Introducing our Environmental Sustainability Strategy

https://nationalhighways.co.uk/ESS

A connected country
A thriving environment

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Our road network

20,000 bridges and other structures

150,000 signs

100,000 sensors, including traffic sensors

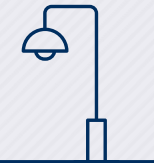**30,000** hectares of green (soft) estate

1,000 Drainage ponds

10,000 miles of carriageways

100,000 street lights

3,500 electronic messaging signs

4,500 miles of motorway and major A-road

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Our roads can be, and will be, a force for good

" Our environmental performance is of national significance, and we are setting out ambitious but credible plans to achieve **net zero carbon**, be positive for **nature** and reduce our environmental impacts on **communities** "

Stephen Elderkin, Director, Environmental Sustainability

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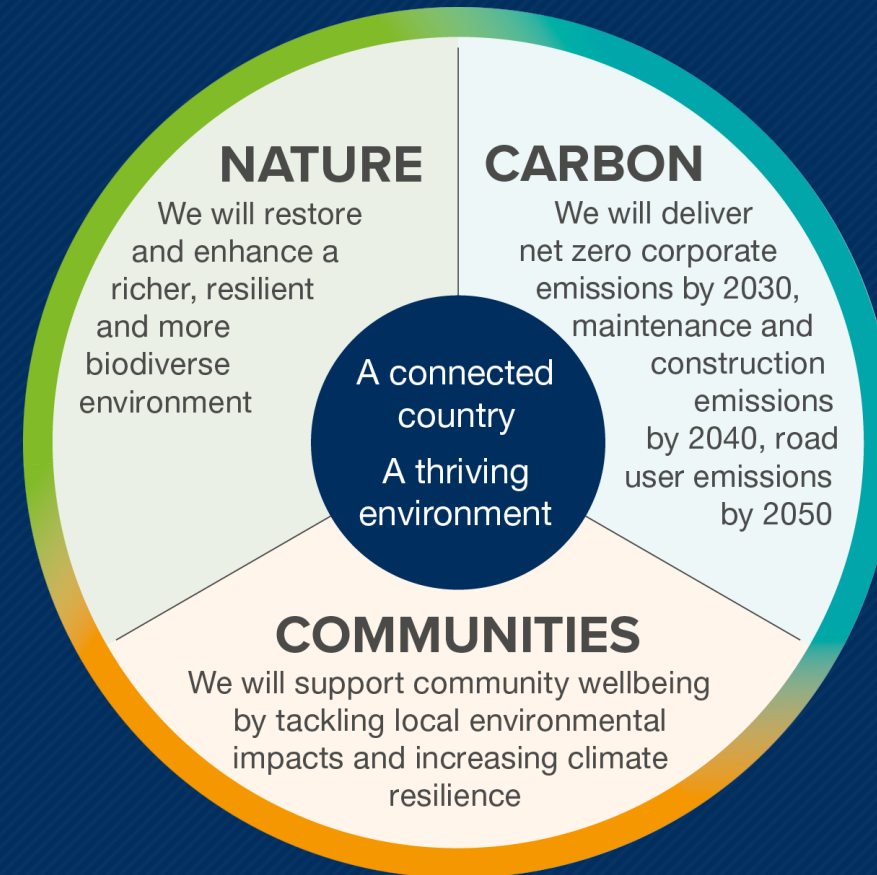# Our Environmental Sustainability Strategy vision

A connected country A thriving environment

At the centre of our strategy is our vision: to fulfil our core purpose of connecting the country, in a way that supports a thriving environment for generations to come

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Our strategic outcomes

To realise our vision, we need to deliver ambitious, positive change for nature, carbon and communities

We describe what we are working towards for each of these strategic outcomes

NATURE
We will restore and enhance a richer, resilient and more biodiverse environment

CARBON
We will deliver net zero corporate emissions by 2030, maintenance and construction emissions by 2040, road user emissions by 2050

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COMMUNITIES
We will support community wellbeing by tackling local environmental impacts and increasing climate resilience
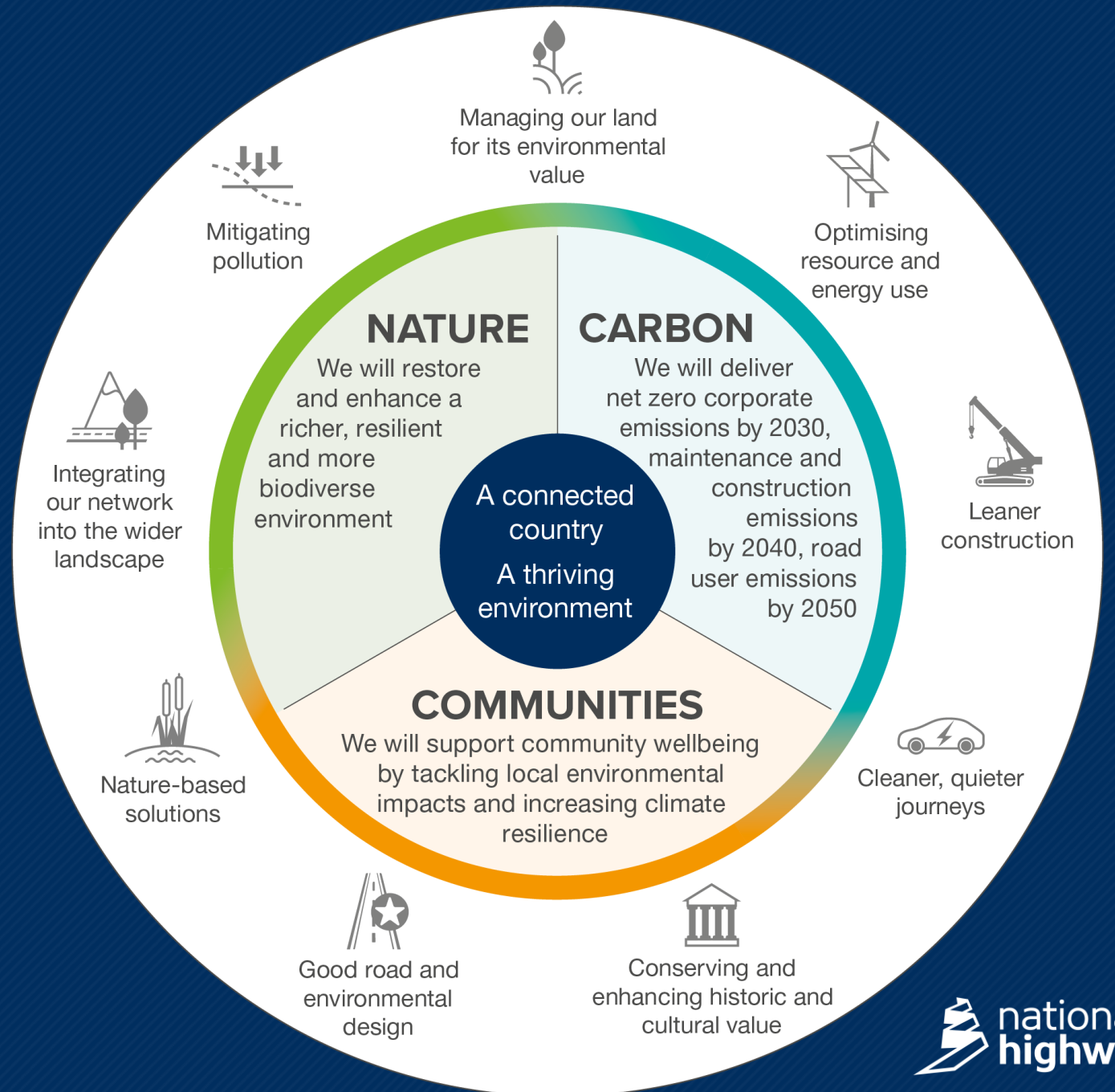
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Our nine priority areas

We've identified nine key areas where we can focus our efforts to maximise benefits across the three strategic outcomes of nature, carbon and communities

Each priority area can holistically contribute to one or more of the strategic outcomes

The priority areas set out the actions we are taking to deliver our strategy for environmental sustainability

Managing our land for its environmental value

Mitigating pollution

Optimising resource and energy use

Integrating our network into the wider landscape

Leaner construction

NATURE
We will restore and enhance a richer, resilient and more biodiverse environment

CARBON
We will deliver net zero corporate emissions by 2030, maintenance and construction emissions by 2040, road user emissions by 2050

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Nature-based solutions

Cleaner, quieter journeys

COMMUNITIES
We will support community wellbeing by tackling local environmental impacts and increasing climate resilience

Good road and environmental design

Conserving and enhancing historic and cultural value

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Where are we now?

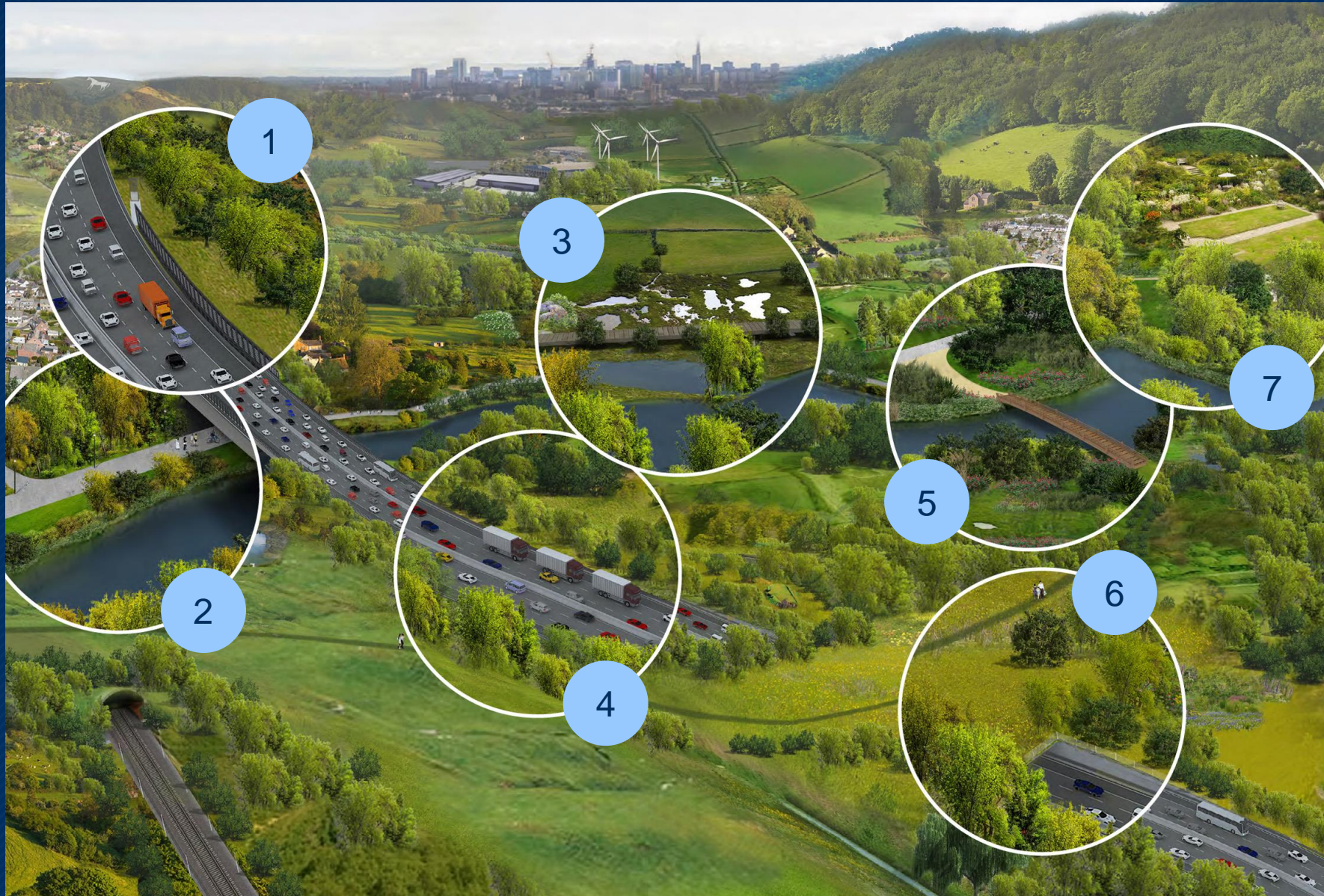

In some parts of our 4,500 mile network:

- Severance issues
- Fragmented habitats
- Altered waterways

Over four million road users per day:

- Contributing to carbon emissions
- Generating noise, air and water pollution

Some key actions have been taken to address these

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Where do we want to be?

Changes we could see across our network by 2050:

1. Improving health and wellbeing.

2. Promoting active travel.

3. Using natural flood management.

4. Good road design.

5. Promoting sustainable resource use.

6. Increasing connectivity.

7. Enhancing cultural heritage.

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What this means for nature

Our ambition:

"We will protect, restore and enhance a richer, resilient and more biodiverse environment".

Managing trees and vegetation to support **climate resilient landscapes** and vibrant, **species-rich** habitats.

Understanding the environmental value of our land and **prioritising habitats.**

Managing our estate as **an environmental asset** and building it into mainstream project and management decision-making.

Better integrating our network into the wider natural and historic landscape.

Promoting a clean, healthy and tranquil natural environment by **reducing pollution** across our estate.

Employing **nature-based solutions** to enhance the habitats and wildlife of our land as part of the wider ecosystem.

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What this means for carbon

Our ambition:

"We will deliver net zero corporate emissions by 2030, maintenance and construction emissions by 2040 and road user emissions by 2050".

Taking a **holistic approach**, delivering multiple benefits, avoiding conflict between competing demands to maximise carbon benefits, support communities, and enhance nature.

Investing in **renewable energy** to reduce our own emissions.

Working with partners to accelerate **vehicle decarbonisation.**

Promoting **leaner construction** to minimise our carbon footprint and the impact of road-building and maintenance.

Optimising resource use and taking a **whole life cycle approach** to design.

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What this means for communities

Our ambition:

"We will support community wellbeing by tackling local environmental impacts and increasing climate resilience".

Minimising particulate air, water and noise **pollution.**

Applying **good road and environmental design.**

Employing nature-based solutions to **improve climate resilience** and protect quality of life and wellbeing.

Being a **responsible custodian** of heritage features on and close to the network.

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Partnering with our supply chain

We need our supply chain's support

Changing the way we work

Growing environmental capabilities

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A30 Keyn Glas

The challenge

The A30 forms a spine through the Cornish peninsula, resulting in habitat and landscape severance. We identified an opportunity to go above and beyond standard environmental mitigations and create a programme of initiatives to deliver improved quality and connectivity of landscape and habitats, together with local and national partners.

What we did

- Worked with a large group of partners and stakeholders to support delivery of 'Keyn Glas' projects.

- Historic field patterns and traditional Cornish hedgerows were restored. We planted trees and woodland, created species rich grasslands and meadows, and restored ponds and wetlands.

- Pilot projects have been delivered using nature-based solutions for flooding and water quality problems.

- Saints Trails cycle network in development, 13km of dedicated on and off-road trails for cyclists, pedestrians, and horse riders.

Benefits

- ✓ 32 habitat areas connected

- ✓ 13,000 trees planted, four pond habitats created or improved, along with five traditional orchards.

- ✓ Up to 2020, Green Ribs delivered 97% biodiversity net gain.

- ✓ Tree planting will result in 10 tonnes of CO_2 being absorbed annually and improved air quality.

- ✓ Natural flood management measures have improved soil and water quality.

Farmland south of the A30 (Cornwall)

Nature   **Carbon**   **Communities**

Conserving and enhancing historic and cultural value

Integrating our network into the wider landscape

Nature-based solutions

Mitigating pollution

Managing our land for its environmental value

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Our implementation roadmap

2023
Establish soft estate as an asset class

Make investment decisions in accordance with PAS 2080

2024
Develop environmental decision tools

Nature-based solutions report

Map network-wide flood risks

Hold air quality conference

Create environmental sustainability opportunities register

Develop plan for reduced road infrastructure

Establish principles of environmentally responsible sourcing

2025-30
Establish characteristics of strategic road network corridors

Involve communities in environmental design

Collate and maintain environmental condition data

Deliver at least 10% biodiversity net gain on NSIPs

Deliver programme of nature-based solutions

Improve network resilience to flooding

Enhance landscape scale connectivity

Pilot programme of urban improvements

Enhance cultural heritage on and adjacent to network

Publish nitrogen deposition guidance

Implement noise mitigation programme

Report on persistent pollution

Deliver water outfalls mitigation

Trial resource exchange mechanism

Embed circularity

Research and action on tyre and brake pollution

Implement improvements to areas of high landscape and recreational value

Act on findings to reduce pollution

Net zero for our own operations by 2030

2030 and beyond
Deliver demonstrator project with multiple benefits

Maintain SSSI land to favourable status or better

Net zero for maintenance and construction by 2040

Net zero carbon travel on our roads by 2050

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