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ADEPT
Association of Directors of Environment, Economy, Planning & Transport

ADEPT LIVELABS2
Decarbonising Local Roads

A382 Carbon Negative Highways Project

Beth Lewis
Principal Engineer
Devon County Council

Presentation Outline

- The A382
- Live Labs
- Carbon negative project
- Changes to business as usual
- Lessons learnt

The A382 Project

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https://www.devor

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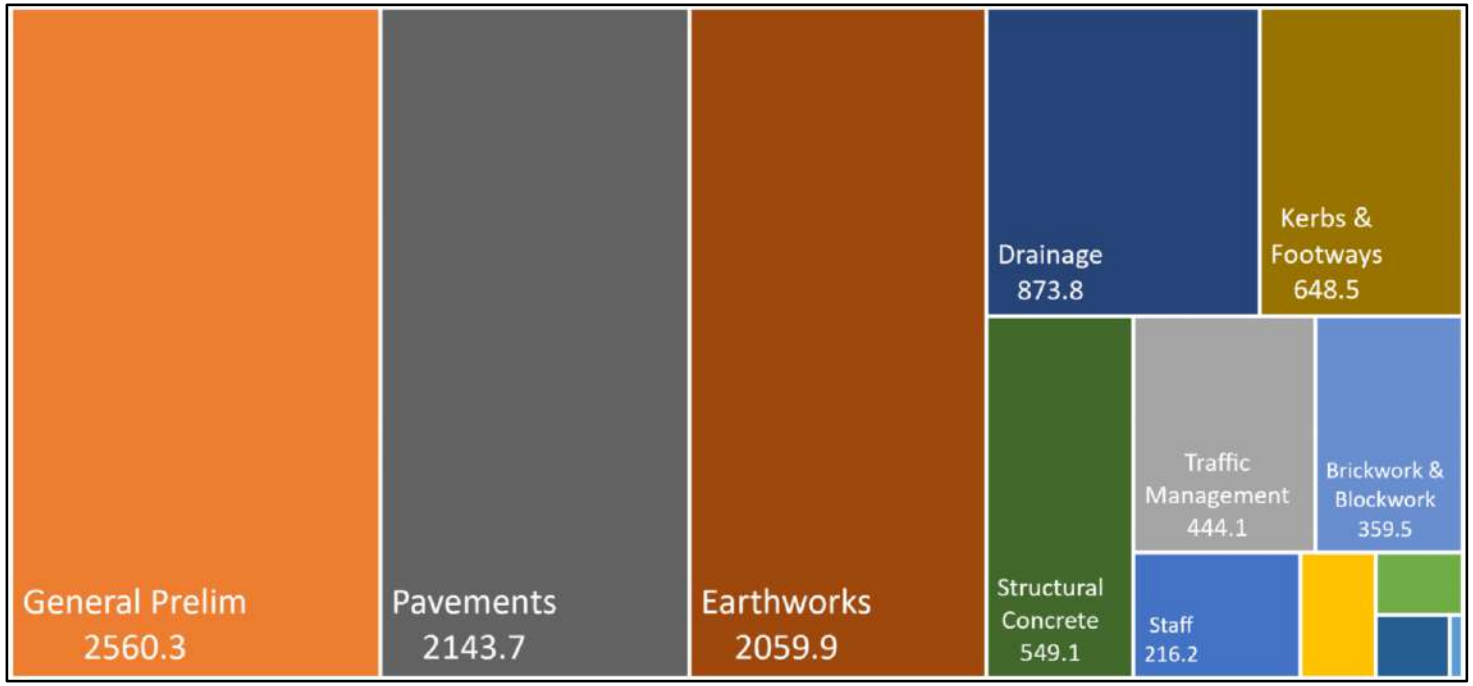
Live Labs 2: Decarbonising Local Roads

- Live Labs 2 is a three-year, £30million, UK-wide programme funded by the DfT
- Concentrates on how to decarbonise local highways infrastructure and assets
- Laser sharp focus on carbon reduction across the whole lifecycle of road assets and operational portfolio
- Seven projects, grouped by four interconnected themes, are being led by local authorities working alongside commercial and academic partners
- Delivery element runs until March 2026, further 5 years of monitoring and evaluation

A Carbon Negative Project

- We recognise the importance:
  - Climate Emergency declared in 2019
  - Net-zero as an Authority by 2030
  - Net-zero as a County by 2050
- Highways construction is a major source of carbon emissions
- Carbon negative = storing more carbon than we emit **across the whole project**



A Carbon Negative Project

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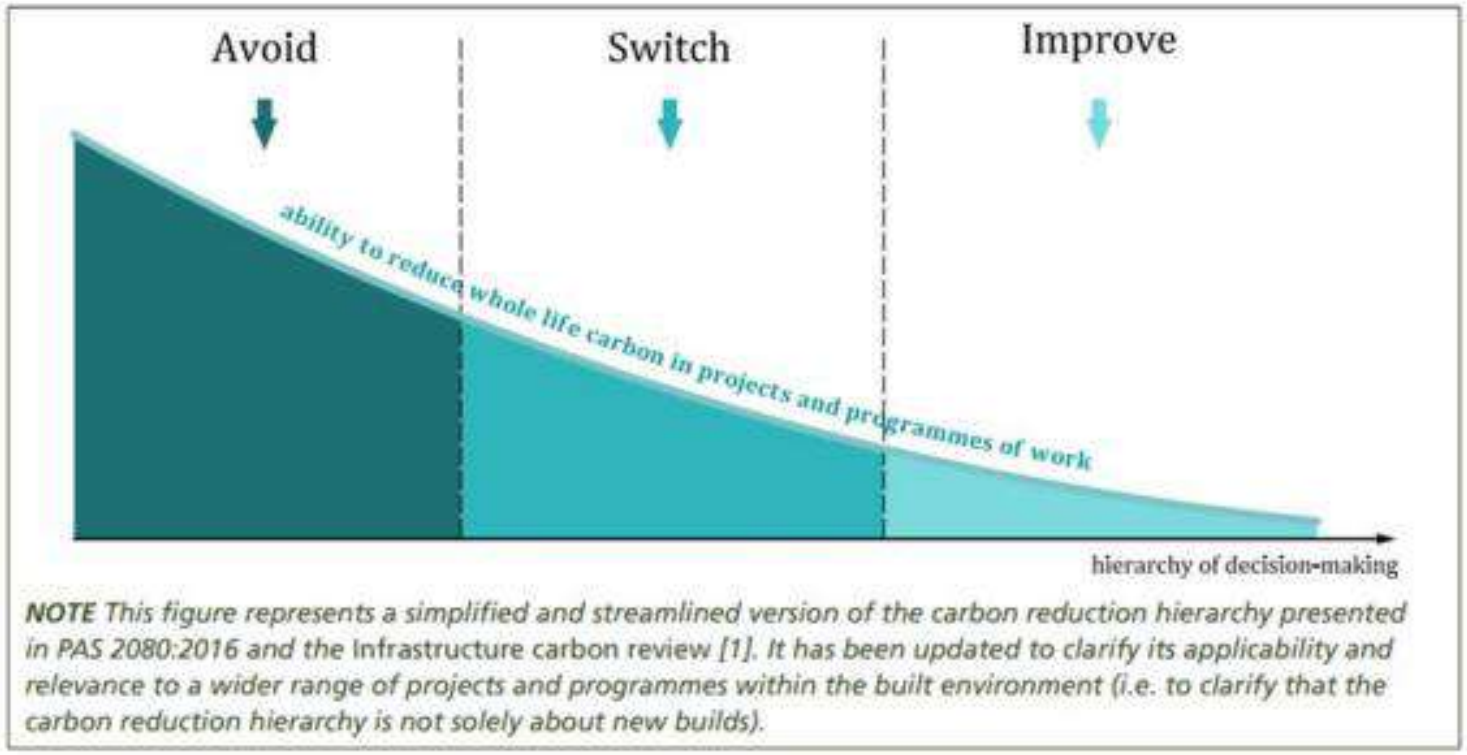
Avoid – avoid constructing a new asset or element through re-use/retrofitting/repurposing.

Switch – adopting low(er) carbon materials and methods of working.

Improve – use solutions which extend design life and promote end of life reuse/recycling.



NOTE *This figure represents a simplified and streamlined version of the carbon reduction hierarchy presented in PAS 2080:2016 and the* Infrastructure carbon review *[1]. It has been updated to clarify its applicability and relevance to a wider range of projects and programmes within the built environment (i.e. to clarify that the carbon reduction hierarchy is not solely about new builds).*

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A change in approach to BAU

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Can we reduce the materials we are using?

Can we reduce what we are building?

What opportunities does the site and surrounding environment present?

What are the constraints that can be pushed and what are absolutely set in stone?

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Vegetation Strategy

Soil Strategy

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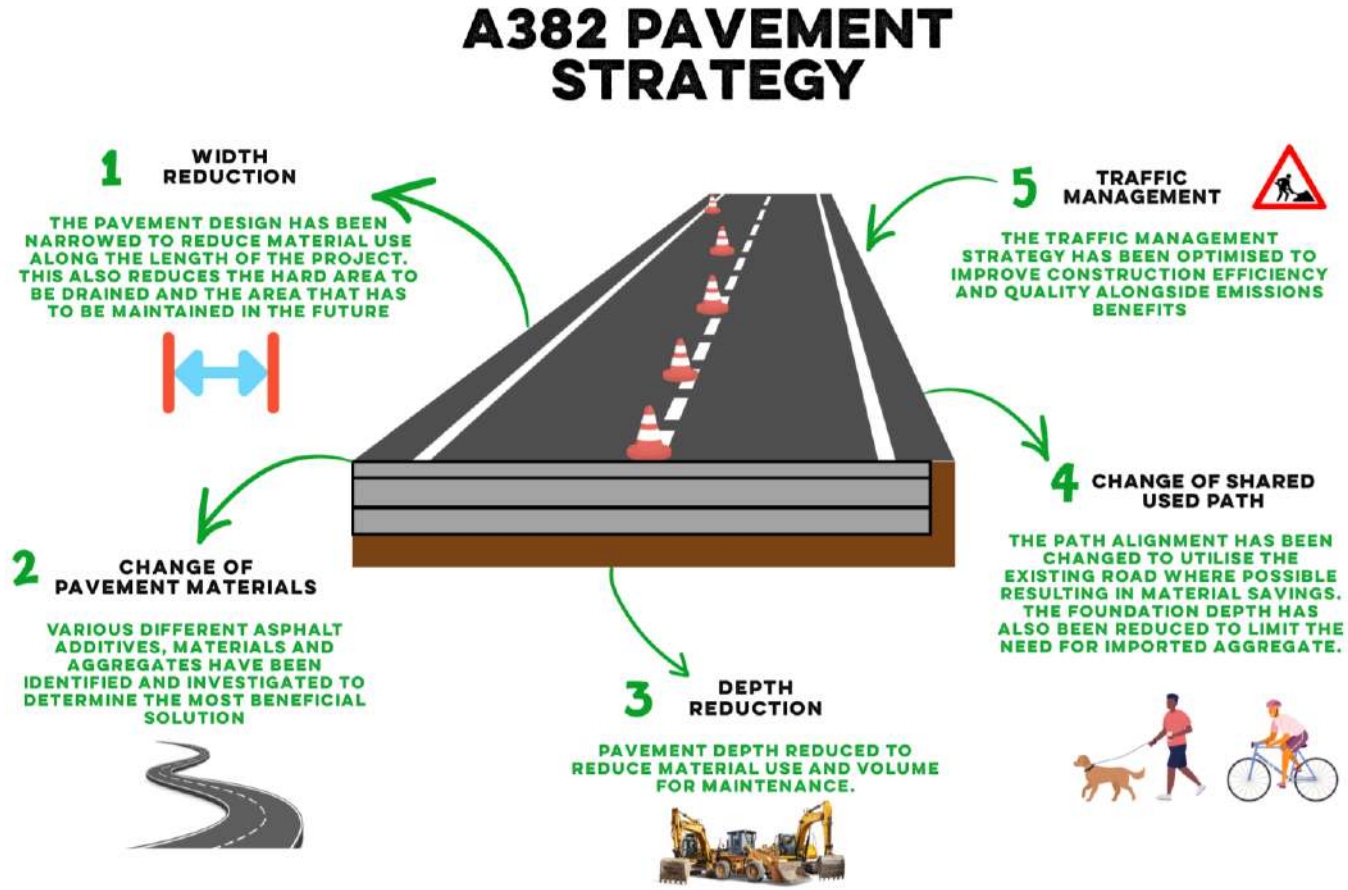
Pavement Strategy



Biochar

Lessons Learnt to date

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Have a **baseline** so you know what you are measuring (the more detail, the better i.e., breakdown to show material/plant)

Don’t underestimate co-benefits; something that may save carbon can have good knock-on effects to biodiversity or could enable carbon savings in other ways

Start somewhere; even small steps will help

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