

Built
Environment
—
Smarter
Transformation

Building a Net Zero Scotland

Scotland Excel

Caitriona Jordan

26.5.22

BE—S—T

01

Built
Environment
—
Smarter
Transformation

Goodbye

Hello

CONSTRUCTION
SCOTLAND
INNOVATION
CENTRE

BE—ST

Built
Environment
—
Smarter
Transformation

Our identity

BE-ST is an international centre of excellence for zero carbon built environment transformation

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

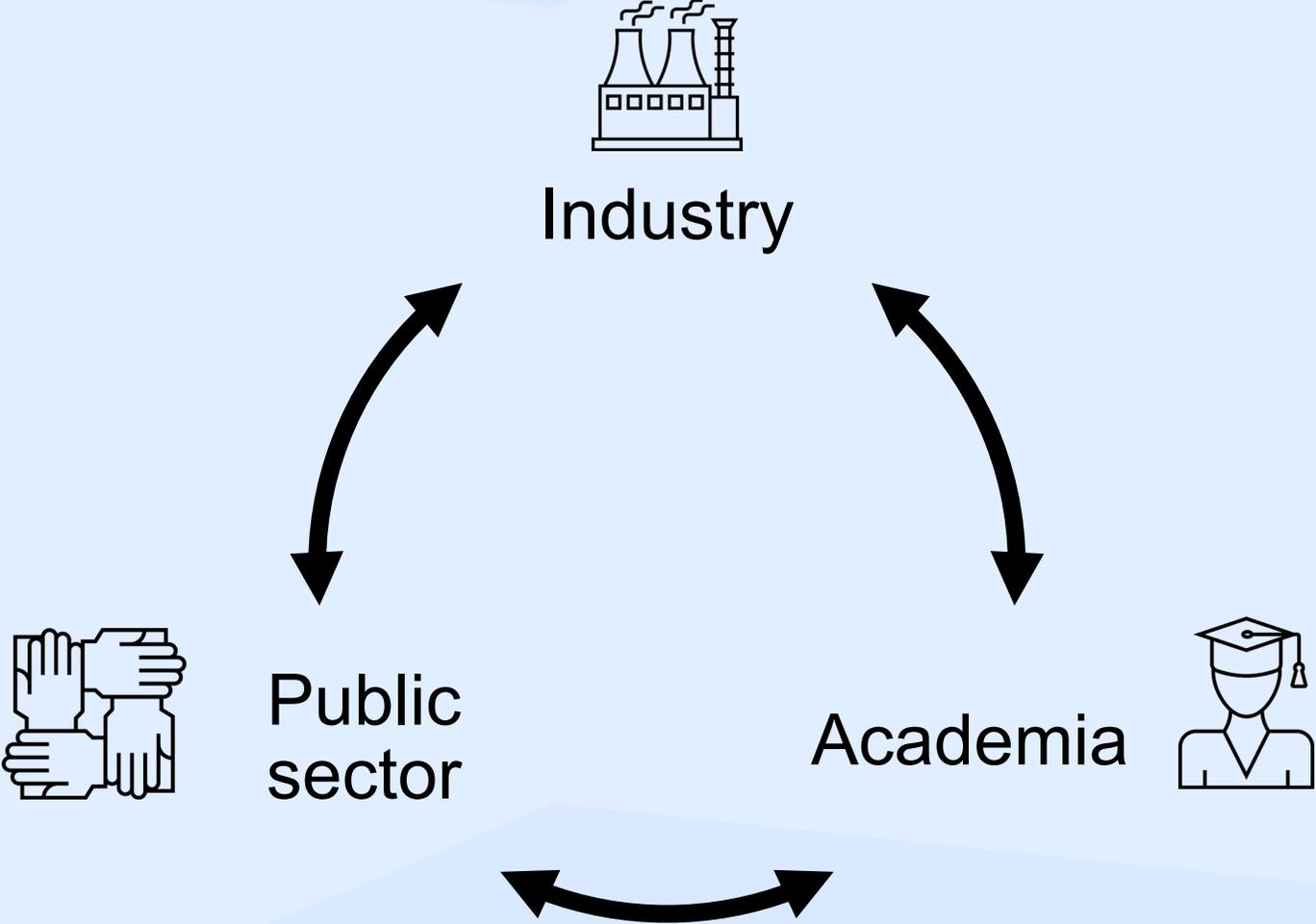
The innovation centre family



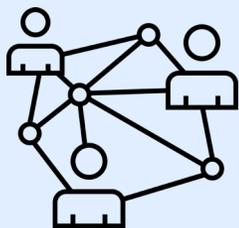
Supported by



Our connected ecosystem



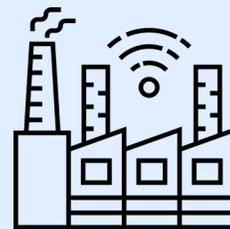
BE-ST unlocks innovation...



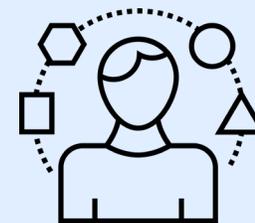
Across our
connected
ecosystem



Through
collaborative
projects &
programmes



At the
Innovation
Factory



By delivering
future skills
programmes

02

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, NextGen America

Construction and the built environment is responsible for

45%

Of global CO₂e emissions

60%

Of materials use in the UK

50%

Of the UK's total waste

Programme Components

Accelerate to Zero brings together **10** integrated programme components across **4** key areas:

- ▶ 1 x Zero Carbon Skills Programme
- ▶ 2 x Transformation Hubs
- ▶ 3 x Culture Change Programmes
- ▶ 4 x Innovation Labs

These integrated component parts of the **Accelerate to Zero** programme will foster collaboration, build capability, share outcomes and cross-fertilise learnings to ensure maximum impact can be realised.

1 Zero Carbon Skills Programme

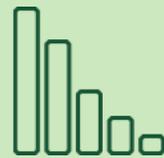


Skills, Knowledge & Competencies

2 Transformation Hubs



Supply Chain



Data Driven Performance

3 Culture Change Programmes



Procuring for Value



System Design



Leadership Development

4 Innovation Labs



Digital



MMC



Deep Retrofit



Sustainability

Innovation Factory 2.0

An additional 35,000sq ft of dedicated innovation space

An incubation hub for micro and SME businesses to transition from start-up to scale-up, focused on delivering maximum economic, social and environmental impact

A national Centre of Excellence for Deep Retrofit in Scotland

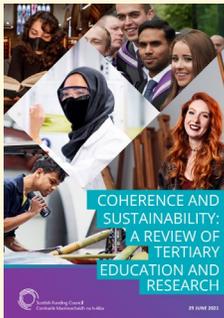
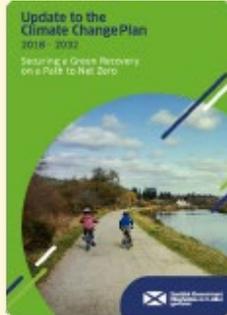


Sectoral Alignment

Accelerate to Zero is aligned to the key industry & government drivers of change, most closely with the recommendations and aspirations set out in **Scotland's National Strategy for Economic Transformation**, the **Programme for Government** the **Climate Change Plan Update**, the **Draft Heat in Buildings Strategy**, **Housing to 2040**, the **Draft Manufacturing Recovery Plan**, Scotland's **Digital Strategy**, the **Infrastructure Investment Plan**, the **Construction Recovery Plan** and the **Construction Accord**.

In a specific skills context, Accelerate to Zero responds to Skills Development Scotland's **Climate Emergency Skills Action Plan**, the Construction Industry Training Board's **Building Skills for Net Zero** report and Zero Waste Scotland's **The Future of Work: Baseline Employment Analysis and Skills Pathways for the Circular Economy in Scotland** report.

In addition, Accelerate to Zero also aligns with the SFC's ambition to build world class industry/academic partnerships that are mission focused and can deliver economic, social and environmental impact for Scotland.



03

Low Carbon Learning

Low Carbon Learning

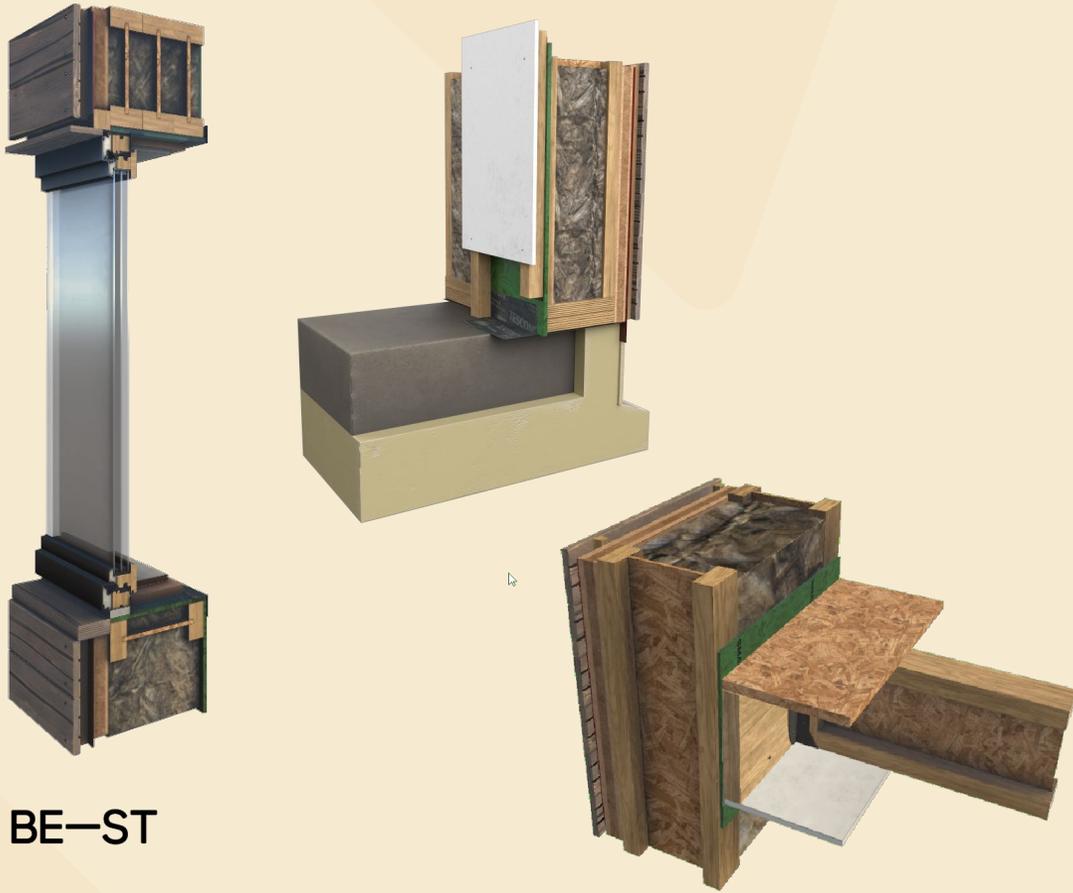
Scotland's first national Passivhaus, retrofit and fabric first training programme



PASSIVHAUS
in practice

Low Carbon Learning

Passivhaus Mixed Reality



BE-ST

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



Low Carbon Learning

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



Low Carbon Learning

Retrofit Webinars

AECB Carbon Lite Contractor Training

AECB EnerPHit Training

AECB Passivhaus Bitesize

Retrofit Coordinator Training

Understanding Domestic Retrofit Training

Immersive Learning Retrofit – through 360

Mobile Passivhaus training rigs for educators

Steel Rig– for practical training

Two Retrofit Rigs - for practical training

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

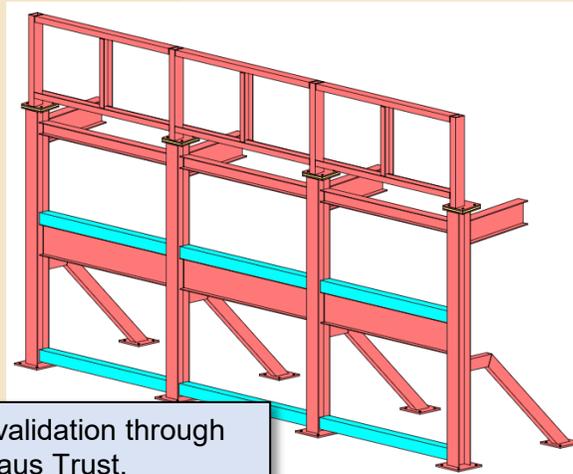


Low Carbon Learning

Steel Rig Retrofit Rig – in partnership with Morrison Construction



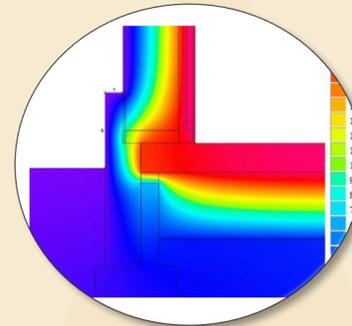
Incorporation of innovation:
i.e. weberwall/ k-briq



Design validation through Passivhaus Trust.

Detail development and modelling:
1. SFS infill
2. SFS oversail
3. Composite

Physical installation:
BSB (steel)
Keys (SFS)
Chemplas (Cladding)
Linnotech (Glazing)



Supply chain input, familiarisation and training.
BE-ST to use for training programme.



BE-ST



Low Carbon Learning

Programme Achievements



372 individuals trained face-to-face in Passivhaus standards



45 individuals accredited in Passivhaus Standards



1628 individuals trained online in retrofit/ passivhaus standards



152 individuals trained face to face in retrofit/passivhaus standards



72 businesses engaged in programme



123 jobs safeguarded and/or created



41 educators engaged in Passivhaus training



18.5% increase in knowledge and confidence amongst participant groups of low carbon construction standards for Passivhaus and retrofit.

Built
Environment
—
Smarter
Transformation

Thank you

BE—ST