

# Concrete & Cement Carbon Net Zero Plan

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## Carbon NetZero goals and key deliverables



### Phase I: (2022 –2023)

**Key goals:** Updates to standards of the low risk/quick win concretes to enable schemes to make use of already proven low carbon materials

Test and trial schedule development along with innovation programme launch

**Key deliverables:** Early start on reducing carbon with quick wins introduced. Test and trial schedule sets out a clear path for trialling and



### Phase II: (2023 –2026)

**Key goals:** Further updates to standards and the DMRB for the medium to long term higher risk concretes

Trials underway, results being reported, case studies and wider adoption coming through

**Key deliverables:** Unlocking further lower carbon options and demonstrating trial materials successes



### Phase III: (2026 and beyond)

**Key goals:** Opportunities in practice reducing carbon

**Key deliverables:** Continuous improvement, further opportunity expansion, better understanding and sharing of carbon reduction possibilities

National Highways is committed to achieve decarbonisation in line with the Governments decarbonation ambitions. We are developing the Road Restraint Systems 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 on quality.

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*Carbon Reduction INITIATIVES within the concrete & cement roadmap.*

## Carbon Reduction initiatives

## Main Actions and next steps

### Phase I:

*(2022 – 2023)*

- Updates to standards of the low risk/quick win concretes to enable schemes to make use of already proven low carbon materials
- Test and trial of new materials schedule development
- Innovation programme launch
- Education , best practice and knowledge sharing routes formulated

- Release memo's to support early quick win options schemes can utilise
- Develop test schedule and with stakeholder groups
- Work with SES, Supply Chain, other bodies to launch innovation programme
- Establish learning material, set up knowledge forums

### Phase II:

*(2023 – 2026)*

- Further updates to standards and the DMRB for the medium to long term higher risk concretes
- Trials underway, results being reported, case studies and wider adoption coming through
- Innovation programme embedded and opportunities process feeding into trials, new products and practices being adopted
- Established knowledge sharing groups delivering further opportunities, and learning

- Step change updates to the DMRB and standards
- Establish standardised testing and results presentation
- Expansion of innovation groups, moved to trial of opportunities
- Forums and stakeholder groups set up and feeding in opportunities, results, learning

### Phase III:

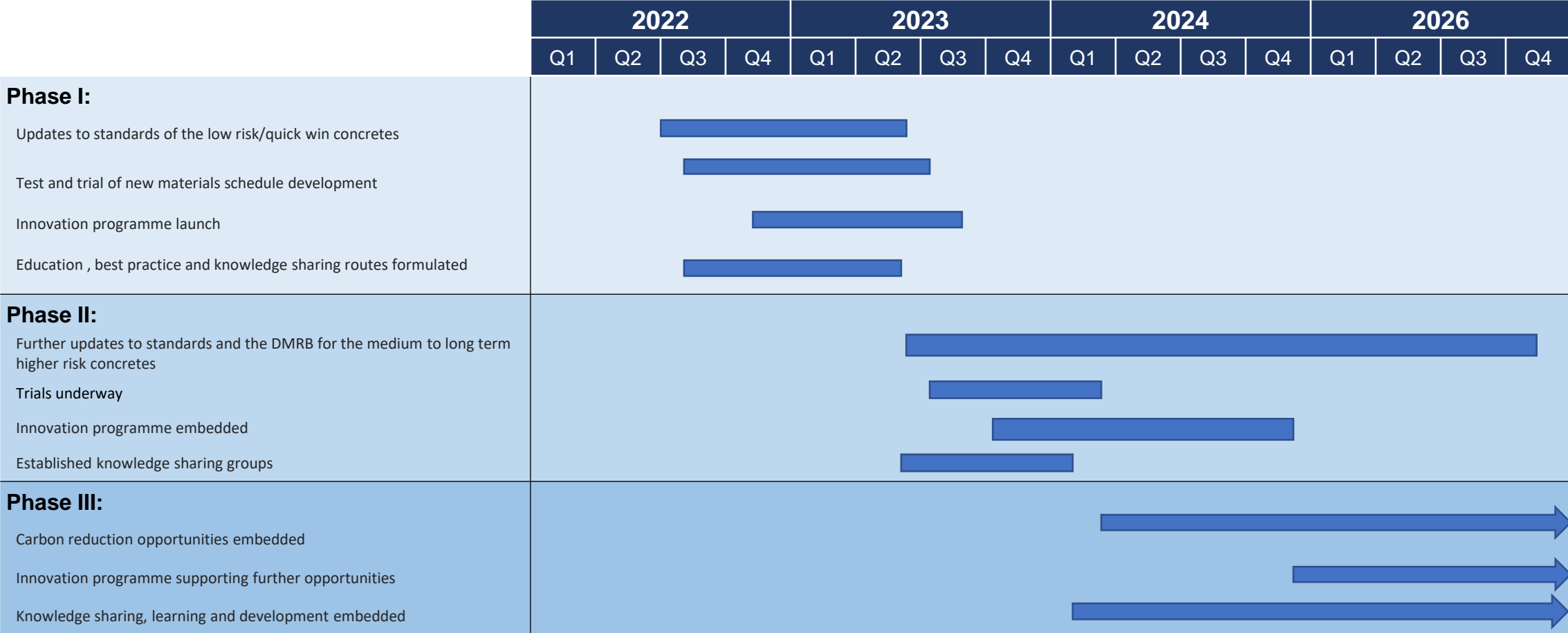
*2026 and beyond*

- Carbon reduction opportunities embedded and showing positive impacts on carbon reduction
- Innovation programme supporting further opportunities and wider engagement
- Knowledge sharing, learning and development embedded and further opportunities being shared by all in the communities

- Continued monitoring and growth of carbon reduction performance. Embedding lessons learnt through innovation groups
- Knowledge sharing BAU and the supply chain and others benefiting from this

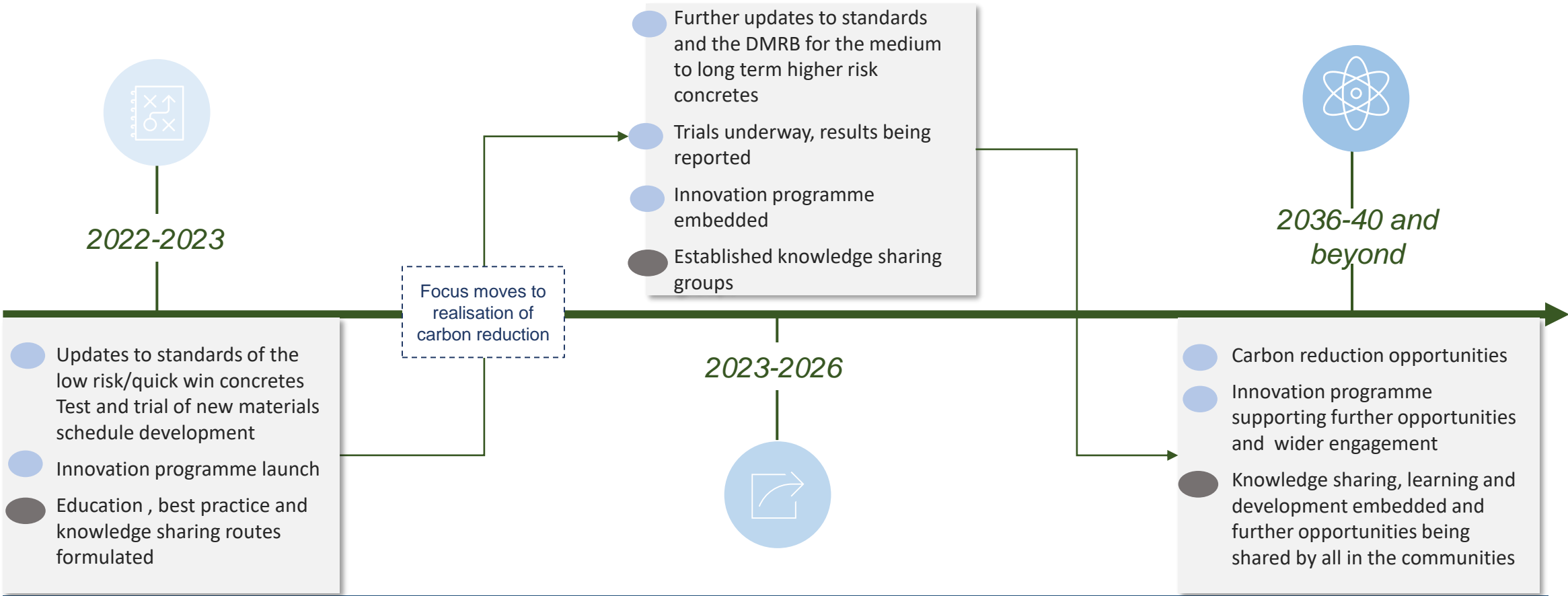
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## Detailed timing plan



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## 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

