include using updated emission factors and the use of more current factors for Operational Energy, Capital Goods and Purchased Goods and Services. This improves accuracy and led to some year-on-year variations and some increases in reported emissions

¹ This year, an outturn cost deflation methodology has been applied using the OBR March 2026 CPI forecast, with all costs converted to 2023 price levels. The 24/25 carbon intensity has been subsequently updated for last year to ensure a consistent comparison. This approach adjusts for inflation, providing a clearer view of underlying changes in carbon intensity, rather than cost-driven fluctuations.

The increase is partly offset by improvements to how we track our projects, including updating the project list to reflect current timelines and removing cancelled schemes, to ensure only active projects are included

Maintenance and construction – 25/26 Key Achievements

- 🕒 We successfully retained PAS 2080:2023 certification, reaffirming the strength of our carbon management approach and continue to support our supplier's attaining certification, with 93% achieving accreditation, on track to becoming accredited or aligned with PAS 2080 principles.
- 🕒 We have modernised and streamlined our MCHW and DMRB standards, removing barriers and opening the door to adopting lower carbon materials and construction practices.
- 🕒 We delivered 11 schemes in 2025-26 through the Low Carbon Demonstrator Fund (LCDF), resulting in whole life carbon savings of 4,449 tCO₂e
- 🕒 Our Carbon Hub continues to be updated with the latest guidance, including our revised '10 Asks for Designers', a standard template for carbon workshops and the continually updated low-carbon opportunities register.
- 🕒 Our *Low Carbon: The New Standard* campaign, attended by over 1000 delegates, raised awareness of lower carbon opportunities, empowering partners to make informed decisions to accelerate our net zero journey

4.1 Construction & Maintenance Carbon Case Study

A pioneering road resurfacing scheme in East Anglia delivered major carbon savings, using more than 90% recycled materials and electric construction machinery. The A47 project between Acle and Great Yarmouth created a new structural layer using recycled asphalt and used a nearby low carbon recycling plant, cutting an estimated 400 tonnes of CO₂, the equivalent of powering 142 homes for a year!

The scheme showcased "Cold Recycling Bound Material" (CRBM), produced by crushing existing road layers and creating a new foamed bitumen mix. Electrified pavers, rollers and hydrogen powered low loaders further reduced emissions, while the recycling plant's proximity significantly cut transport related carbon.



The project forms part of National Highways' Low Carbon Demonstrator Fund, helping innovative materials and methods become standard across future

resurfacing schemes. See full article: <https://nationalhighways.co.uk/press/new-recycled-road-surface-project-paves-way-to-zero-carbon-highways/>

5. Road User Emissions

We are committed to achieving net zero carbon travel on our roads by 2050.

The biggest source of emissions on our network is road traffic. The government aims for net zero transport by 2050, which covers road transport, rail, aviation (domestic) and shipping. Learn more at: [Decarbonising Transport: A Better, Greener Britain website](#).

This year, the total modelled road user emissions on our network was 27,262,000 tCO₂e, which is a reduction from last year. This is due in part to the use of the latest vehicle emissions factors recently published by Defra, which have lower emissions compared to previously published emission factors.

The latest emission factors include greater numbers of electric vehicles, which mirrors the ongoing transition of the fleet to lower emission vehicles and increasing numbers of electric cars and vans. A new baseline activity will be undertaken to ensure alignment with the revised Emissions Factor Toolkit (EFT).

Road user – 25/26 Key Achievements:

- 🕒 We continue to deliver energy storage systems (ESS) at motorway service areas (MSAs) to supplement grid supply and enable high powered (150kW) EV charging for drivers. We now have 2 live boosting charges, 6 that we are working to commission and another ready for MSA deployment
- 🕒 We undertook initiatives to help truck stop operators understand the process for charge point installation for electric HGV.
- 🕒 We developed a programme of work for RIS3, focused on HGV decarbonisation and considering strategic charging infrastructure, incident management and any changes from zero-emission heavy good vehicles (HGVs) on road assets.

We also supported the work of others:

- 🕒 For the first time there is charging provision at all 115 motorway service areas, providing a visible and reliable network for strategic journeys
- 🕒 Excellent progress was made by the zero-emission HGV programme (ZEHID) project partners as they completed the Procurement and Infrastructure Development phase. The programme is moving into the On-Road Demonstration phase running to 2031, which we will continue to support.
- 🕒 The All-Purpose Trunk Road (APTR) Accelerator programme supports industry and local partners to reduce ultra-rapid charging 'cold spots' (sections of strategic A-road where drivers are unable to access ultra-rapid charging within reasonable distance). Since January 2024, 1,240 miles of cold spots were removed, with less than 10% of the APTR now classified as cold spots

5.1 Road User Case Study

Our first Energy Storage System (ESS) was brought into operation in October 2024 at Tebay Northbound (M6) to support EV charging. The ESS is enhancing charger capacity beyond the limits of the grid alone and consistently meets high availability targets and on busy days boosts the grid for up to eight hours, helping customers charge quickly and continue their journeys.

The system has exceeded expectations by efficiently recharging during short gaps between EV charging sessions, maximising overall performance. With the ESS connected to a slightly larger grid supply than originally planned, there is potential for additional ultrarapid chargers, which are being explored by the motorway service area operator.



6. Progress on our enabling actions between April 2025 and March 2026

Key achievements:

- We continue to enhance our Carbon Hub with new tools and learning resources, available to our suppliers and key stakeholders
- We delivered a series of webinars attracting over 1,680 participants, including *Carbon Week*, *Low Carbon: The New Standard* and *An Integrated Approach to Carbon Data Improvement*.
- We continue to enhance our construction and maintenance carbon data collection processes, with new digital tools under development to enable more robust data collection across carbon data estimates and actuals.
- We improved data availability and accuracy for MSAs, HVO fuel and vehicles used to transport salt to depots, strengthening our corporate carbon reporting

7. Progress on our commitments

We have achieved most commitments we pledged to complete by March 2026:

Commitment	Update
We will reduce our corporate emissions by 75% by 2025 using GGC methodology*. *We will now be reporting and publicly disclosing our corporate emissions against SBTi methodology	2025/26 was a baseline setting for GGC, therefore to-date we have reported against a SBTi baseline. Against our SBTi baseline and the publication of our Net Zero Plan in 2021, we have delivered a significant 73% reduction in our corporate emissions over the five-year period. This is a strong achievement that demonstrates sustained progress and the impact of our decarbonisation efforts. We continue to build on this momentum, driving further reductions across our operations.
75% of our light fleet switched to electric or hybrid by 2025	100% of our light fleet transitioned to ultra-low / zero emission in April 2025
0-10% reduction by 2025 compared to 2020	23% reduction in construction and maintenance emissions compared to 2020
Commission long term delivery partner to design major net zero road scheme	Our focus has shifted towards the Low Carbon Demonstrator Fund, which represents the most effective route for supporting low-carbon initiatives
Our Tier 1 and Tier 2 suppliers have certified carbon management systems	93% of our suppliers have achieved accreditation or are on track to becoming accredited. We are actively supporting remaining suppliers to complete their PAS 2080 verified Carbon Management Systems and setting commitments aligned with SBTi
Apply transparent reduction target to each scheme using a robust, standardised baseline from 2025	Carbon reduction targets for our schemes have been incorporated into our PAS 2080-certified Carbon Management System which is embedded within our contractual requirements for suppliers.
Integrate net zero into our standard contracts & design codes from 2025	Carbon in Contracts Policy in place from June 2023. Maximum carbon intensity benchmarks for asphalt, steel and ancillary concrete established under the legacy concrete roads reconstruction framework, expanded to include structural concrete, supporting use within upcoming SDF2 contracts. In September 2025, we launched the updated MCHW/DMRB standards, enabling a wider range of lower carbon solutions to be used across our schemes.
Implement Operation Excellence 2025 Strategy, identifying practical ways to work more efficiently, cut journeys & reduce material use	Operational Excellence 2025 Strategy has been implemented and is now standard business-as-usual practice across the organisation.

We are planning for a trajectory of 31-26 MtCO₂e by 2025	27.26 MtCO ₂ e road user emissions in 2025-26. We continue to see annual reductions in road user emissions
Investigate energy storage to support EV charging at MSAs	We have rolled out energy storage systems at motorway service areas to bolster local grid capacity and enable reliable high-power EV charging. By end March 2026, 2 are live, 6 in-situ and working to commission and 1 ready for deployment

7.1 Progress in 2025/26 against other NZP commitments

Corporate emissions (net zero by 2030)	
Commitments	Latest update for April 2025 to March 2026
We will aim to reduce the overall size of our estate by one third by 2027	We remain on track, having recently moved into new offices in Birmingham and Guildford
100% of our business mileage will be by electric vehicles (hire or personal) by 2030	We launched our green car salary sacrifice scheme in 2022, with almost 6% of our staff (395 employees) joining the scheme. We continue to encourage staff to follow our travel hierarchy, which prioritises the use of sustainable transport options and are producing a Travel Plan, outlining key initiatives for RIS3
Plant at least an extra 3 million trees by 2030	Over 380,000 trees have been planted across over 65 National Highways and community projects, in addition to extensive tree planting through design and mitigation of new road schemes.
Develop a deliverability plan to deploy solar panels on the network and explore long term electricity generation options in 2024/2025	Between April 2025 and March 2026, we installed solar PV across a further 23 depots, along with energy efficiency upgrades, heat-decarbonisation and battery storage. We plan to upgrade a further 15 sites between April 2026 and March 2027, with further carbon reduction initiatives scheduled for future years.
We will buy 100% of our electricity via zero carbon tariffs	We continue to buy our electricity via zero carbon tariffs and are assessing our procurement strategy to ensure 100% of our electricity is procured from zero carbon sources in future years.
Our heavy vehicle fleet will be 100% electric or	There are no zero emission HGV models currently on the market that meet our operational requirements. We continue

hydrogen heavy vehicles by 2040	to engage with manufacturers to explore emerging technologies to support our future needs. One third of our fleet operates on HVO and we are assessing opportunities to expand HVO use across the remainder of our heavy fleet, ahead of viable zero emission HGV options becoming available.
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Construction and maintenance emissions (net zero by 2040)	
Commitment	Latest update for April 2025 to March 2026
In each road period we will identify which low/zero carbon products we will use in construction and maintenance	We continue to update our <i>Low Carbon Opportunities Register</i> with new opportunities. We are working with delivery teams and our supply chain to identify promising technologies through the Low Carbon Demonstrator Fund. This work is helping us assess the technological maturity and commercial readiness of a range of low-carbon solutions and is feeding into our pipeline from research to innovation to business-as-usual.
100% electric or hydrogen heavy vehicles deliver to our sites by 2040	We continue to engage with suppliers to learn about their plans for zero emission deliveries with heavy vehicles, working together to identify challenges and assess information to understand how to achieve our goal.
100% zero carbon plant used on sites and site cabins by 2030	We will continue to collaborate closely with our supply chain to understand practical considerations and to support effective rollout across our operations.
100% electric vehicle site cars and vans by 2030, and all compounds run on renewable electricity by 2030	We continue to work closely with our supply chain to develop a collective understanding of zero emission technologies and their practical application.
Develop a zero carbon 2040 roadmap for steel, cement, concrete and asphalt	This year, we have established maximum carbon intensity thresholds for structural concrete, building on the ancillary concrete, steel and asphalt intensity limits developed for the Legacy Concrete Roads Reconstruction Framework. This approach strengthens our Material Decarbonisation Roadmaps and builds on the principles in our Contracting for

	Carbon policy, providing suppliers with a clear pathway to reducing carbon.
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Road user emissions (net zero by 2050)	
Commitment	Latest update for April 2025 to March 2026
Support the delivery of high-powered charging infrastructure on the Strategic Road Network enabling the transition to net zero	By supporting the Government, we've gained valuable insights into industry capabilities, strengthened stakeholder collaboration and improved understanding of future energy demand. All 115 motorway service areas now offer electric vehicle charging, giving drivers confidence they can charge easily and reliably on long journeys.
Develop and test a comprehensive programme to expand travel choice in second road period & integrate into the third road period	We progressed the Solent Travel Choice project in collaboration with large employers to shape travel choice policy. We promoted lift sharing, Love to Ride cycling app and workplace grants for sustainable transport facilities. As part of the Manchester Travel Choice project, a lift-sharing pilot at Salford Royal Hospital introduced dedicated car-sharing parking spaces and Liftshare app
Recommend a preferred solution for HGVs and investment plan for implementation in the 4th road period	We will use insights from the Innovate UK zero-emission HGV projects to shape future solutions and investment plans. We're also researching global market trends to understand their impact on zero-emission HGVs on our network.
Identification of additional actions to influence and go further to support reducing road user emissions on SRN.	We have developed a programme considering strategic charging infrastructure, incident management and impacts from zero-emission HGVs on road assets. We've supported EV infrastructure rollout, working with industry through accelerator programmes, improving guidance and strengthening collaboration to address challenges such as grid connections and site readiness.

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