

Net Zero Public Sector Buildings standard

Place

Inclusive NZ Economy Outcomes

Carbon

Construction Embodied

Operational Energy

Whole Life

Environment

Environment

The Scottish Government's Standard for defining, delivering and verifying net zero greenhouse gas outcomes of public sector new build and major refurbishment projects

The Scottish Government's new voluntary Standard

- Developed collaboratively by
 - The Scottish Government
 - Scottish Futures Trust
 - Zero Waste Scotland
 - Health Facilities Scotland
 - Construction & public sector in Scotland

The Standard: Overview

A voluntary Standard for ambitious public bodies' new build, non-domestic projects

Applies the Scottish Government's Net Zero Policy to:

→ Construction Projects:

- Newbuild
- Major Refurbishment

→ Shaped by National & Local NZ commitments:

- Local Authority Areas
- Sectors
- Organisational Policies

→ Set targets in client brief, verify outcomes *in use*:

- Exemplar energy performance
- Strategy to reach Net Zero deadline
- Healthy indoor & outdoor environments



The Standard: Overview

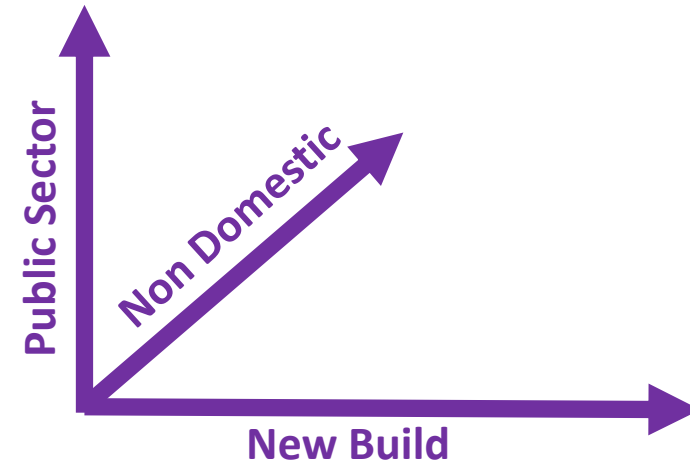
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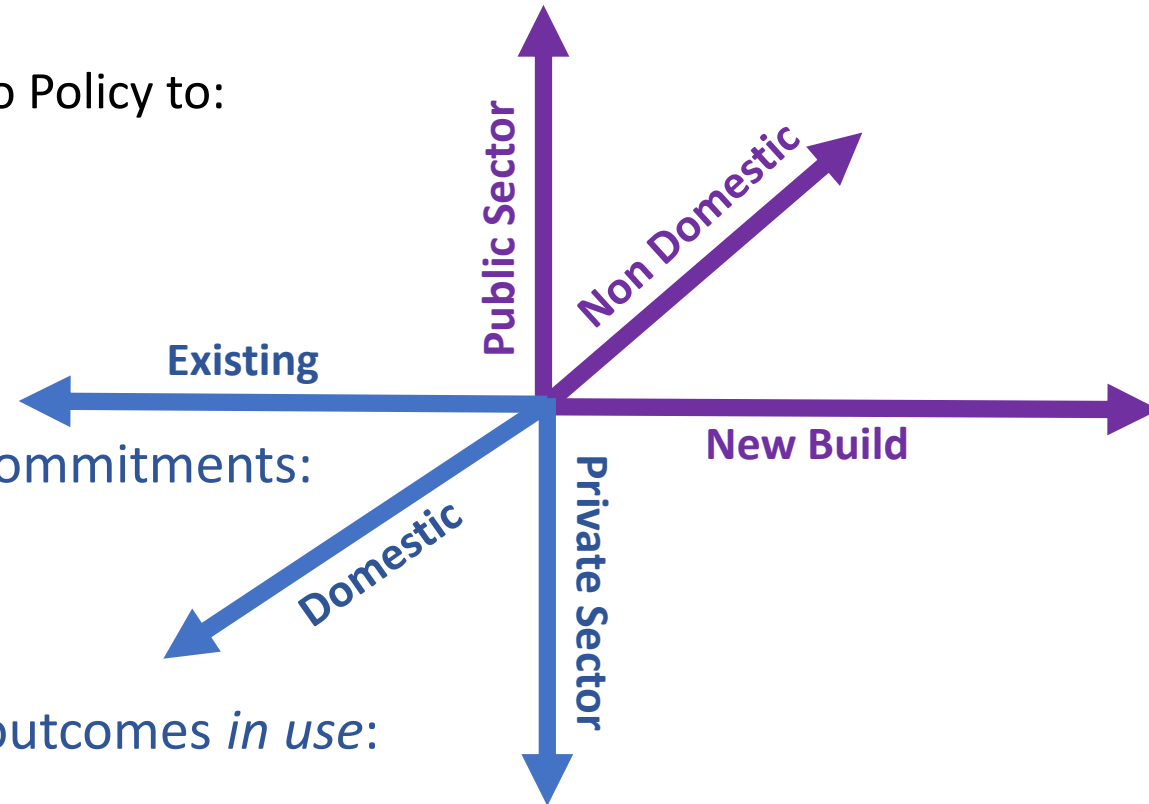
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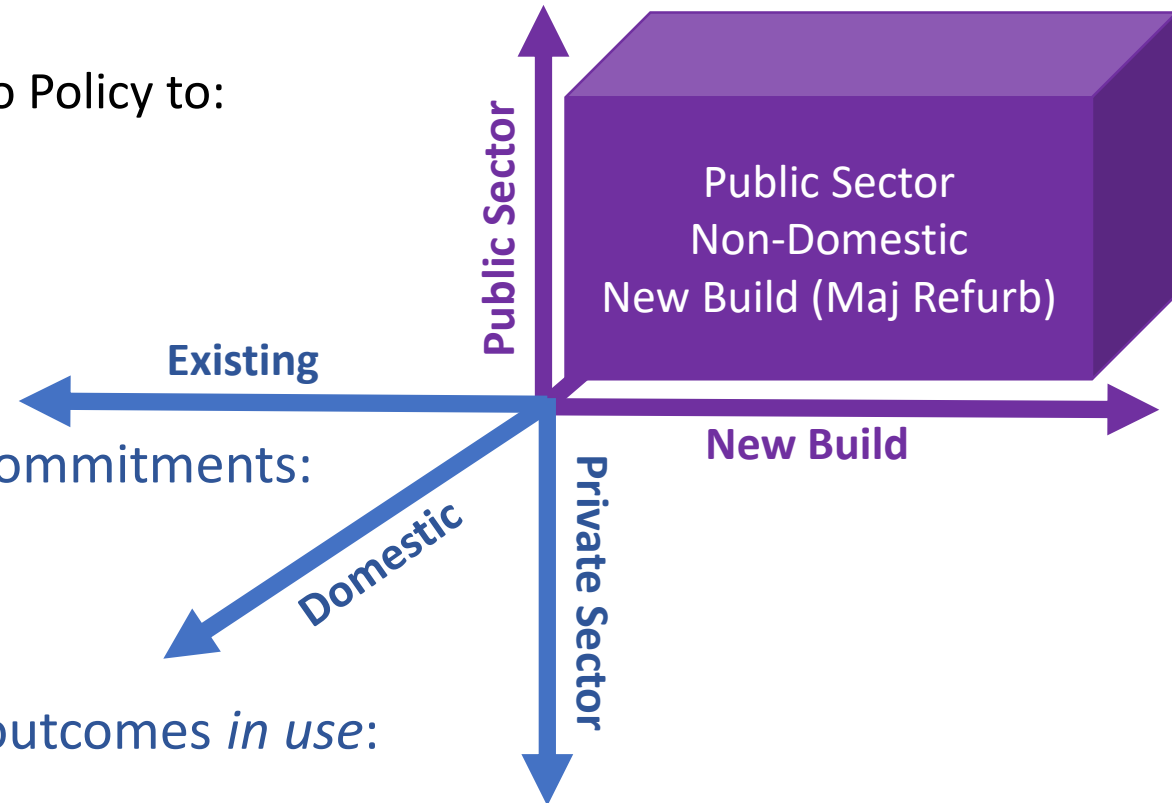
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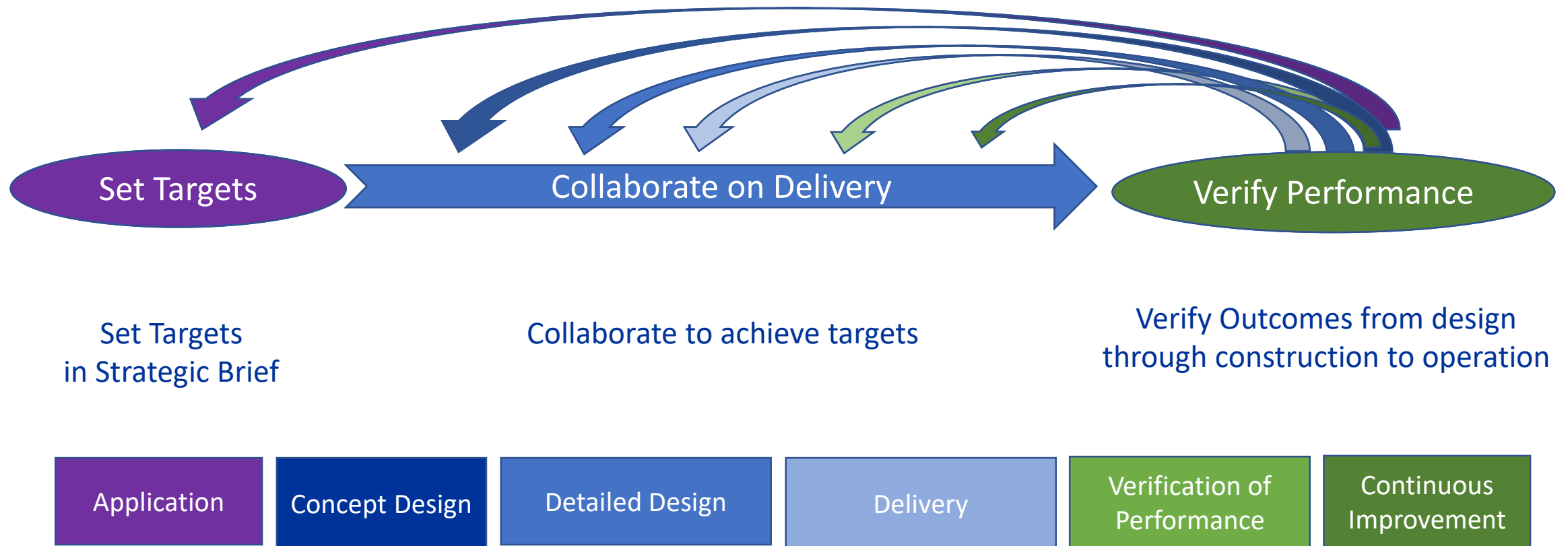
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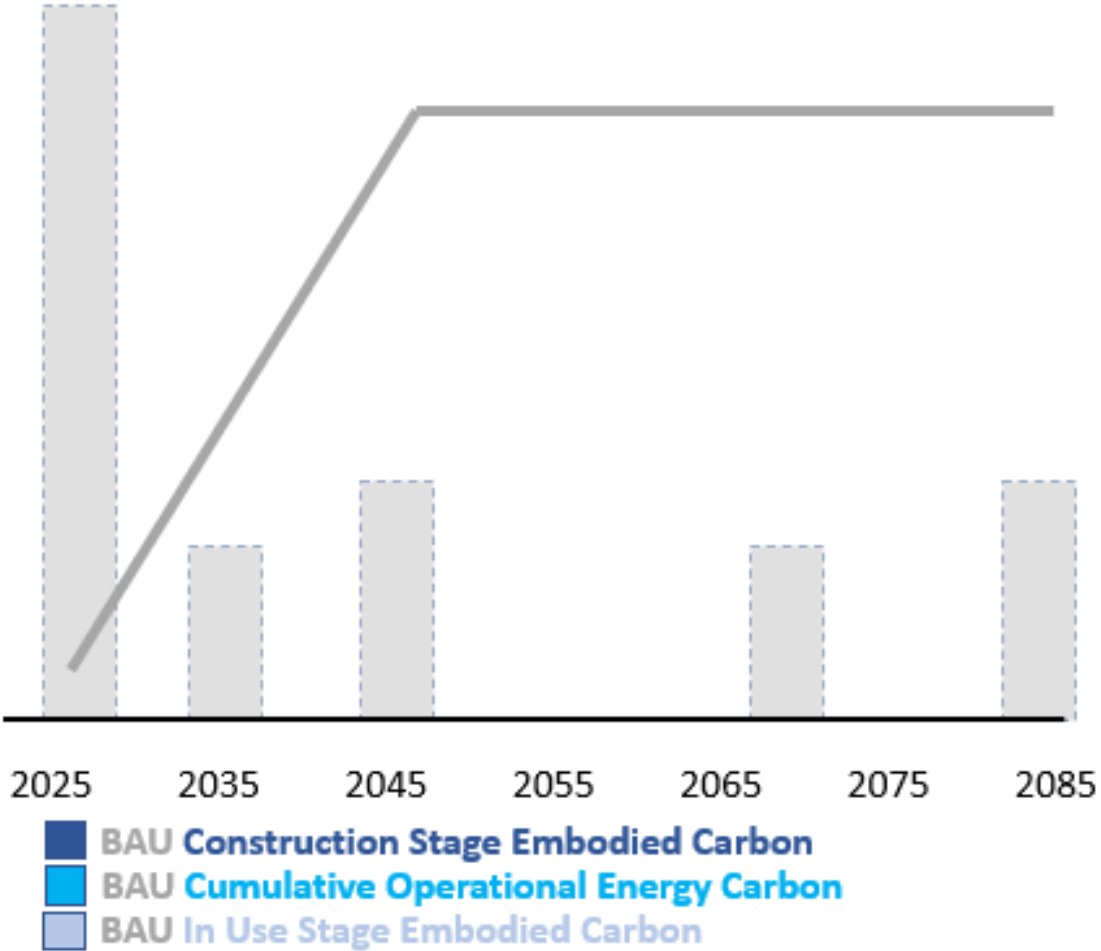
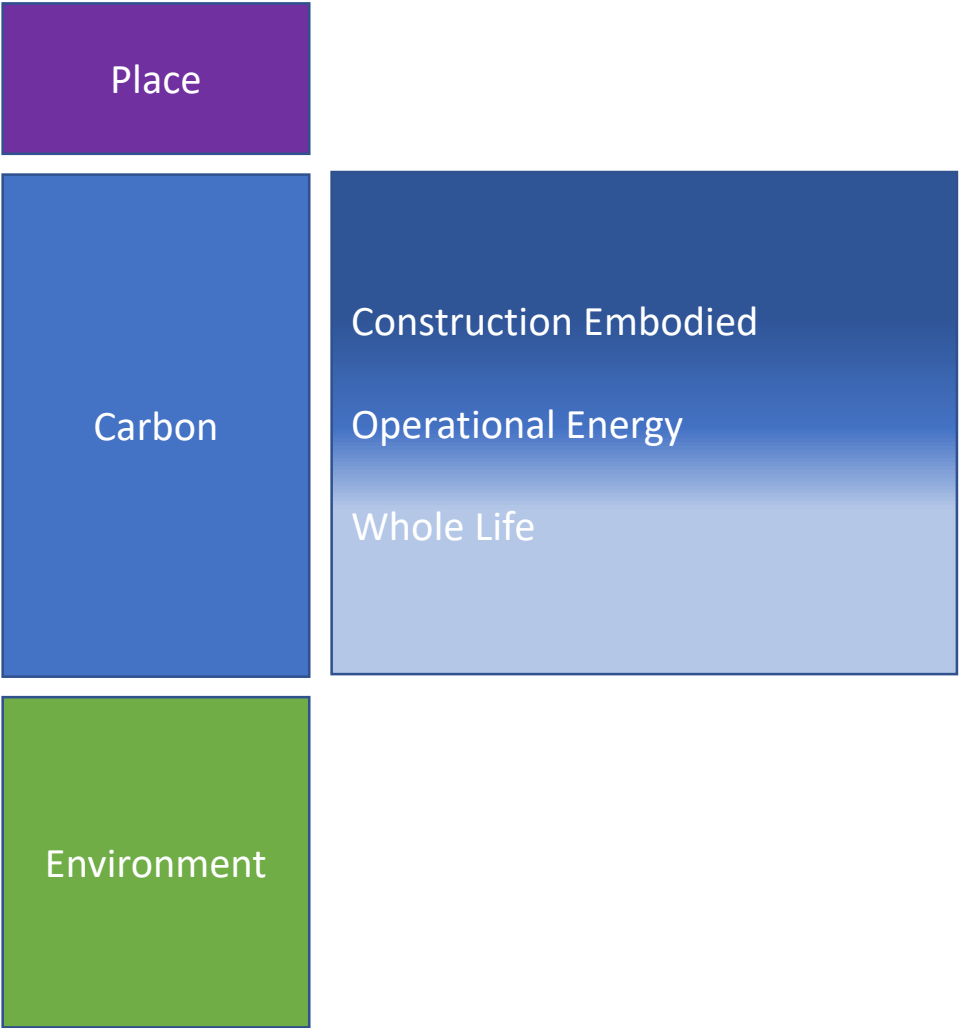


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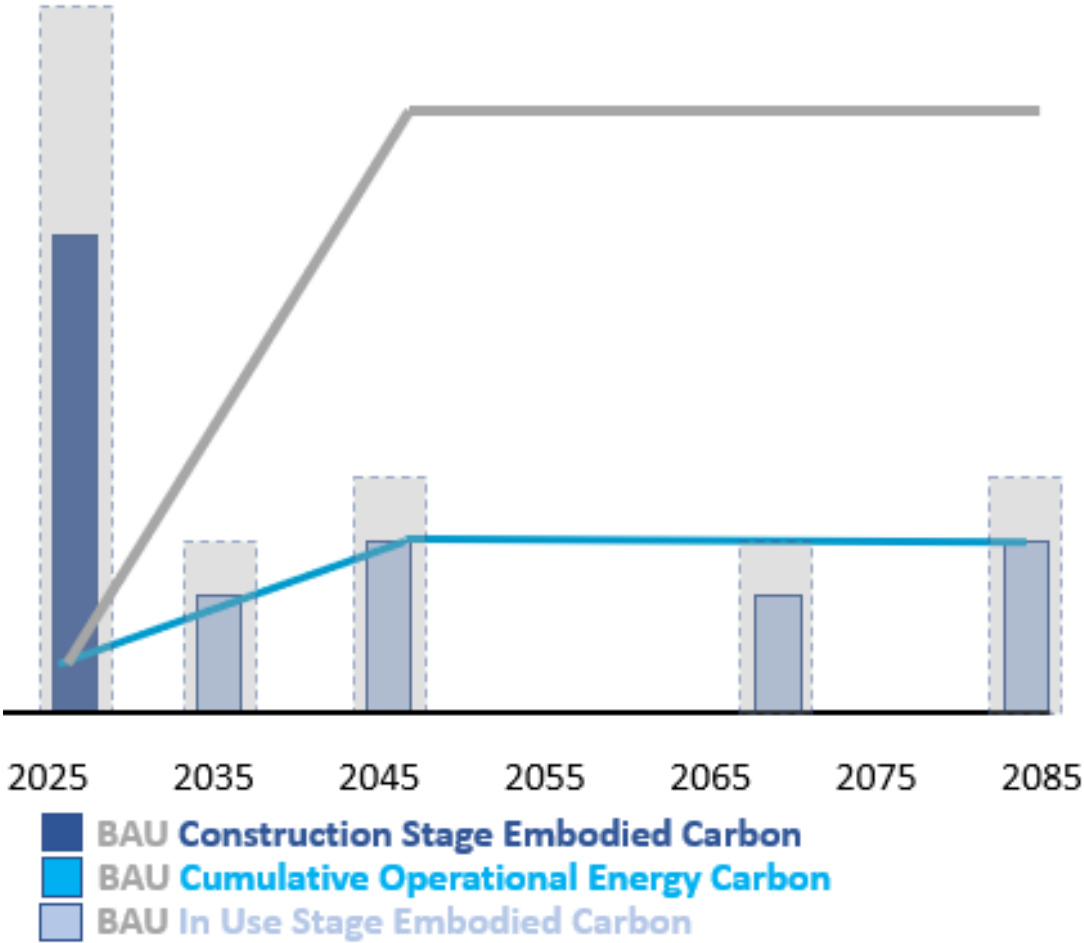
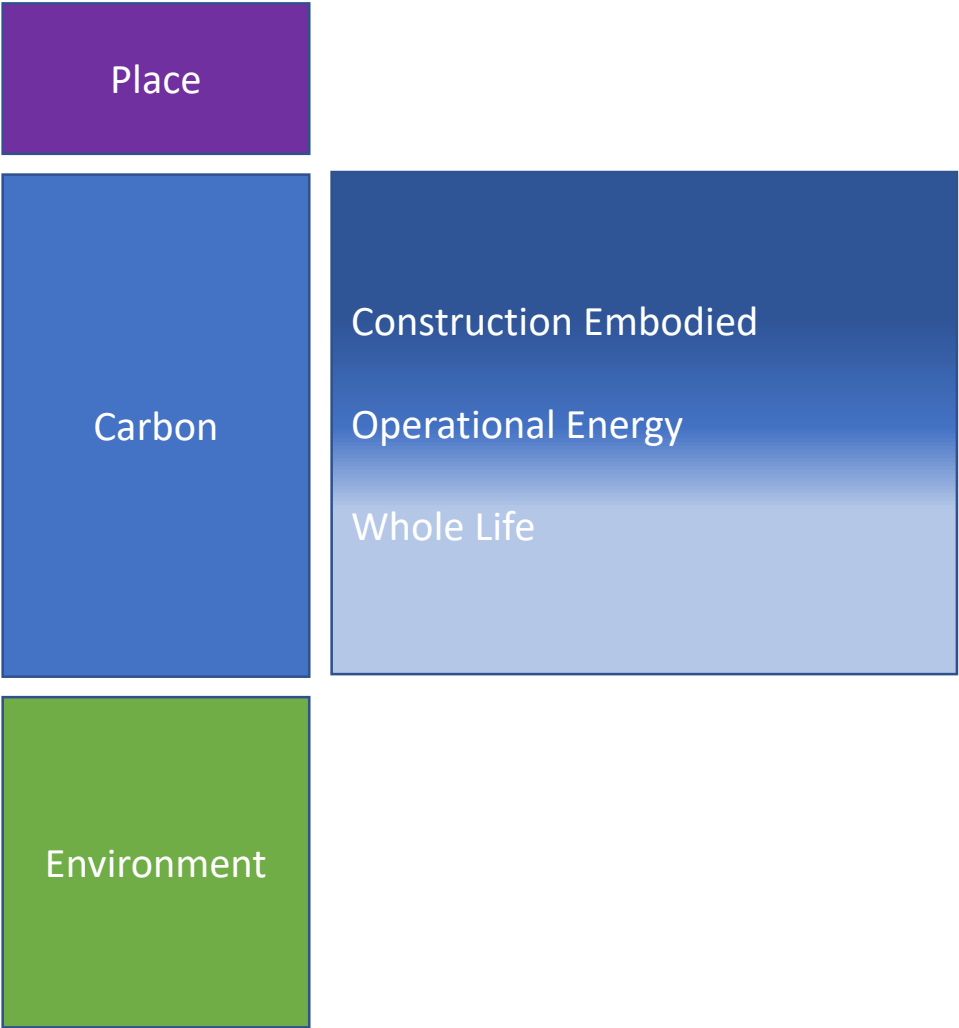
In Use stage verification influences design & construction



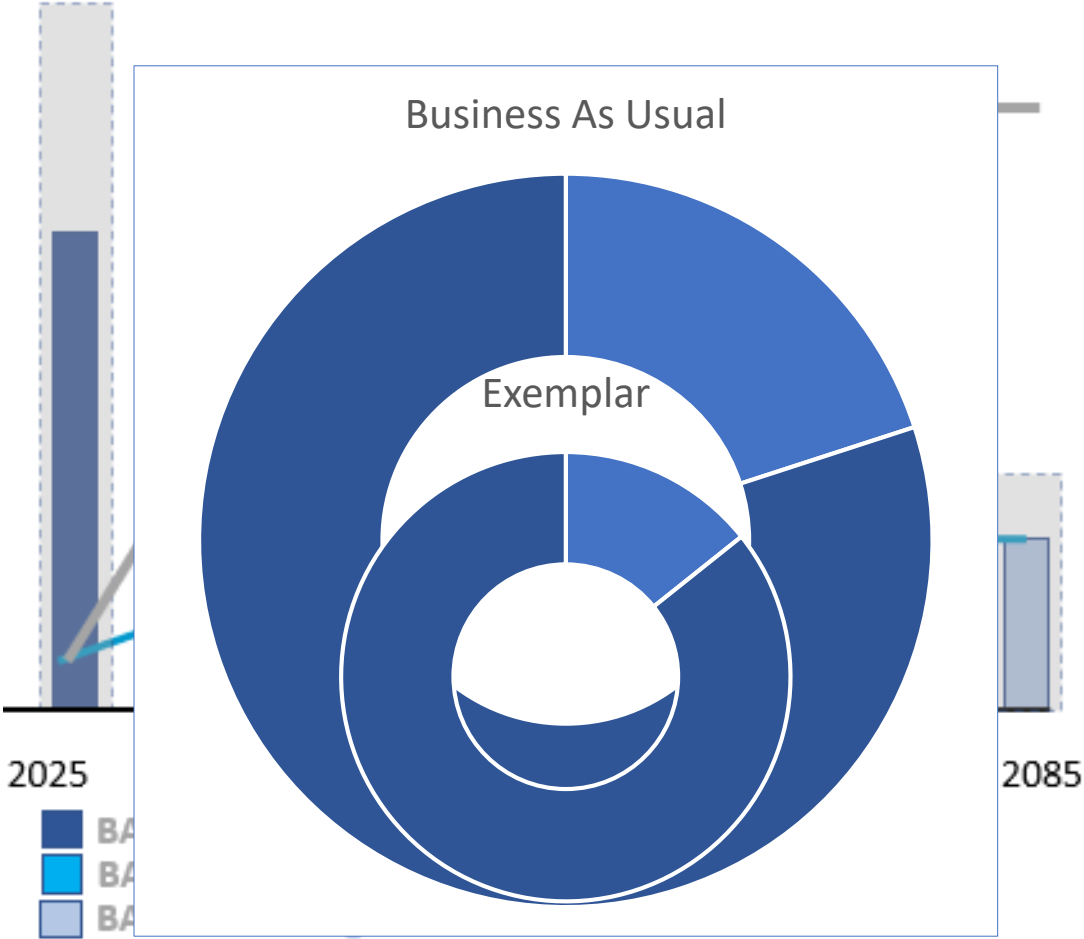
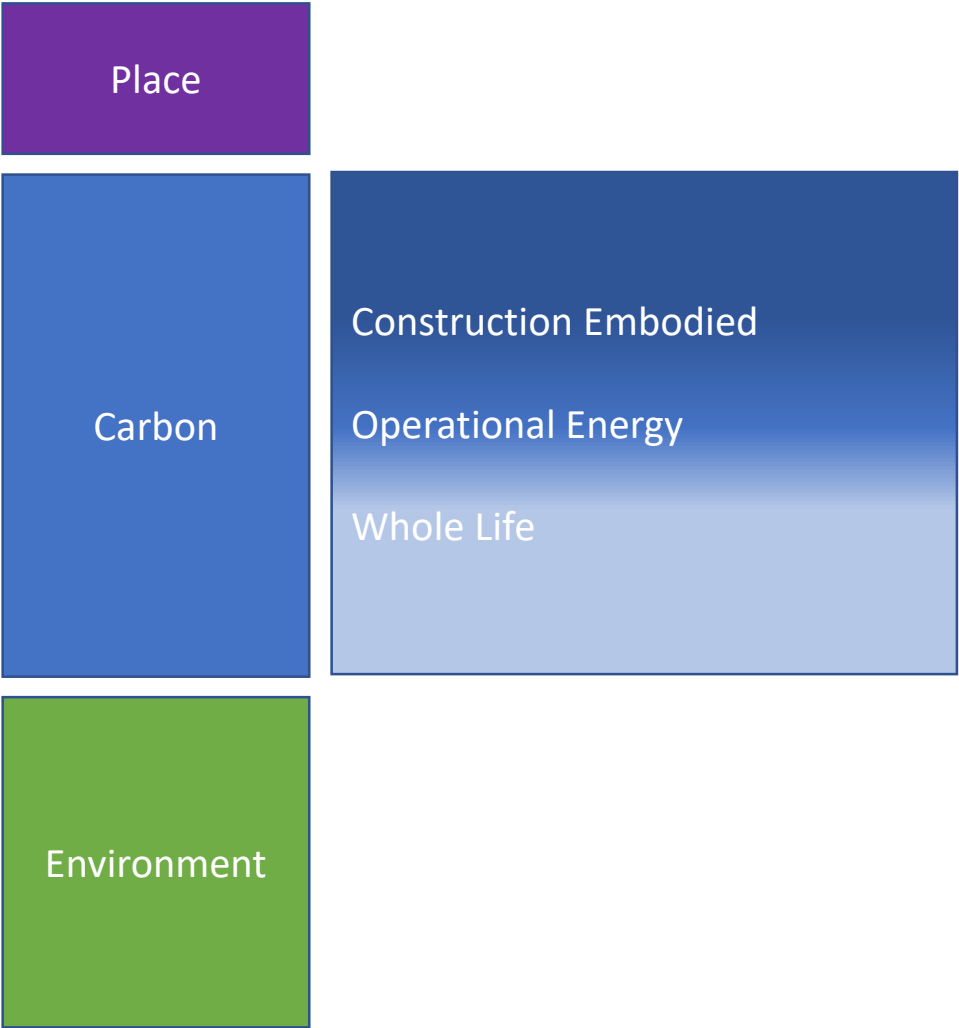
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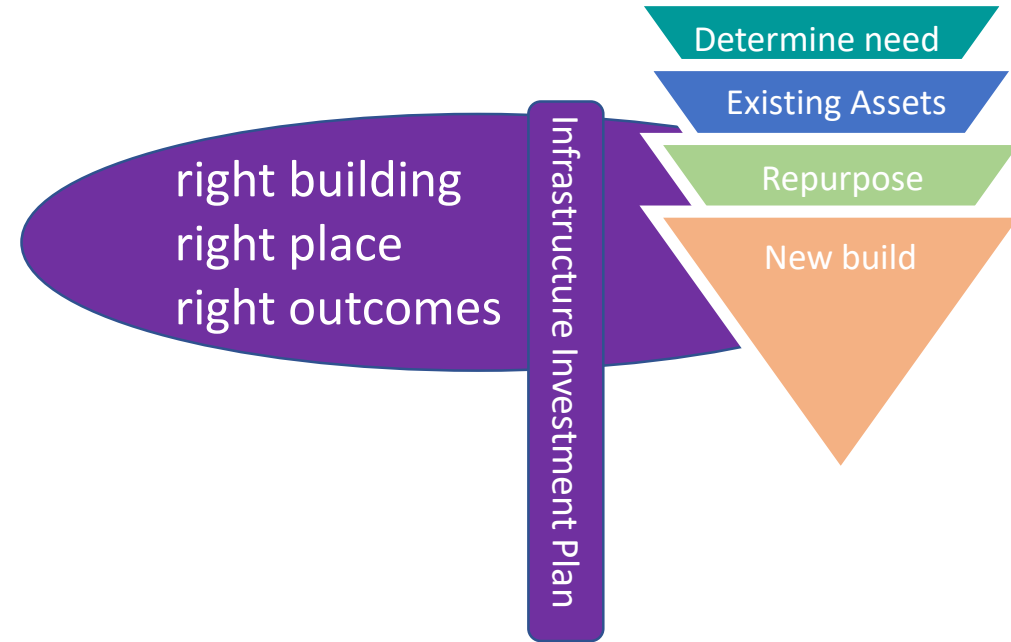
Objectives

| | | |
|-------------|---|--|
| Place | Inclusive NZ Economy Outcomes | |
| Carbon | Construction Embodied Operational Energy Whole Life | |
| Environment | Environment | Exemplar quality of indoor environments <ul style="list-style-type: none">- Plenty of clean, fresh air- natural light- avoidance of overheating External Environment & Other Aspects |



Objectives

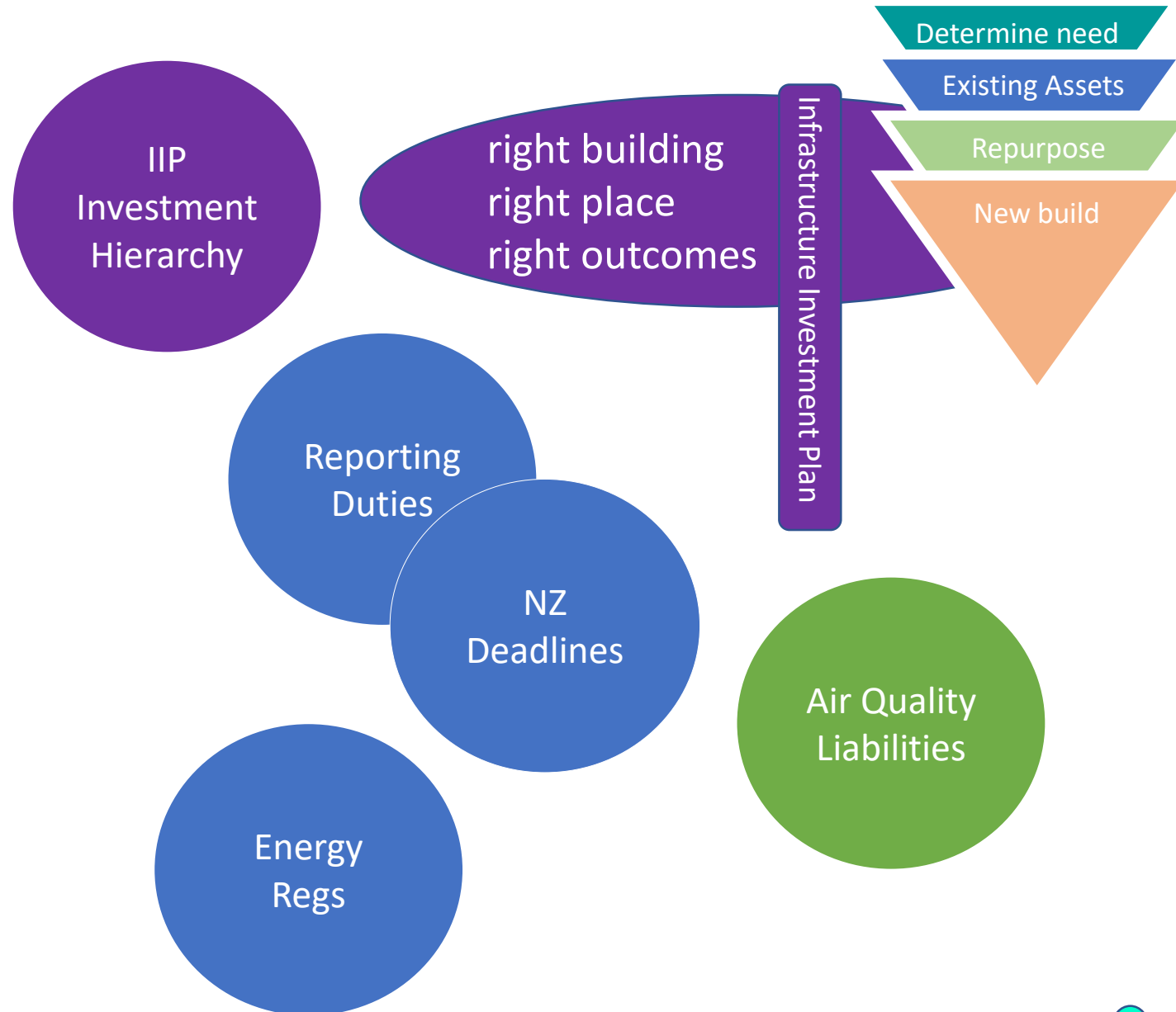
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Why is a voluntary standard helpful?

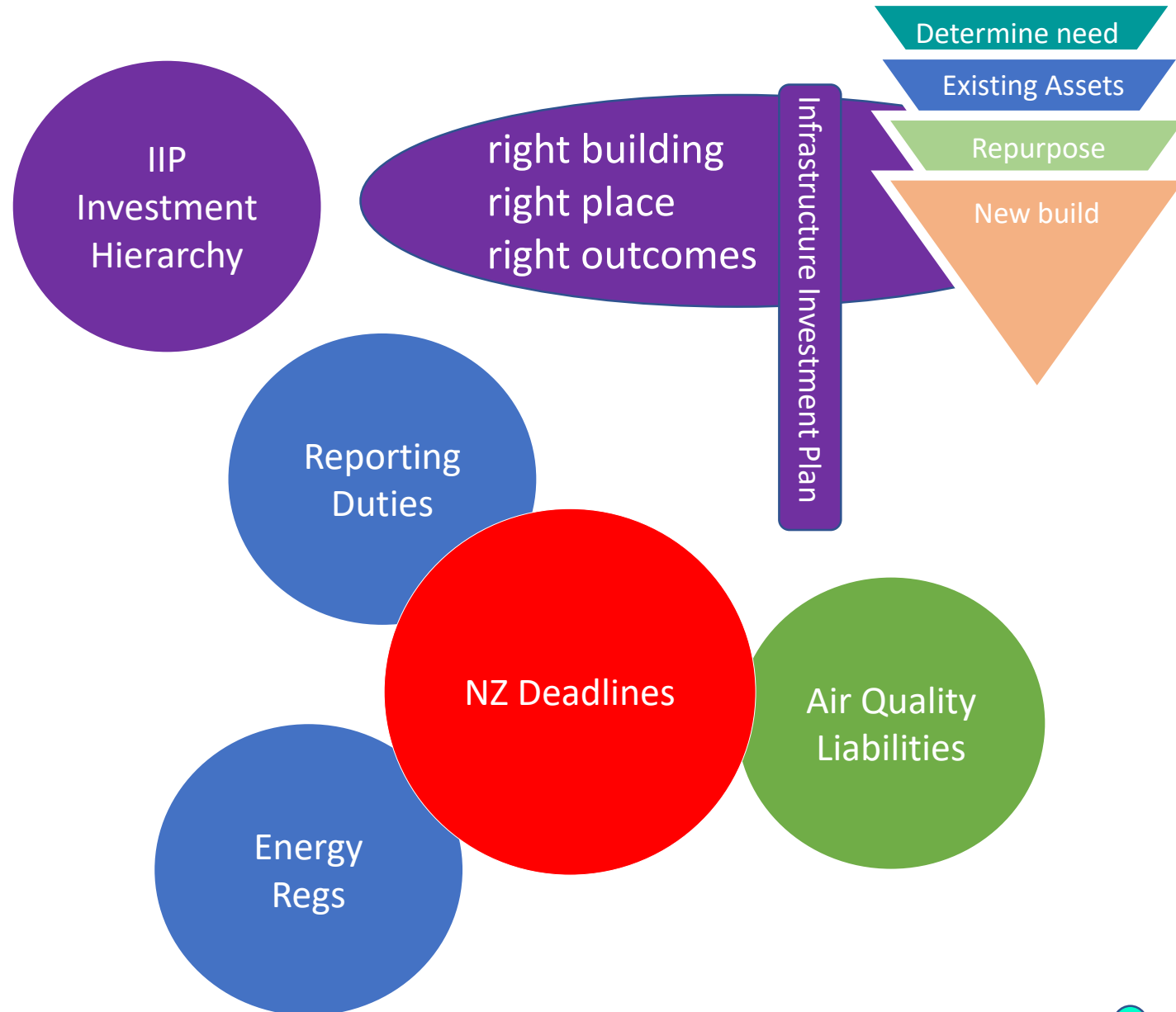
- Navigation through future regs & climate change mitigation:-
- The Place-Based agenda
- Local Authority Area commitments
 - Local Heat & Energy Efficiency Strategies
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 - Building Standards Energy Reviews
 - Heat in New Buildings Regs 2024
 - National Planning Framework 4
- Public Bodies' net zero commitments
- Air quality concerns – indoor & out



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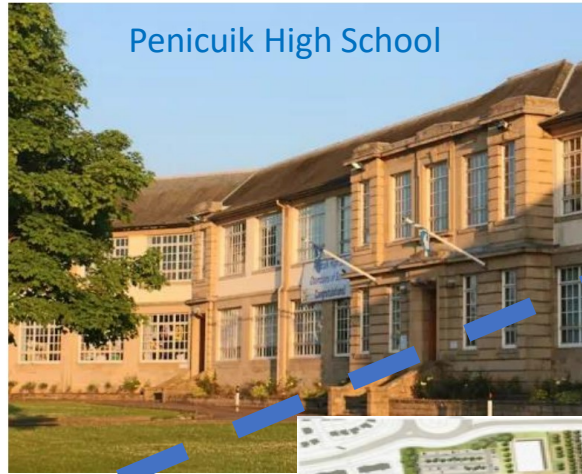
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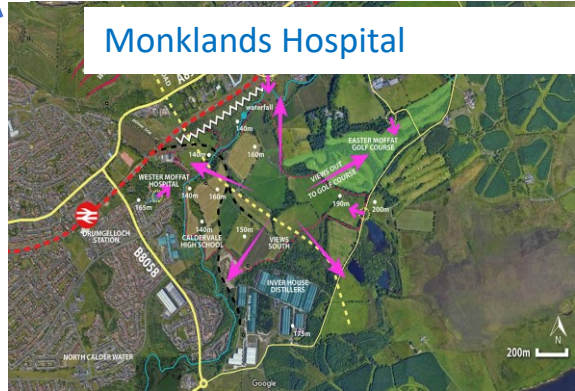
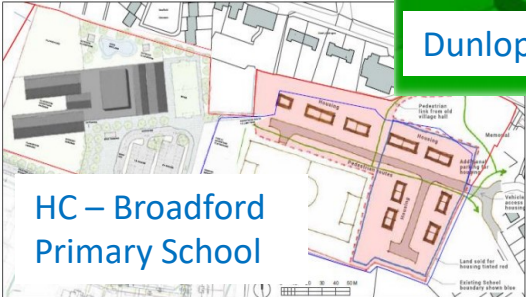
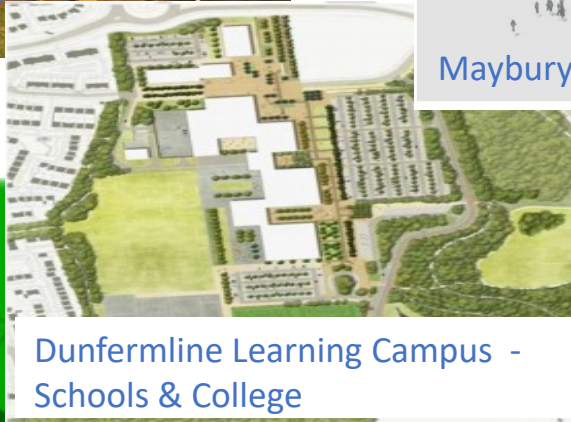
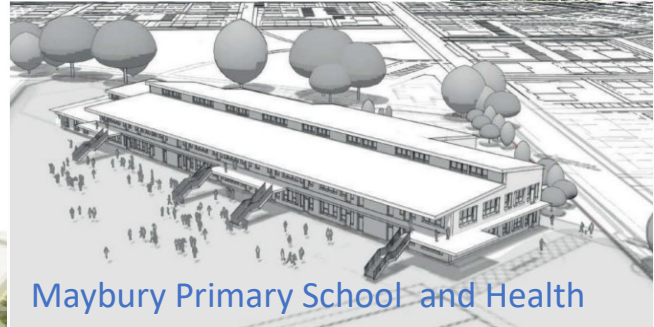


The Standard: Pathfinders

Education – Major Refurb.



Education New Build



Health New Build

The Standard: Pathfinders

Dunfermline Learning Campus – Fife Council & Fife College

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Strategic case: 'joined up learning'

Embodied Carbon: a new concept;
Council and College keen to engage;
consider setting targets

Operational Energy Target:
Council set; College considering

Whole Life Carbon: a new concept;
Council and College keen to engage;
consider setting targets

Indoor: generally understood,
key requirements and verification
being considered

Outdoor: engaging with Building Standards;
further development being considered



The Standard: Pathfinders

Initial Feedback

- Costs
 - Resources
 - Programme
 - materials and insurance
- Fit with Major Refurbishment
 - Fit with existing standards
 - Applies other standards' processes & certifications
 - Extends other standards to include:
 - Net Zero deadlines
 - Embodied carbon
 - Organisation's priorities
 - Public bodies keen to engage on Net Zero and see the **benefits**



The Standard: Benefits

What will it do differently?

- Set Net Zero Targets
- Verify them **in use**

Benefits

- Meet **legally binding** net zero commitments
- Better Air Quality: indoor & out

How will it do it?

- Carbon performance as core objectives of construction projects
- Energy Modelling to check design & construction remain on track to meet targets
- Verify in use → remediate under-performance

Next Steps

- Detailed documentation being completed
 - Available for use by ambitious Authorities now**
- Peer Review in Summer
- Launch in the run up to COP26



Questions?

The Scottish Government's

**Net Zero Public Sector Buildings
standard**

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for defining, delivering and verifying
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Jamie.Goth@ScottishFuturesTrust.org.uk

07889 803 786

Richard.Lockhart@ScottishFuturesTrust.org.uk

07792 662 884

