

Structural Steel & Gantries Carbon Net Zero Plan

Category: Structural Steel & Gantries

Carbon NetZero goals and key deliverables



Phase I: (2022 – Q1 2023)

Key goals: Full implementation of carbon reduction initiatives within the supply chain and NH identified

Key deliverables: Identification of Schemes for trials for quick win carbon reduction solutions through Design Optimisation and reuse

Phase II: (2023–2025)

Key goals: Support uptake of revised standards and design specification optimisation

Key deliverables: Embodied and whole life carbon reductions (including operational)

Phase III: (2025 and beyond)

Key goals: Securing & Realisation of carbon reduction innovations

Key deliverables: Standardised Monitoring and capture of lower carbon reduction performance

National Highways is committed to achieve decarbonisation in line with the Governments decarbonation ambitions. We are developing the Structural Steel & Gantries road map as set out within our 2030/2040/2050 plan, which will identify carbon reduction initiatives. This will be supplemented by a focus on integrated carbon thinking within the DMRB by 2025 and a renewed focus design & optimisation

Category: Structural Steel & Gantries

Carbon Reduction INITIATIVES within the Structural Steel & Gantries Roadmap

Carbon Reduction initiatives

Main Actions and next steps



Phase I:

(2022 – 2023)

- Encourage Reuse and Design optimisation
- Innovation initiatives launch with SIP and Supplier communities
- Knowledge sharing routes formulated, providing education, best practise

- Encourage uptake of lower carbon products by introducing a carbon tool structures at design stage
- Review current standards for renovation, reuse & recycling options
- Publication of updates for recycled content and improved durability for current products



Phase II:

(2023 – 2025)

- Investigate & deploy design optimisation, standardisation, and circular economy
- Promote the efficient use of materials. Including reuse and recycling.
- Reducing embodied and whole life carbon
- Case Study trial(s) of standardisation design change
- Changes to SCORBS Ratings /Standards

- Publish case studies including carbon reduction opportunities such as optimised cold recycling .
- Whole life carbon considered and demonstrated within Structural Steel & Gantries design and delivery.
- Continue trials & industry engagement for opportunities in carbon reduction.



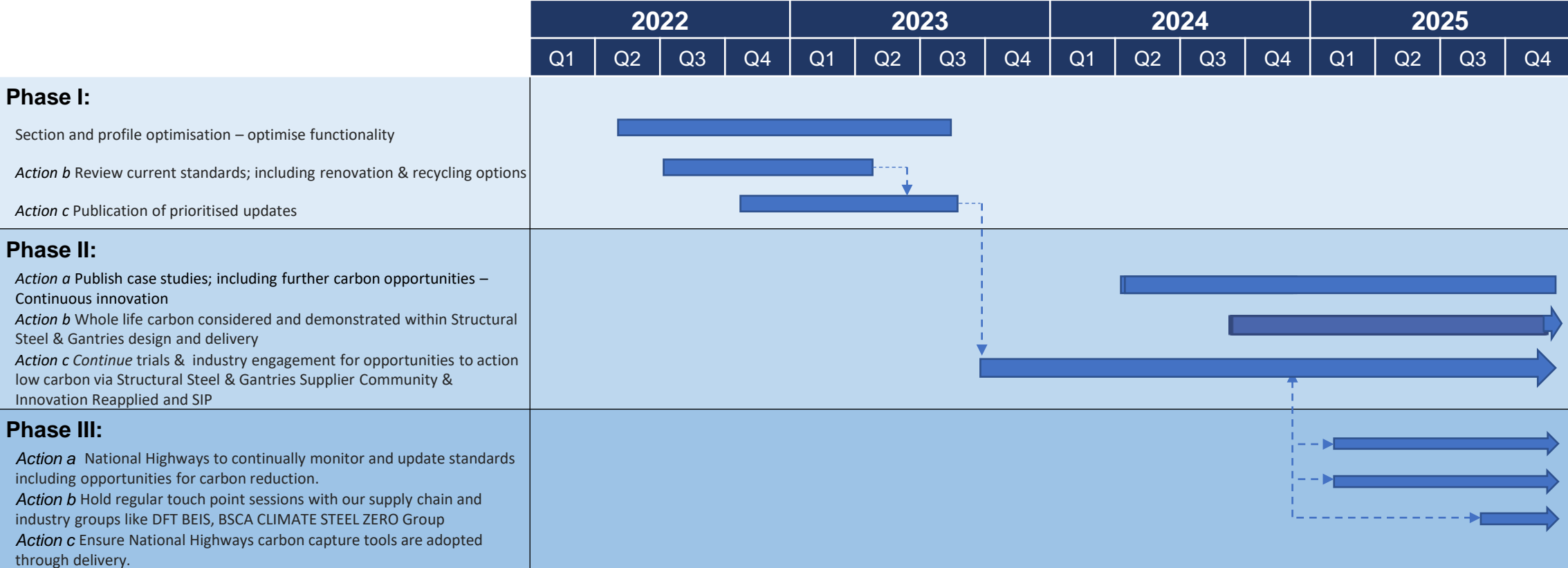
Phase III:

2025 and beyond

- Update National Highways standards based on available information from phase II.
- Continue industry engagement and collaboration with Industry and Public Sector working groups including BEIS & DFT to encourage industry to fast track their emission reduction processes
- Actively capture and monitor carbon reduction vs our Net Zero Plan targets. Ensuring delivery consistently utilises Carbon Capture reporting tool

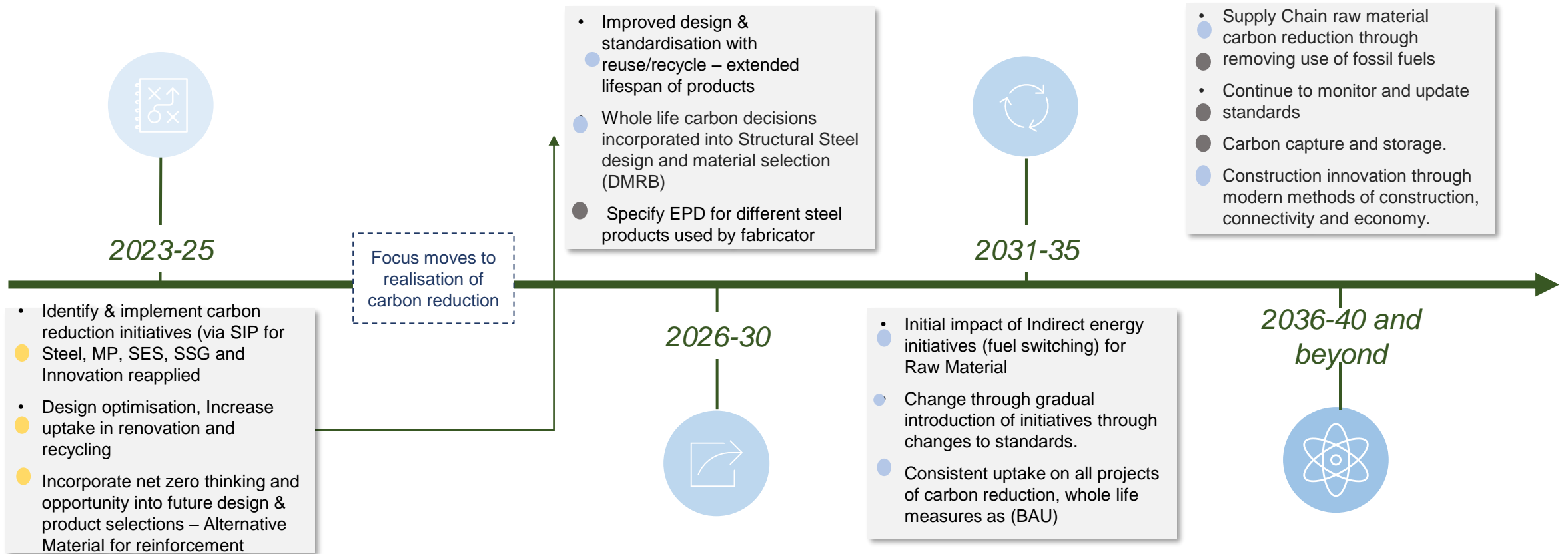
- National Highways to continually monitor and update standards including opportunities for carbon reduction.
- Hold regular updated working sessions with our Supply chain and industry groups like BCSA and Climate Group Steel Zero, and continue work with other public Sector Bodies such as HS2 and Network rail through DFT and BEIS

Category: Structural Steel & Gantries



Category: Structural Steel & Gantries

Carbon NetZero Initiatives plan



It is key for National Highways to work closely with the supply chain and wider industry bodies to be able to achieve net zero by 2040. Trialling net zero barrier maintenance and construction schemes on the SRN between 2023-2025. New technologies, fuel changes, a whole life carbon approach to design, delivery and materials will be key to meeting our ambitions.

Legend:

- Higher Impact
- Lower Impact
- Unknown Impact