

Built
Environment
—
Smarter
Transformation

Introducing BE-ST

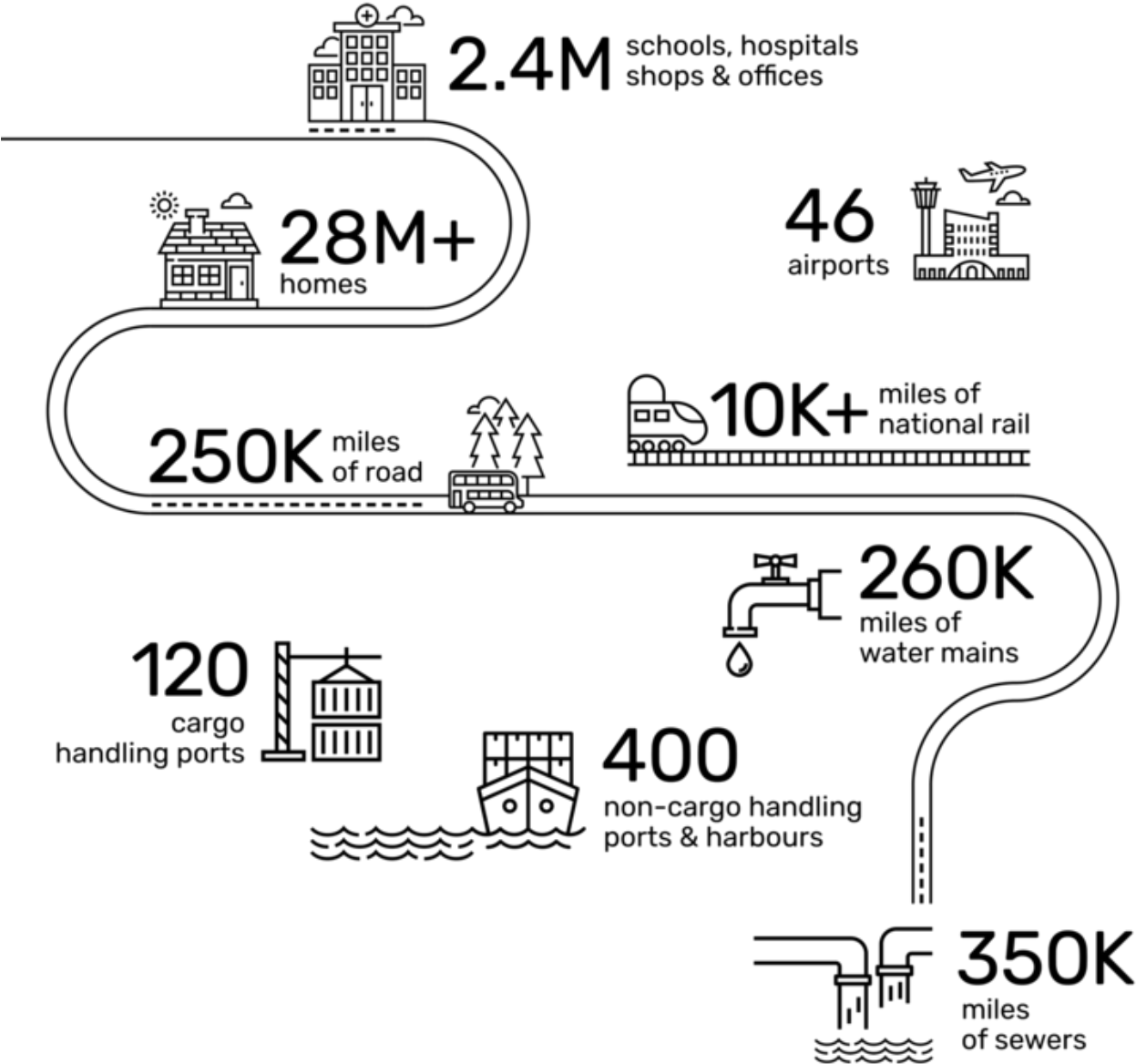
BE-ST

01

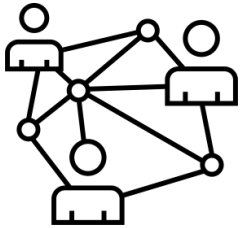
The challenge

“Innovate, accelerate, scale. When it comes to the climate crisis – winning slowly is the same as losing. To rebuild the world, we need to innovate, accelerate, and scale bold climate solutions.” Tom Steyer

The scale



The construction ecosystem



- ▶ An economic powerhouse, generating around **£8bn** Gross Value Add (GVA) per year in Scotland
- ▶ Responsible for around **£4bn** of Scotland's public sector spend per year
- ▶ Part of the fabric of our society, underpinning every other economic sector and employing over **143,000** in Scotland
- ▶ Supporting skills development, providing **23%** of modern apprenticeships in Scotland
- ▶ Fragmented supply chains, with **99%** of businesses being SME's

The construction sector

60%

Materials use in the UK

50%

UK's total waste

59%

reduction in emissions from non-domestic buildings by 2032 from 2015 levels

70%

of heat from low carbon sources by 2032

20%

reduction in non-domestic heat demand by 2032 from 2015 levels

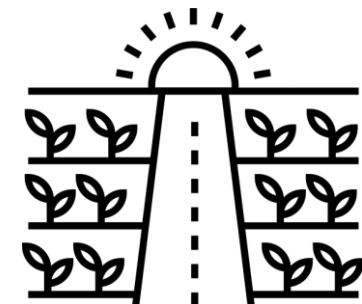
50%

equivalent energy for Scotland's heat, transport and electricity consumption to be supplied from renewable sources by 2030

Scotland's commitment to a zero carbon future by 2045

Committed to a net-zero carbon future by 2045

- ▶ As one of the biggest users of energy, emitters of CO₂e and generators of waste, we need to find better ways of doing what we do
- ▶ We need to innovate and collaborate like never before
- ▶ We need to embrace new digital and technical solutions at scale
- ▶ We need to develop more local and sustainable approaches and use Scotland's natural assets responsibly
- ▶ We need to radically change our mindset and culture so we think, act and behave differently
- ▶ We need to reinvent our skills ecosystem; up-skilling, multi-skilling and re-skilling the industry
- ▶ We need a support structure to help us and a route-map to guide us



02

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Our identity

BE-ST is the launchpad to a zero carbon built environment

Our vision

A better built environment that delivers inclusive and sustainable economic, social and environmental impact

Our mission

To accelerate the built environment's transition to zero carbon

Our strategy

We provide the connections, infrastructure and culture needed to solve the sector's most pressing challenges

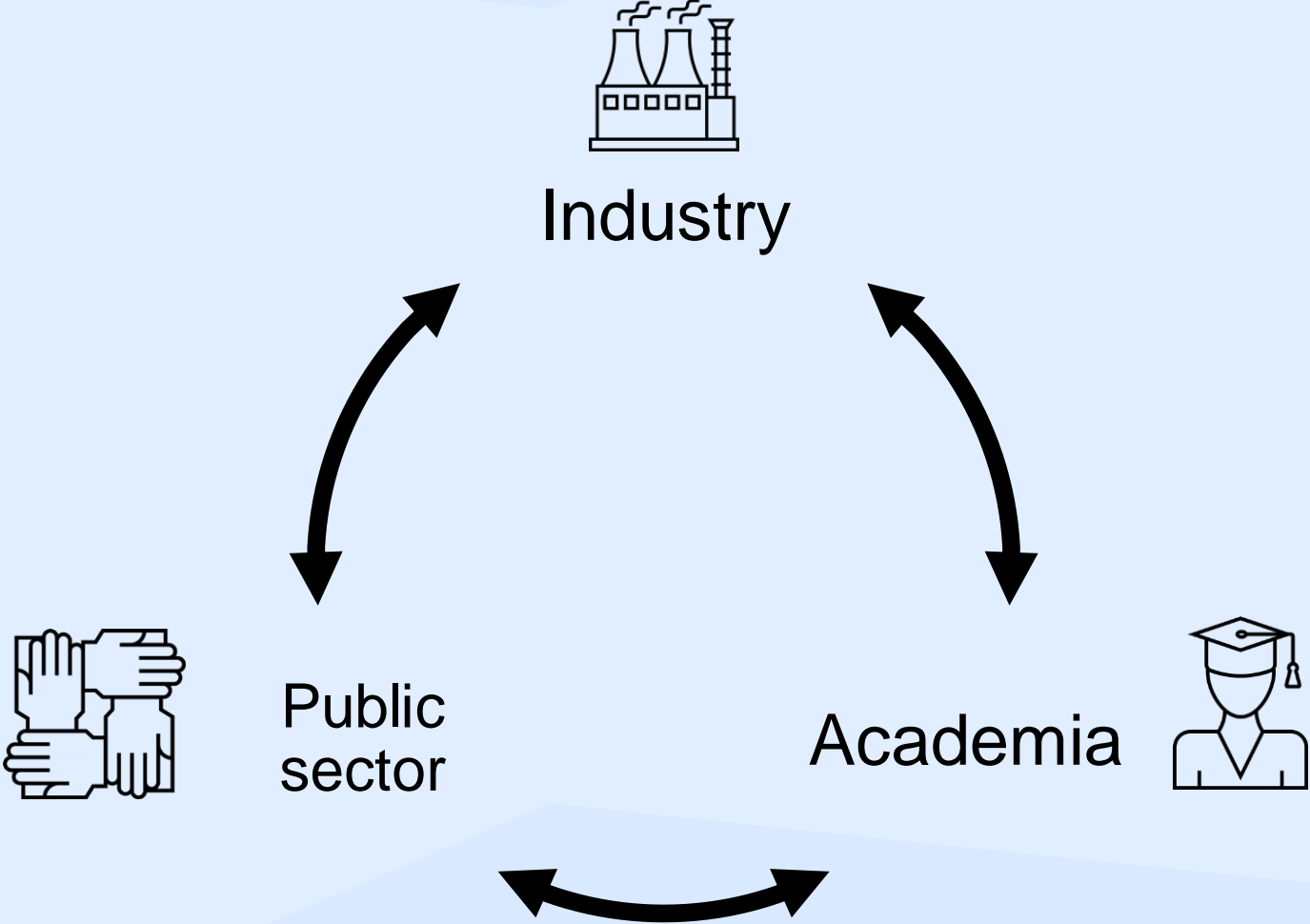
The innovation centre family



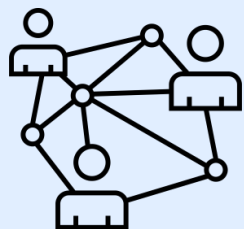
Supported by



Our connected ecosystem



BE-ST unlocks innovation across



Our connected ecosystem



Collaborative projects



Our Innovation Factory



Future skills programmes

The UK construction industry's first dedicated digital manufacturing prototyping and future skills centre of excellence



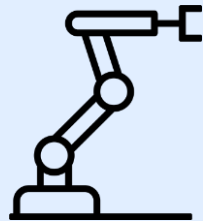
Collaborate to innovate



BE-ST delivers impact through



Innovation



Research &
development



Knowledge
exchange



Service &
system
design

Our pledge

1. A built environment that produces zero carbon emissions
2. A sector that is data rich and digitally enable
3. Safeguarding of existing jobs & businesses and creating new green jobs & businesses
4. Greater supply chain resilience
5. Talent attraction, improved education pathways and a highly skilled workforce
6. Attraction of inward investment and enabling of businesses to export
7. More impact from academic investment and help increase business investment in innovation and R&D
8. Green economic growth across all sectors underpinned by a vibrant and sustainable construction and built environment ecosystem
9. Eradication of fuel poverty and tackle health inequalities
10. More efficient use of public investment and support a just transition
11. Diverse talent attraction and retention
12. Better places for Scotland's citizens to live, work and explore

What we have done

£1.39B

revenue add

4,846

jobs safeguarded

284

new products

£43M

total project value

3,329

new jobs

84

new business models

£25M

cost savings

6.02mt

CO2e savings

156

new services

Accelerate to ——— Zero

A zero carbon
transformation programme
for the built environment

The support structure that helps the sector and the route-map that guides the sector

- ▶ A **collaboration** programme – uniting the sector to tackle the climate crisis and bringing together existing expertise and initiatives.
- ▶ A **transformation** programme – challenging the status quo and creating the tools needed to tangibly measure progress.
- ▶ An **accelerator** programme - scaling-up the Scottish supply chain to build local resilience, national expertise and international opportunity.
- ▶ An **innovation** programme – deploying at scale, the innovations we already have, and rapidly creating and commercialising the innovations we will need.
- ▶ An **impact** programme – delivering measurable impact across Scotland’s built environment.
- ▶ A **community** programme – aligned nationally to optimise impact, but delivered locally in every community across Scotland, at its heart Accelerate to Zero is about Scotland’s people shaping Scotland’s built environment.

Integrated programme components

1 Zero Carbon Skills Programme

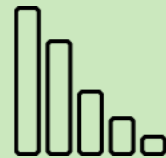


Skills, Knowledge & Competencies

2 Transformation Hubs



Supply Chain



Data Driven Performance

3 Culture Change Programmes



Procuring for Value



System Design

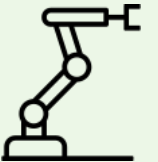


Leadership Development

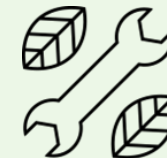
4 Innovation Labs



Digital



MMC



Retrofit



Sustainability

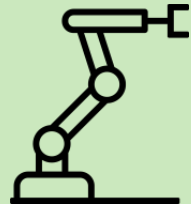
Accelerate to Zero programmes

20
21

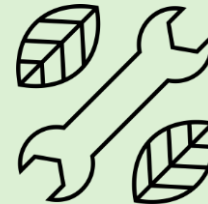
Digital transformation



Modern methods of construction

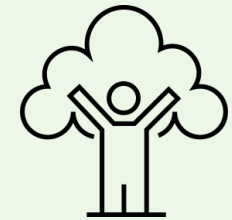


Retrofit



Sustainability

20
45



Zero carbon skills | culture change | supply chain transformation

03

Examples of our work

Near Home working hub

Getting to work on retrofit by transforming public spaces into sustainable working hubs and 20-minute communities



Transforming Timber

Bringing homegrown mass timber in construction into the mainstream



Low Carbon Learning

Scotland's first national Passivhaus, retrofit and fabric first training programme



GenZero

New, improved design standards for school buildings with the aim of making them net zero



Heat Source

Scotland's low carbon heat network

The logo for HeatSource is displayed within a white rectangular frame. The text "HeatSource" is written in a large, bold, black sans-serif font. The letters are partially overlaid by a horizontal gradient bar that transitions from blue on the left to green on the right. The background of the slide features abstract, light-colored geometric shapes in the corners.

HeatSource

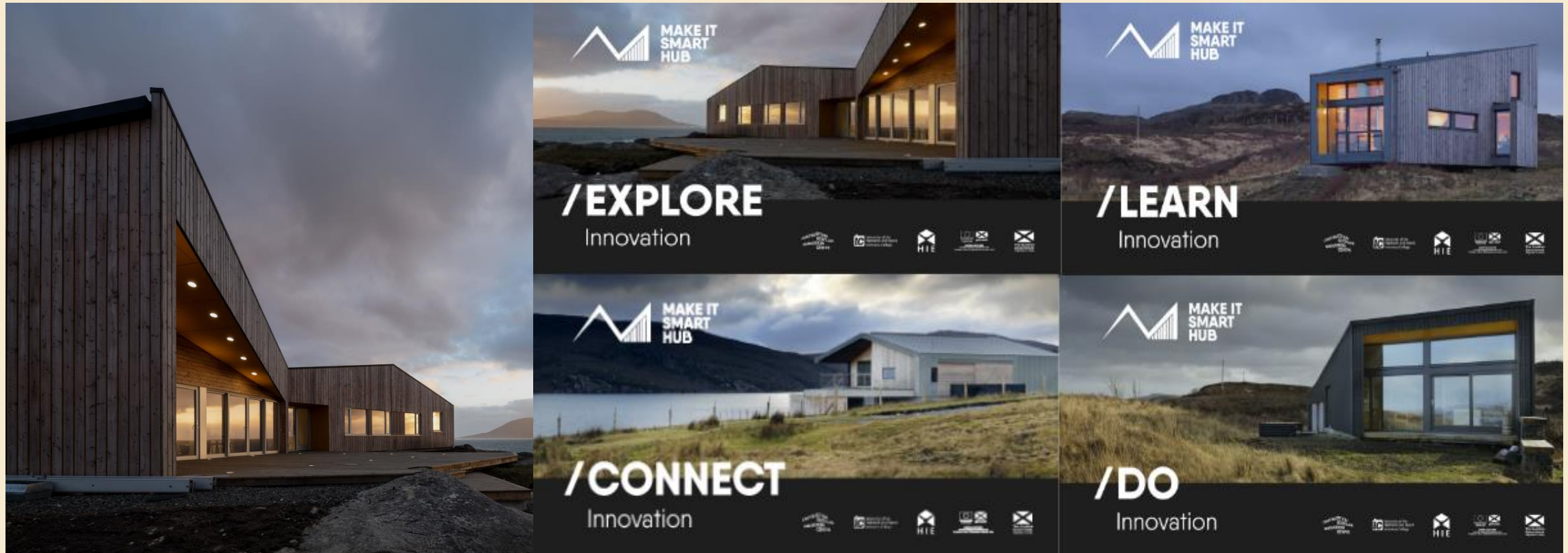
Edinburgh Home Demonstrator

A new business model for affordable homes built to net zero standards using offsite construction



The Make it Smart Hub

An innovation one-stop-shop for construction and manufacturing in the Highlands & Islands



K-Briq

The world's first 90% recycled brick



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Thank you

BE—ST