

Reducing construction emissions

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Our road network



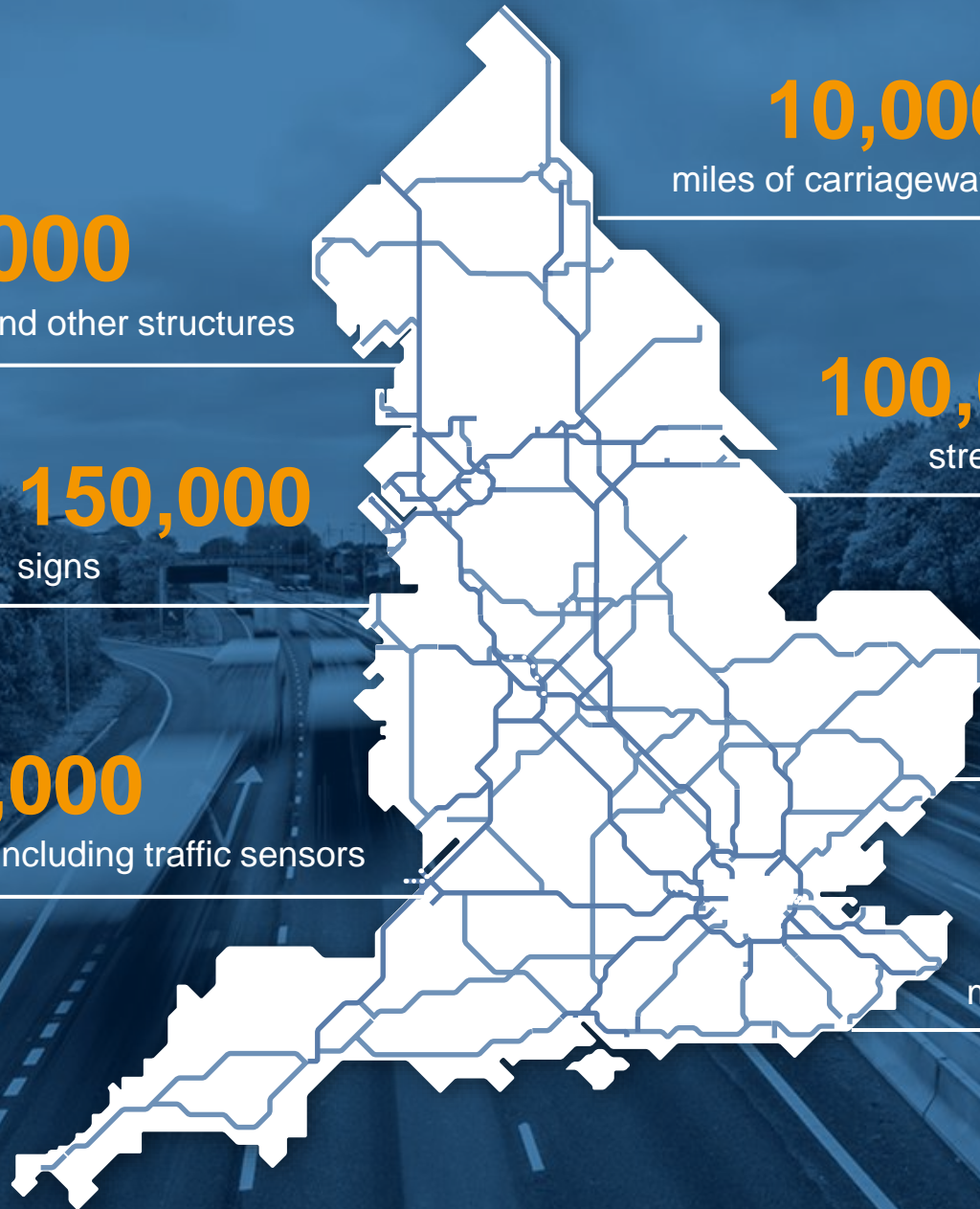
20,000
bridges and other structures



150,000
signs



100,000
sensors, including traffic sensors



10,000
miles of carriageways



100,000
street lights



3,500
electronic messaging signs



4,300
miles of motorway and major A-road



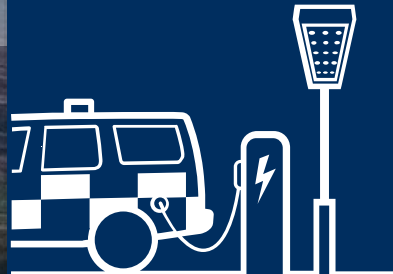
Environment

We will embed environmental considerations into all parts of our schemes, from designs to delivery.

Support government's ambition for net zero carbon by 2050



Reduce our own carbon emissions and encourage others to do the same



Tackle air quality



Mitigate noise for those living near our roads



Support the government in delivering their environmental strategies



National Highways commitments on NRMM

At the moment, work to reduce emissions from construction and machinery on our network is being driven by the Net Zero Highways Plan.

The key commitment is that:

“All construction plant and compounds zero emissions by 2030”

A range of approaches and advice are being developed, including behavioural measures and technology/fuel change.

Fuel changes to HVO and Hydrogen significantly reduce carbon emissions, going electric achieves zero carbon emissions (on site)



Electric plant used during archaeological work, A63, Yorkshire

Air Quality, National Highways and NRMM

- Until now NH air quality activity has focussed on reducing significant exceedances of NO₂ limits
- This has been largely because emissions from roads in normal running has been the dominant issue for the SRN.
- Outside of London, it has also long been the case that reducing emissions from machinery has not been included in consents.

Potential changes coming up:

- In 2022 National Highways was given new duties to cooperate with Local Air Quality Action Plans.
- In turn guidance on these plans is bringing a sharper focus on all sources of emissions – including from construction and roadworks machinery. We may be asked to bring our works sites up to local standards if they are imposed.
- On consents, we are also seeing the precedent set by the HS2 and Silvertown projects spreading more widely,
- for instance the Lower Thames Crossing is proposing to meet London standards for NRMM as part of their code of construction practice.



Issues to consider

- Picking the right solution
 - Near carbon zero emissions (on site) can be achieved with alternative fuels and hydrogen, however these remain non-zero for both air pollution and carbon.
 - Electricity supply on site is also potentially problematic, especially if diesel generators are the solution.
- Air quality vs Carbon
 - Policies are not always well aligned, especially if multiple regulators/contracting organisations are involved.
- Major Projects vs routine works
 - Big projects are likely to get more attention, and more investment to support improvement, but
 - Routine maintenance works are a significant contributor to emissions.
 - Some of the problems are different – short term deployments can be harder to incentivise for local change
- Displacement
 - A limited supply of cleaner equipment means deployment could be prioritised for areas with active standards

