

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

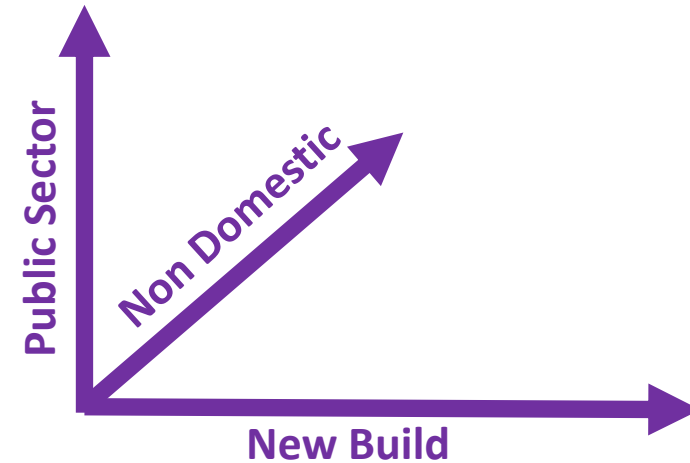


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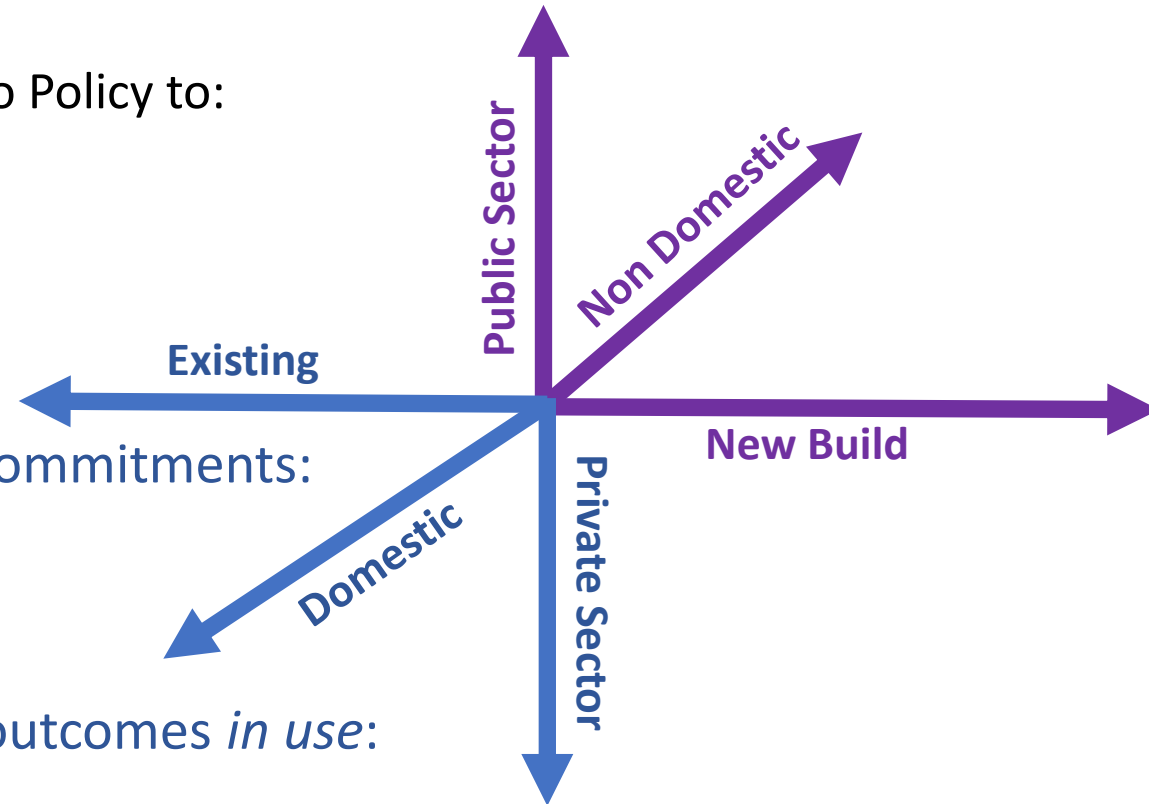
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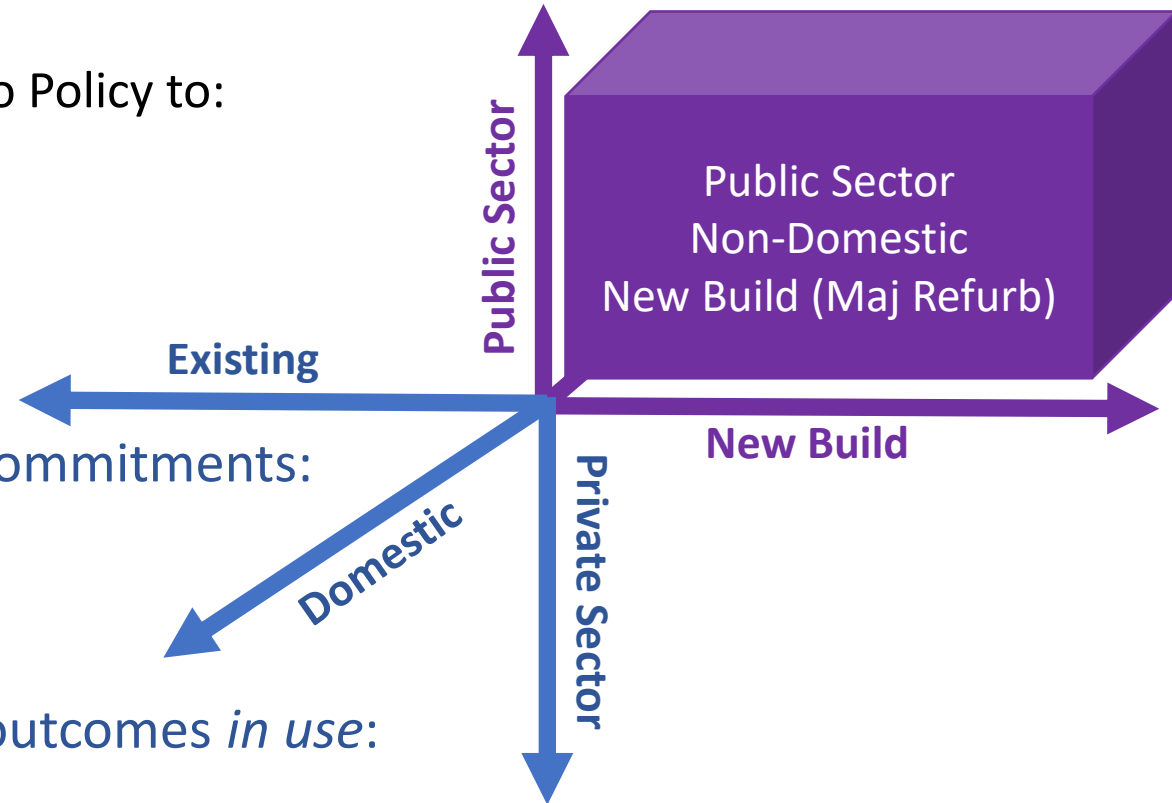
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The Standard:

In Use stage verification influences design & construction



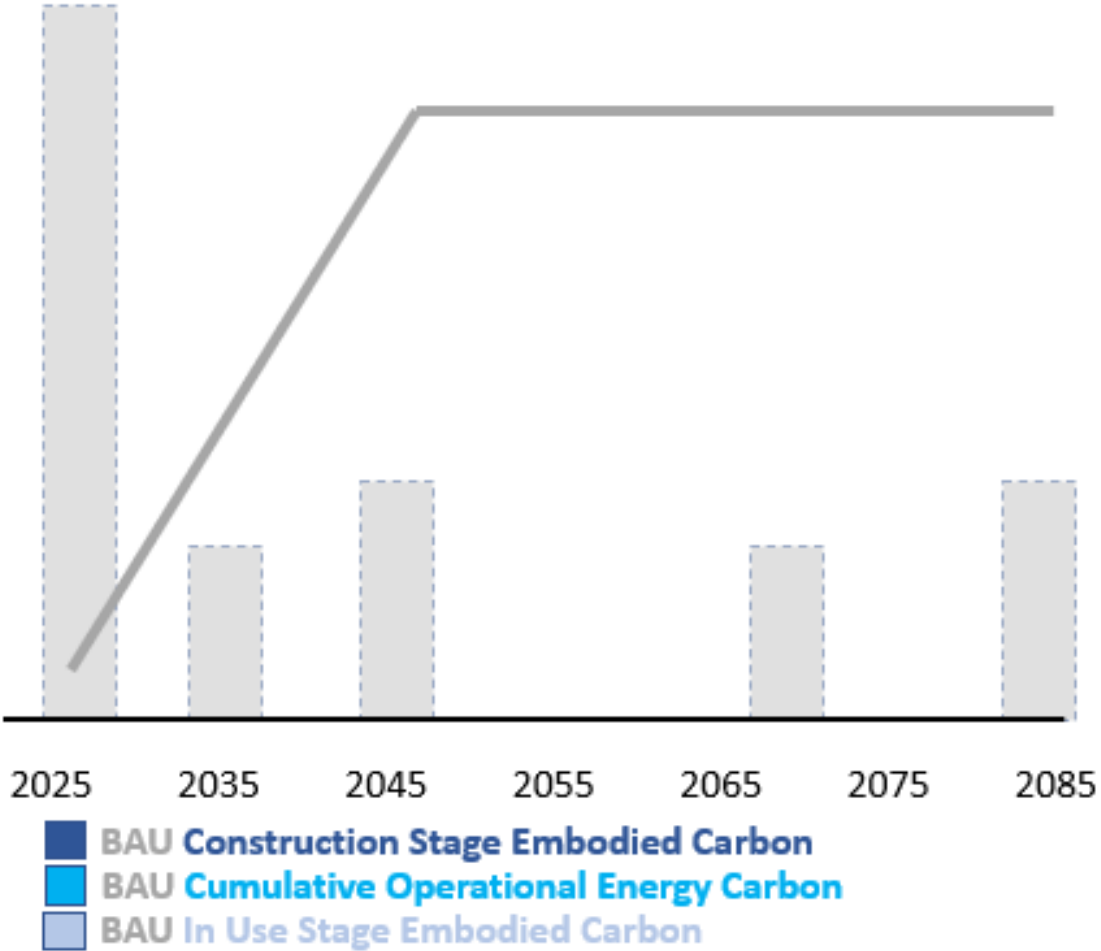
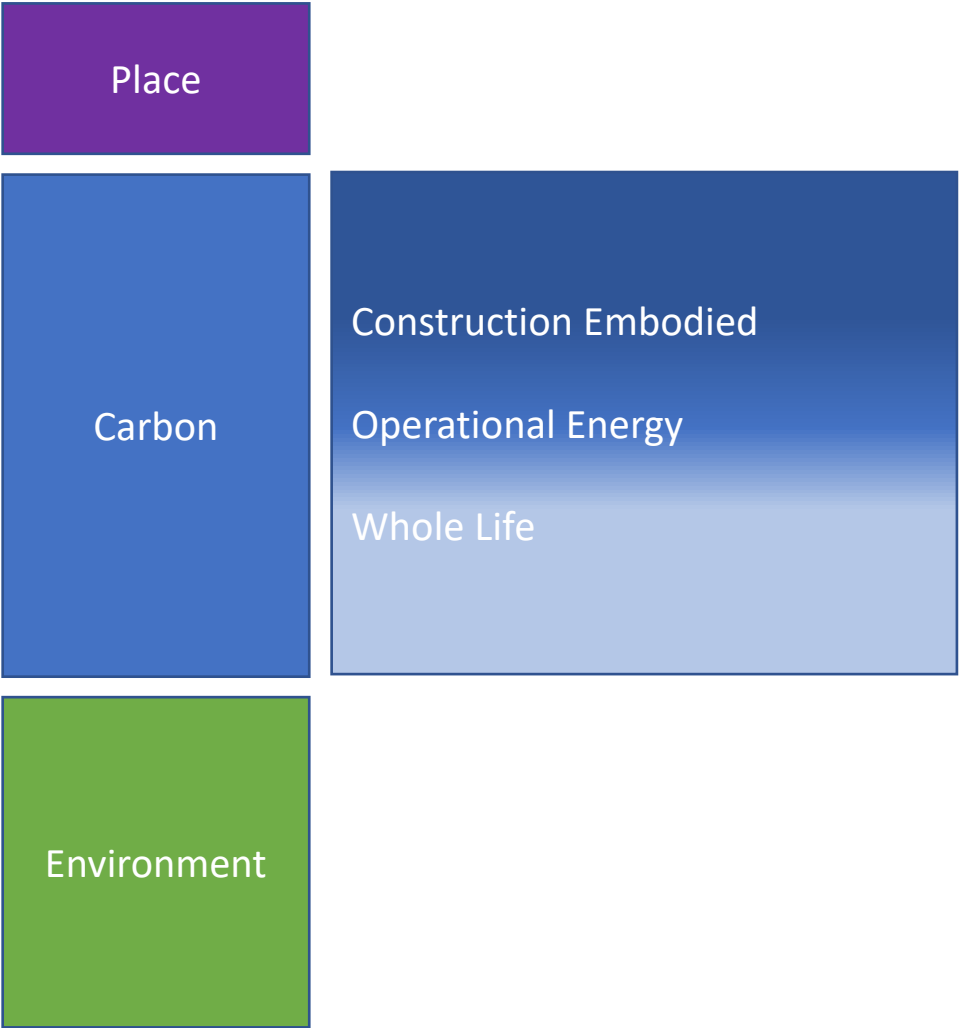
Set Targets
in Strategic Brief

Collaborate to achieve targets

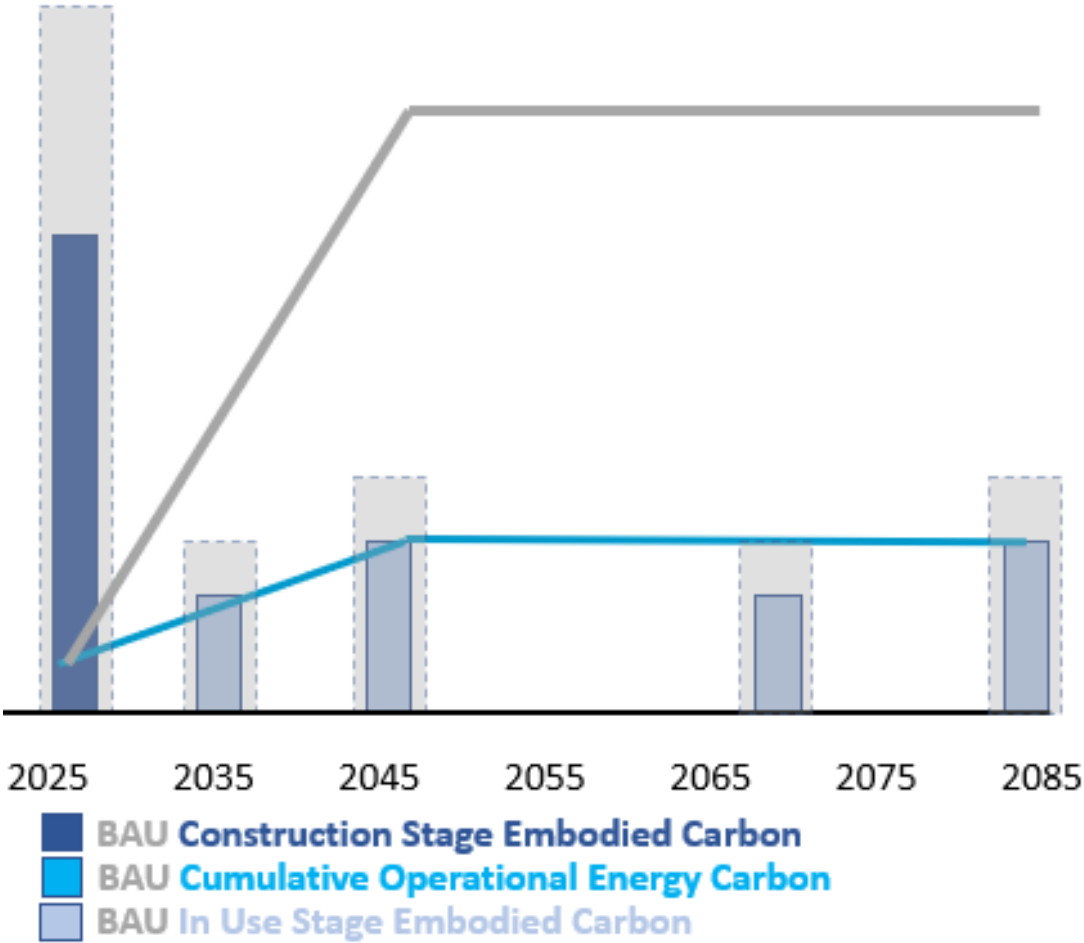
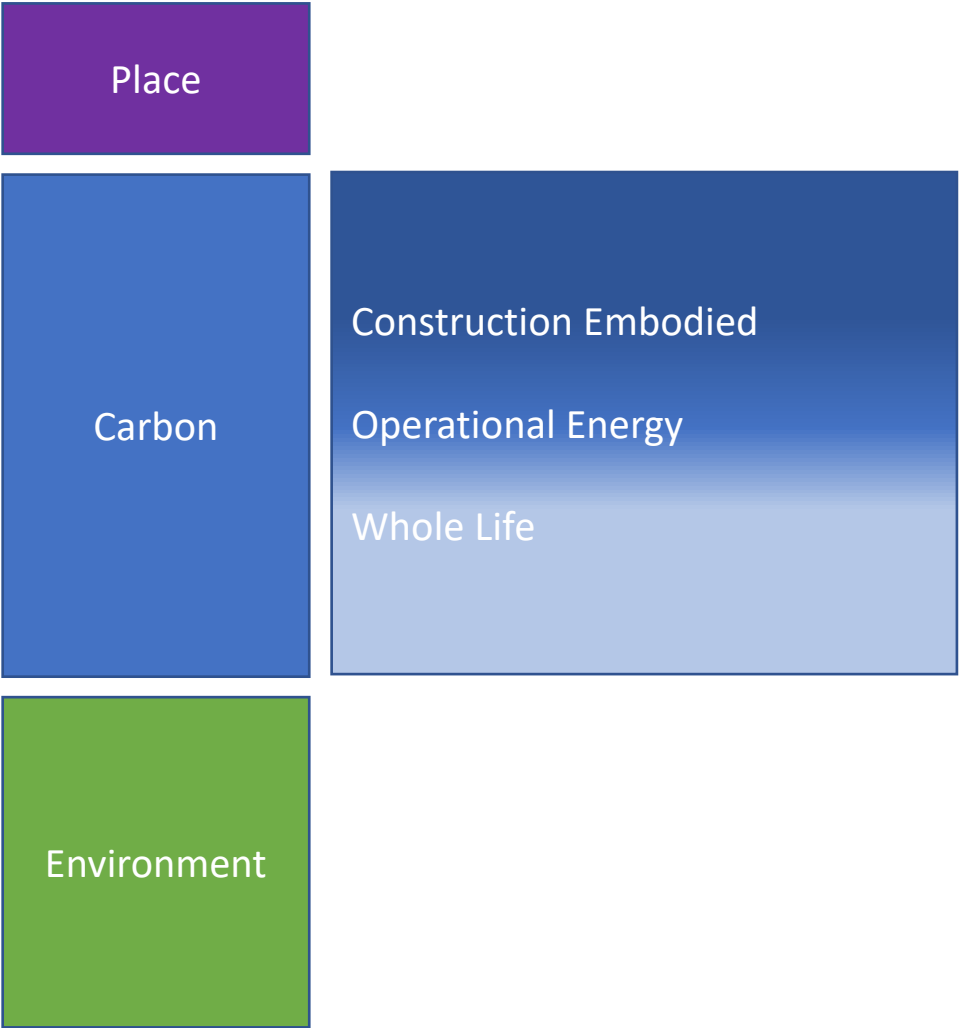
Verify Outcomes from design
through construction to operation



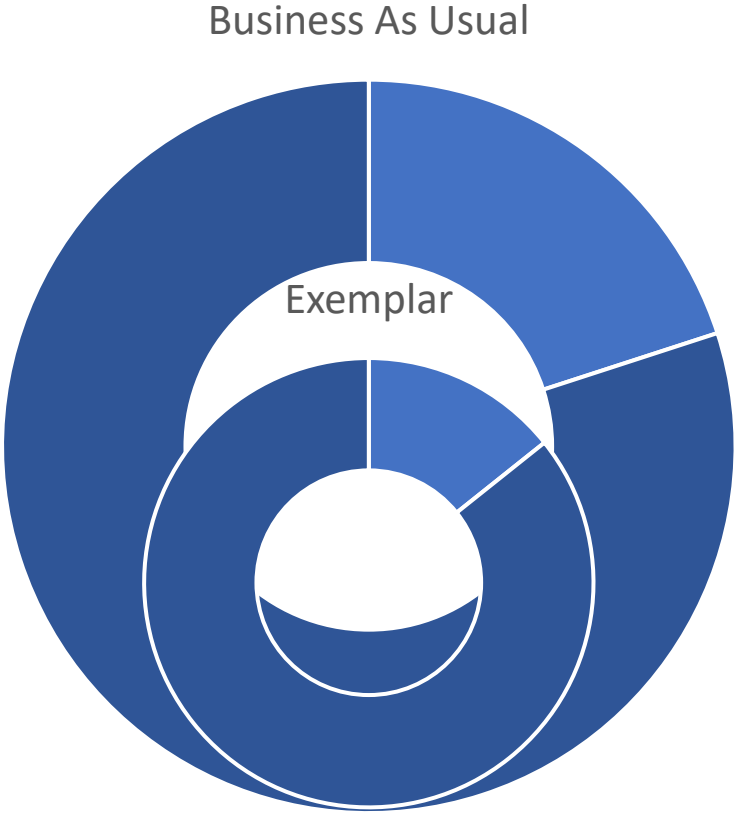
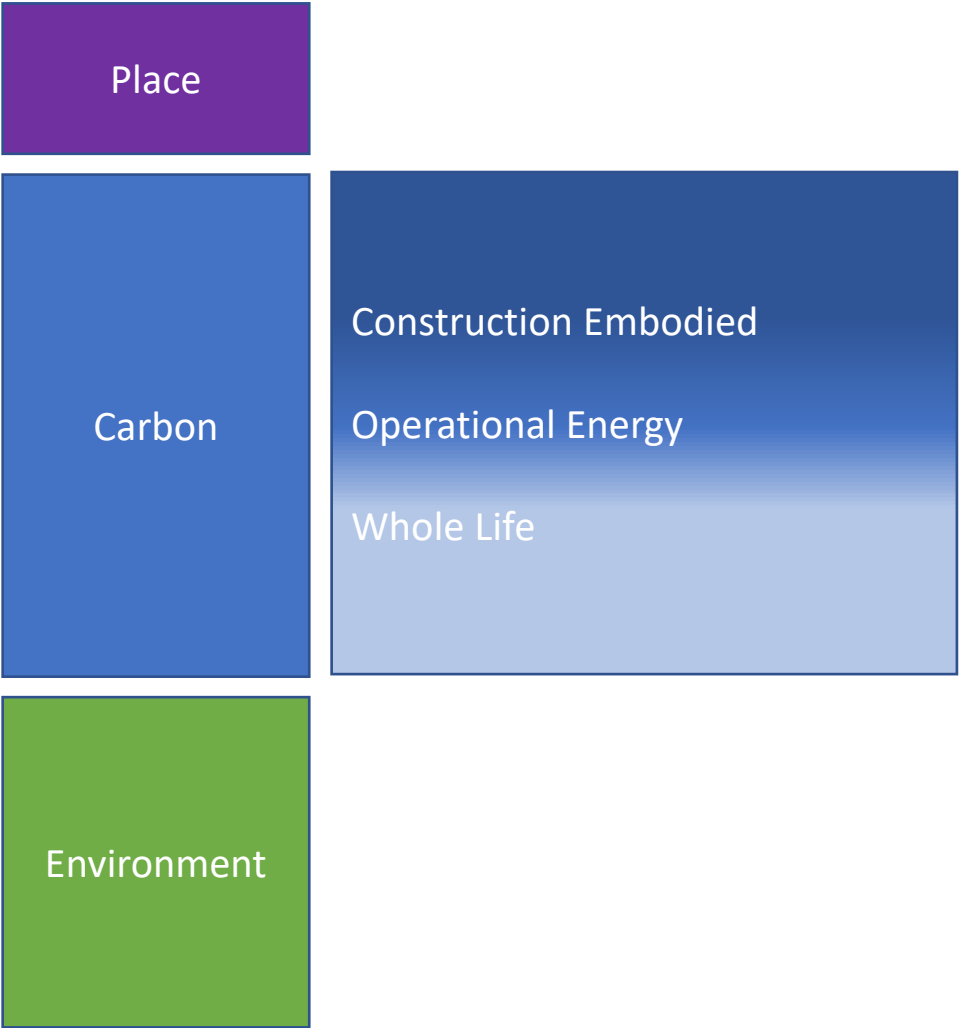
Objectives



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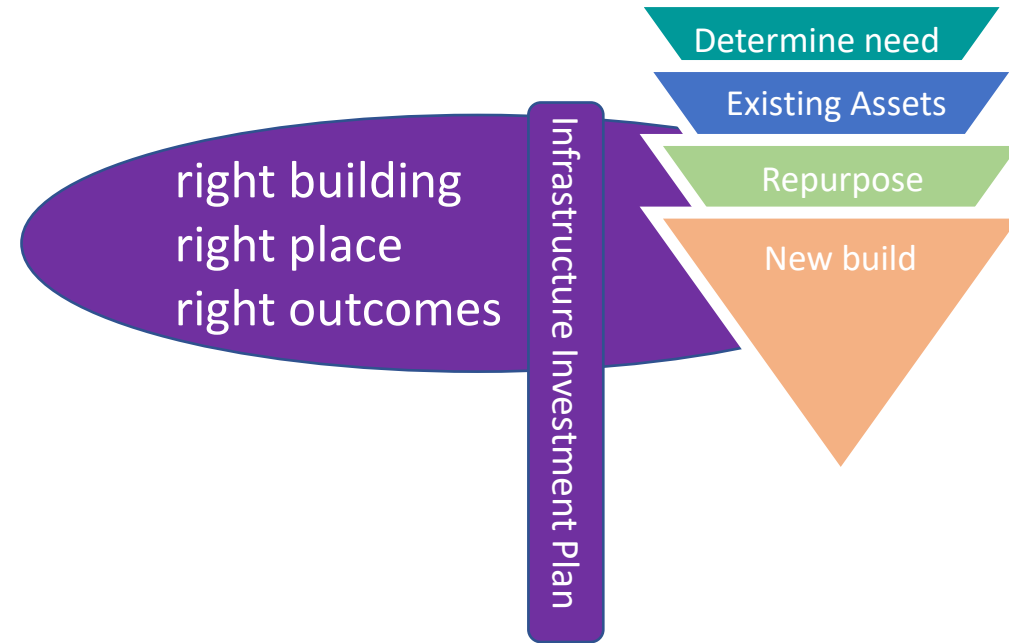
Objectives

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

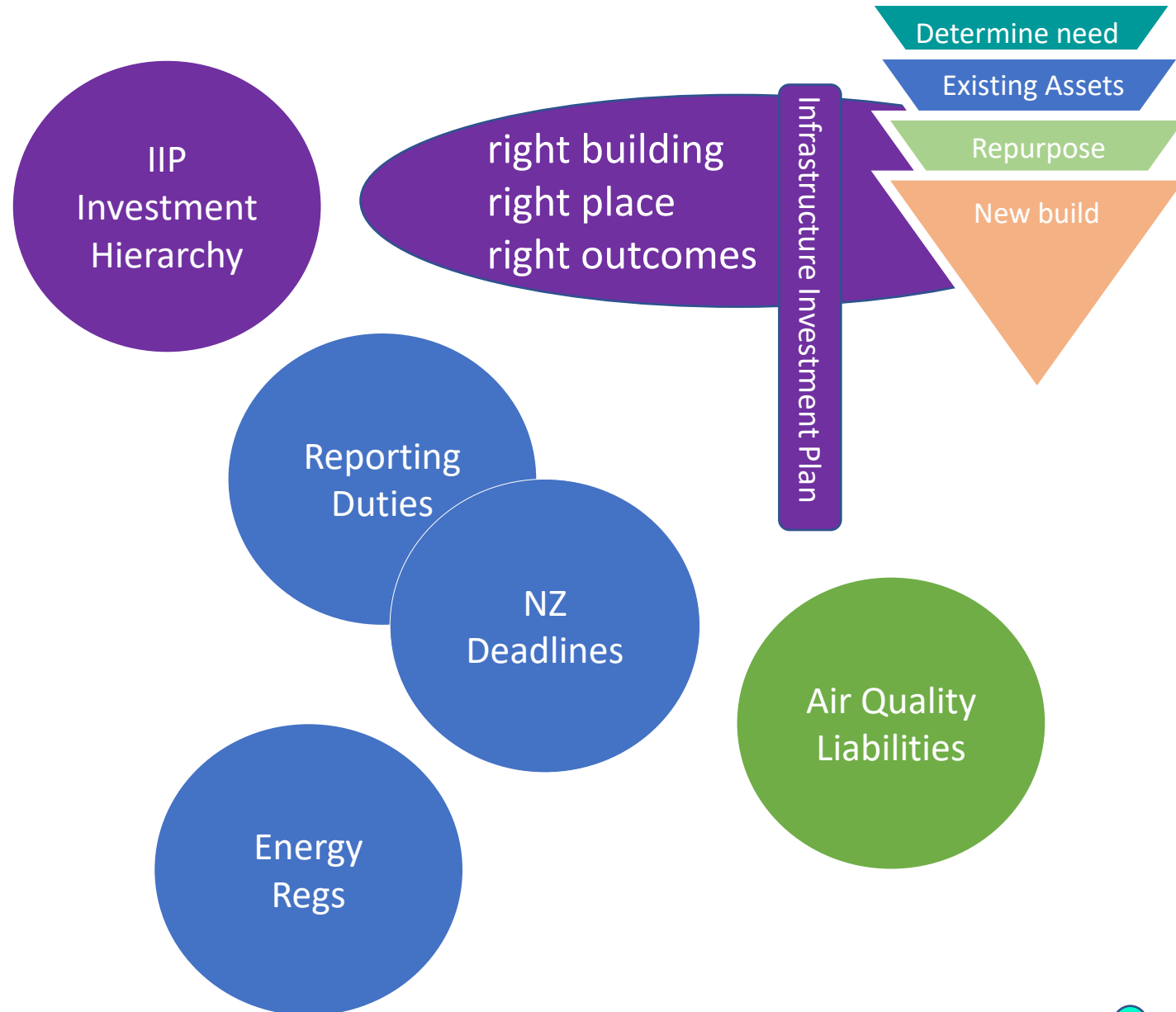
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Objectives

Why is a voluntary standard helpful?

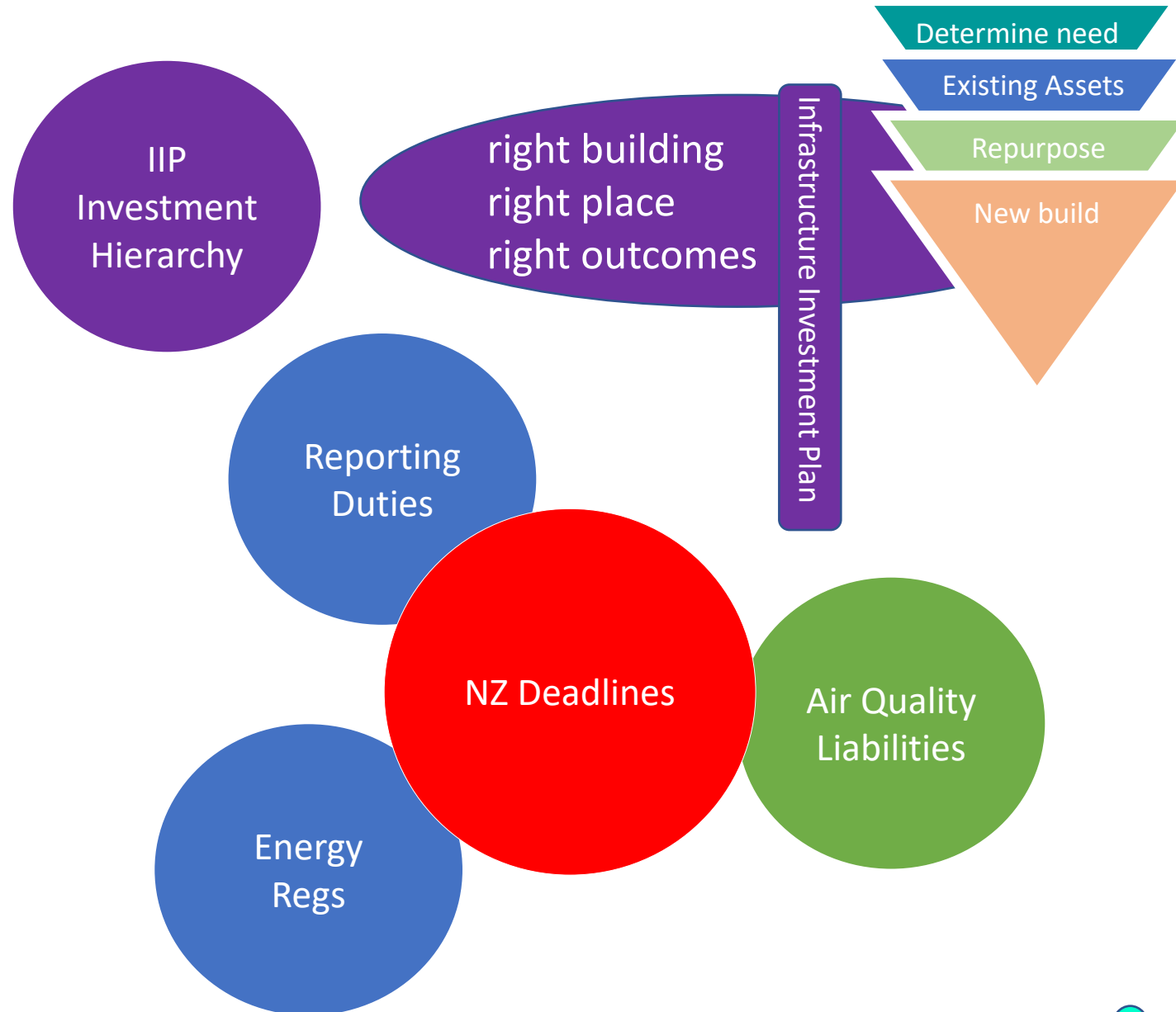
- Navigation through future regs & climate change mitigation:-
- The Place-Based agenda
- Local Authority Area commitments
 - Local Heat & Energy Efficiency Strategies
- Energy in Buildings
 - Building Standards Energy Reviews
 - Heat in New Buildings Regs 2024
 - National Planning Framework 4
- Public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



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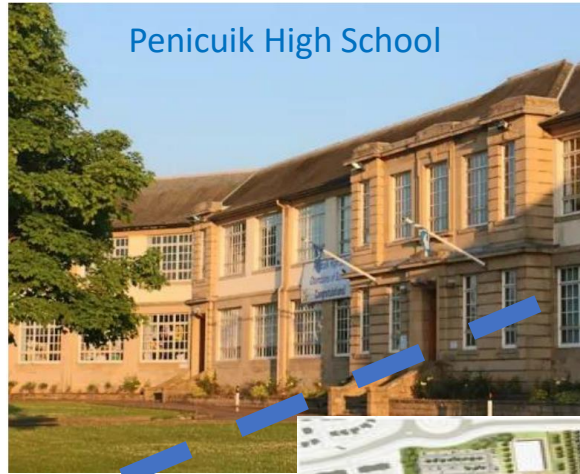
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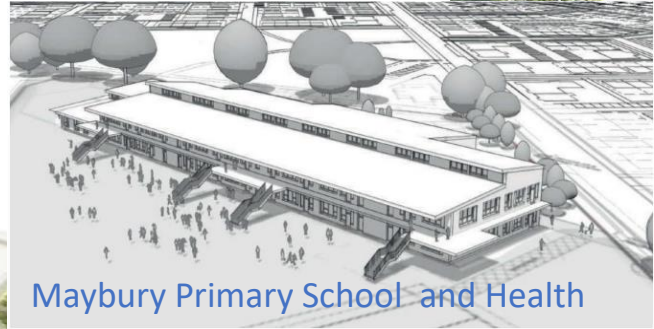


The Standard: Pathfinders

Education – Major Refurb.



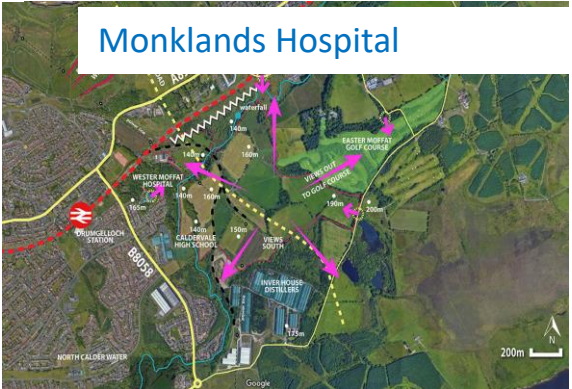
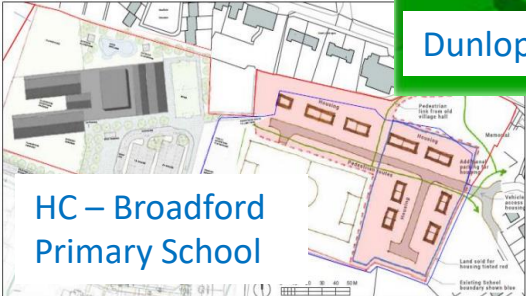
Education New Build



Dunfermline Learning Campus - Schools & College



Dunlop Early Learning Centre



Health New Build

The Standard: Pathfinders

Dunfermline Learning Campus – Fife Council & Fife College

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Place/strategic case

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

Dunfermline Learning Campus

- Learning Estate Investment Programme outcomes approach
- driven the adoption of very low Operational Energy Target - meeting requirements of the Standard
- Adoption of Passivehaus fabric first principles
- Use of Standard Information Management Plan and Construction Quality Assurance initiative
- Appropriate NZ champion appointment

Pathfinder Trends

- Costs
- Resources
- Programme
- materials and insurance

Public sector keen to engage on NZ 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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