



Carbon Considerations in Asset Management

Āpōpō Northland Branch Event – 21 March 2024

Overview

- Context
- Case study 1: Low-carbon road surfacing
- Case study 2: Road marking renewal
- Case study 3: Berm mowing



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Carbon reduction under tightened budgets

- Councils under financial pressure
- But low carbon often = low cost

Rates in Far North could rise almost 17 percent

1:56 pm on 12 March 2024

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Road damage has contributed to the proposed increase, the council says. Photo: RNZ

Whangārei ratepayers facing huge 17.2 per cent rates hike

By [Susan Botting](#)
Local Democracy Reporter

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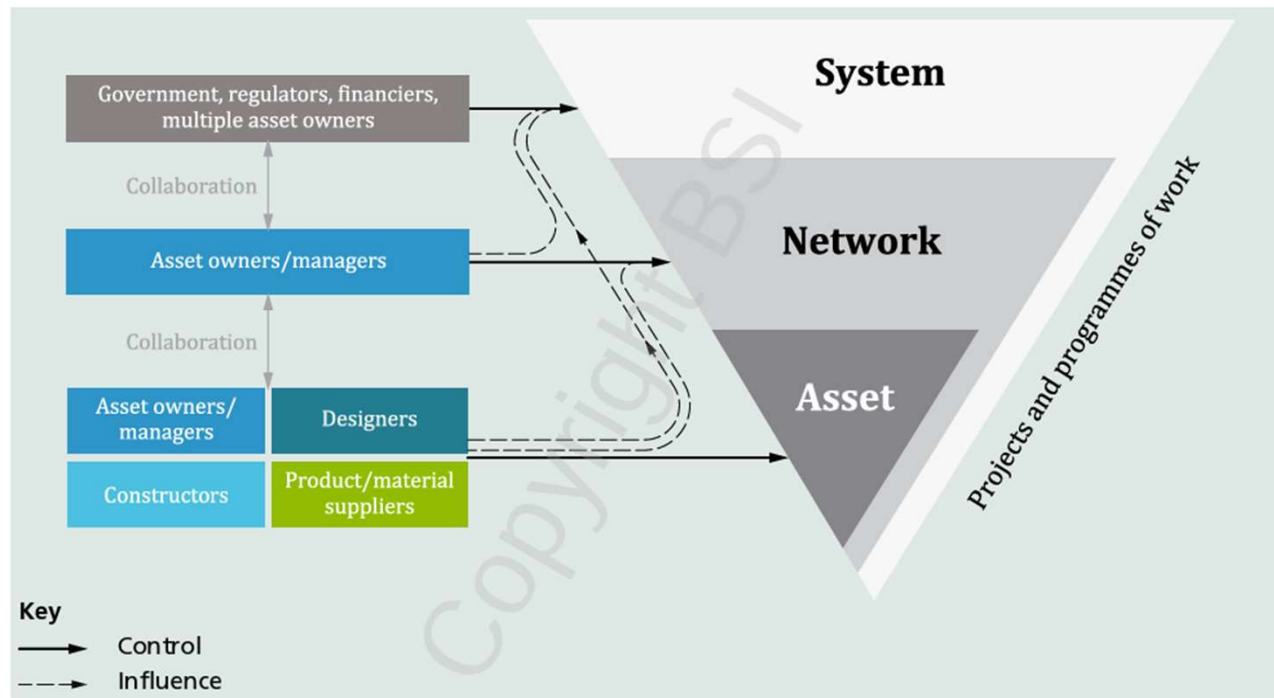
6 Mar, 2024 05:00 AM 4 mins to read



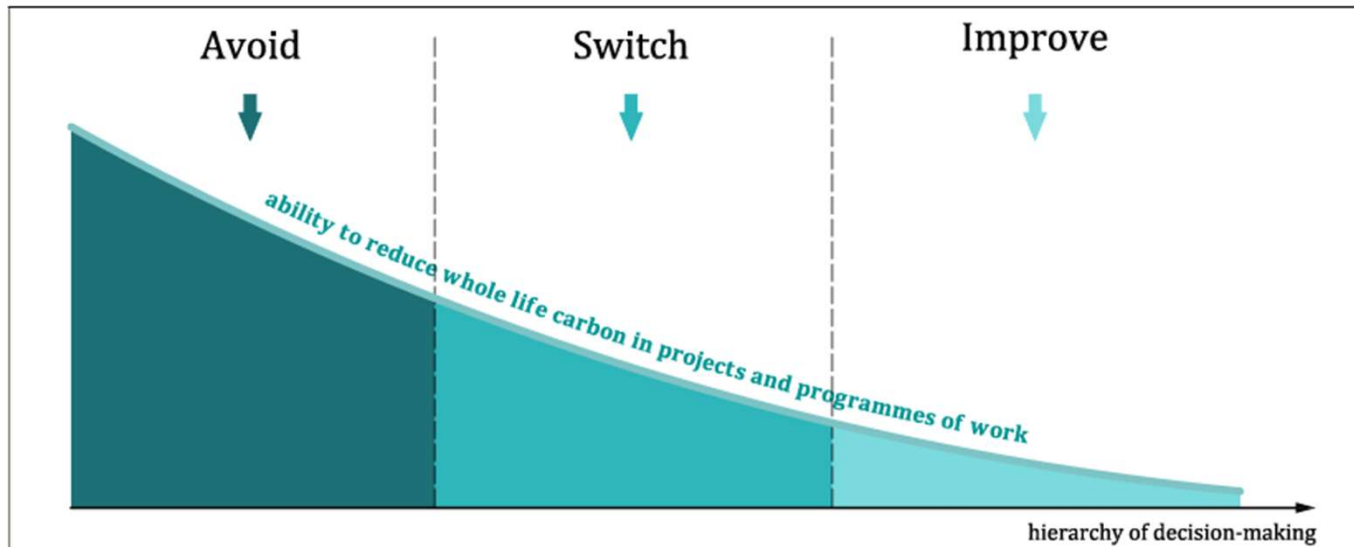
Ratepayers are facing a 17.2 per cent rates increase. Photo / Michael Cunningham



Who can make carbon decisions?



Carbon reduction strategy



- Strategic decisions – do nothing or reuse existing assets
- **May compromise level of service**
- Alternative materials and methods
- Operational efficiencies
- Quick wins here



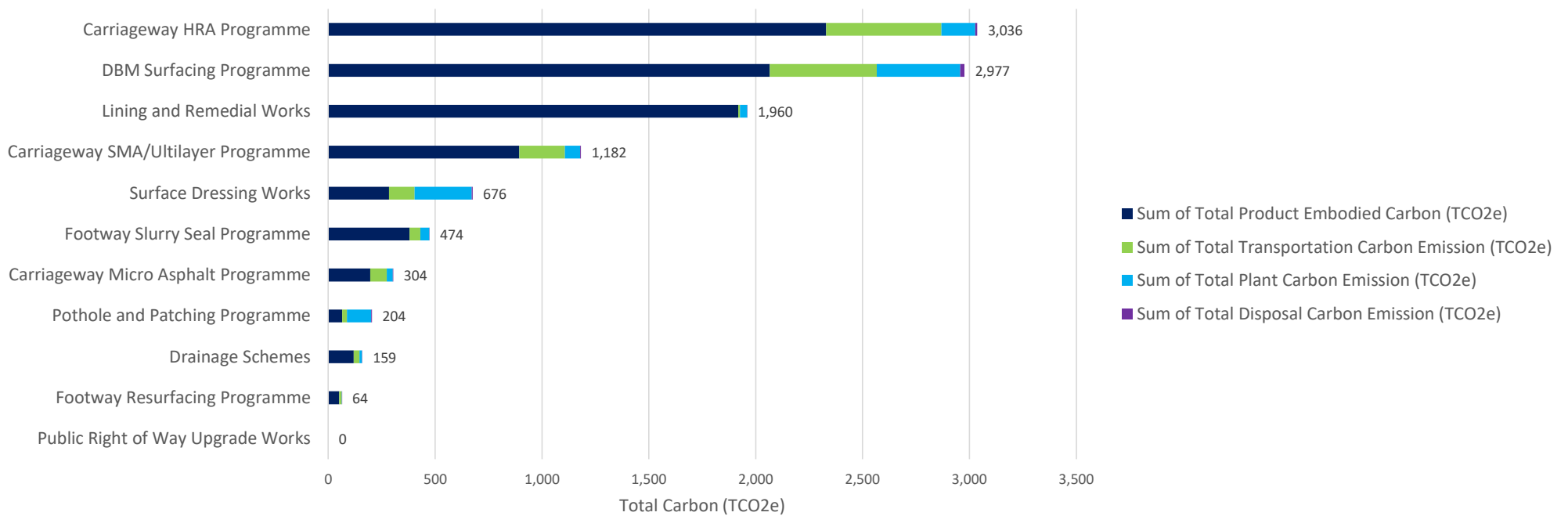
Overview

- Context
- **Case study 1: Alternative road materials**
- Case study 2: Road marking renewal
- Case study 3: Berm mowing

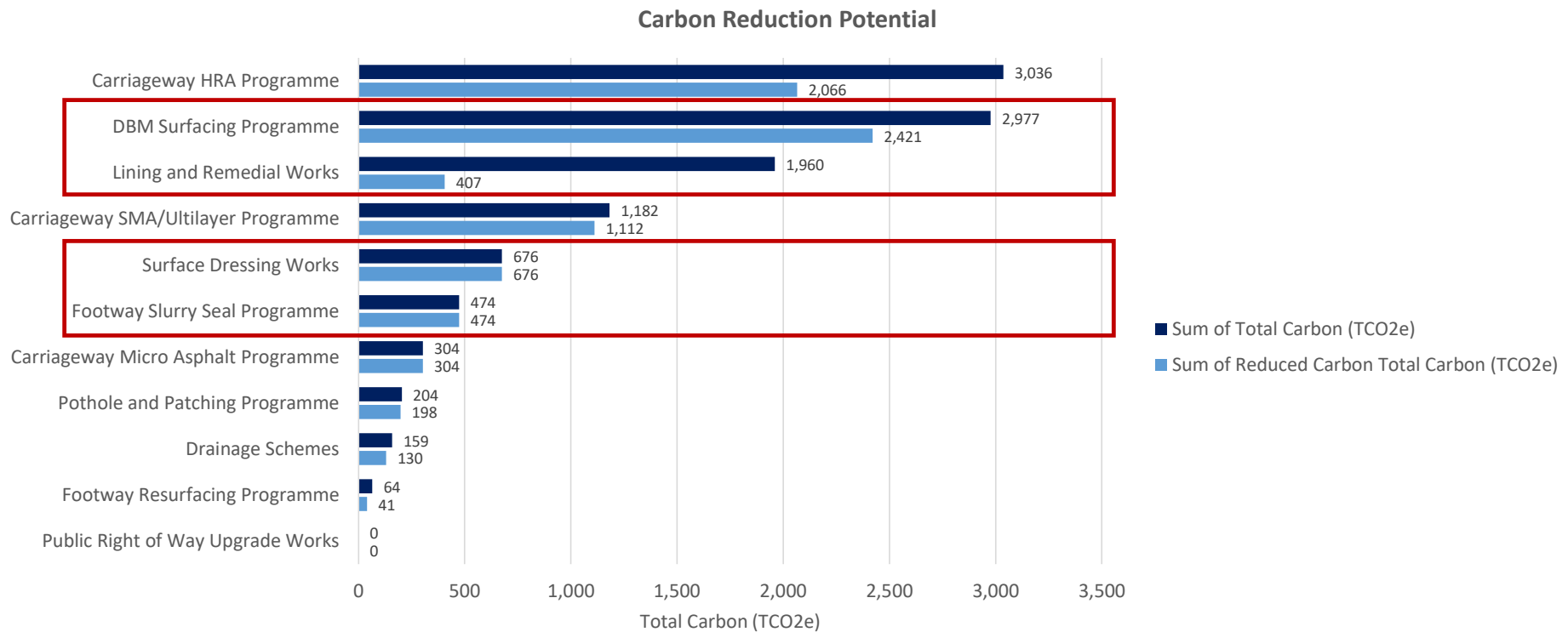


Case study: Alternative road materials

Product, Transportation, Plant, and Disposal Carbon by Scheme



Case study: Alternative road materials



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Case study: Road marking renewal, Westminster

- Council renews lines every 4 years
- Reprioritisation by level of risk

High Risk

Stop Lines + Give Way Lines

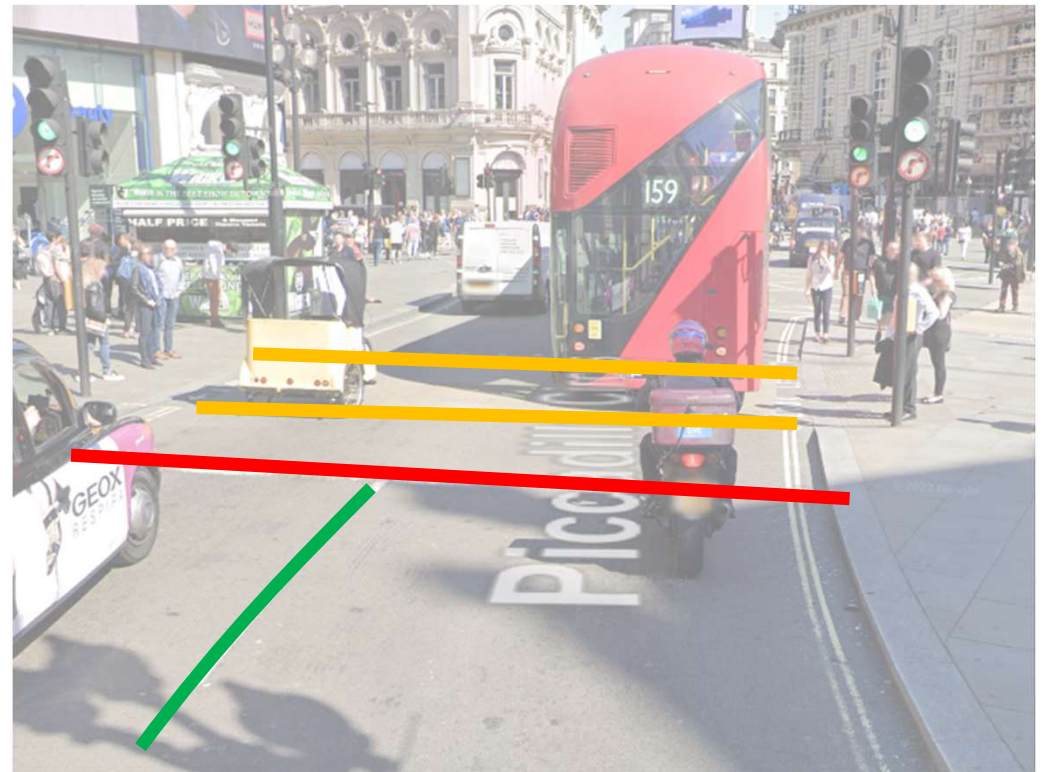
Cycle Lane Symbols

'Keep Clear' + 'Slow' + 'No Entry'

Low Risk

Dashed Centrelines + Give Way Triangles

Hatching



Case study: Road marking renewal, Westminster

New programme:

- High priority inspected every 2yrs, renewed as needed
- Low priority renewed every 8yrs

Outcomes

- 20% reduction in yearly road markings
- Carbon savings of **31 tonnes CO₂e / year**



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- **Case study 3: Berm mowing**



Case study: Berm mowing, South Gloucestershire



- Reduce mowing
- Biogas from grass clippings

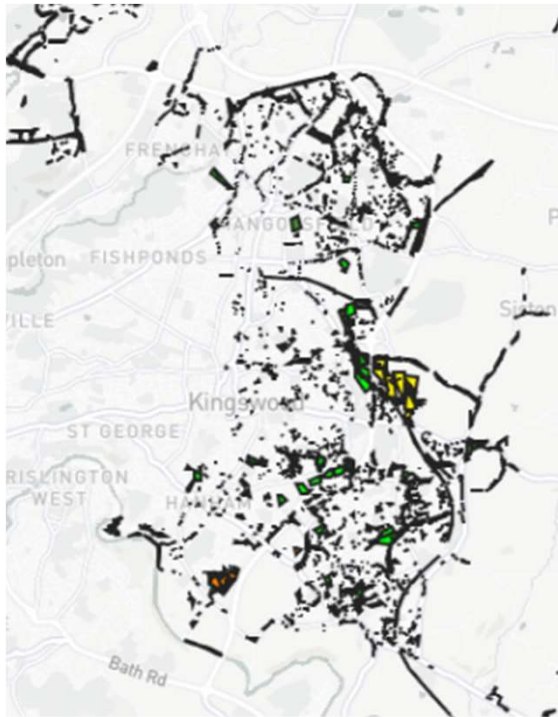
Benefits

- Carbon sequestration
- Low-carbon energy
- Lower maintenance burden

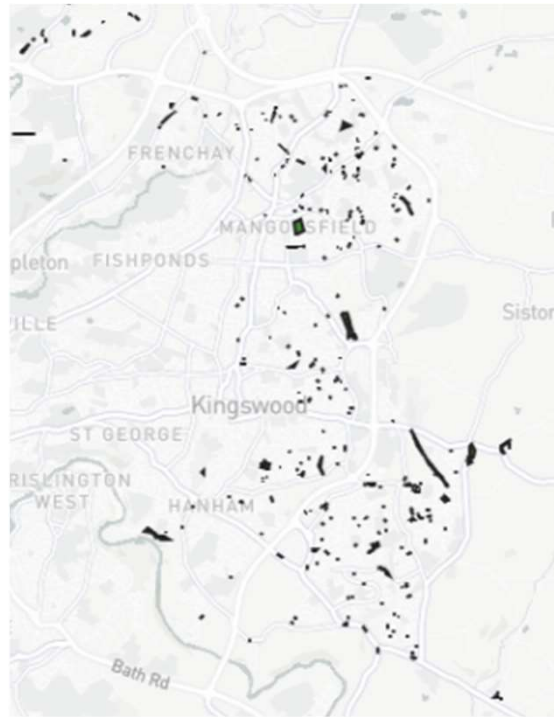


Case study: Berm mowing, South Gloucestershire

Green spaces owned by Council Roding



Green spaces suitable for trial



- Select berms for implementing trial
- Considerations:
 - Road safety
 - Services
 - Littering
 - Others?



Adapting for NZ



No mow trial in Hamilton



Biogas plant in Auckland



Summary

Reducing carbon:

- Often corresponds with good asset management practice
- Can be done without massive investment

