

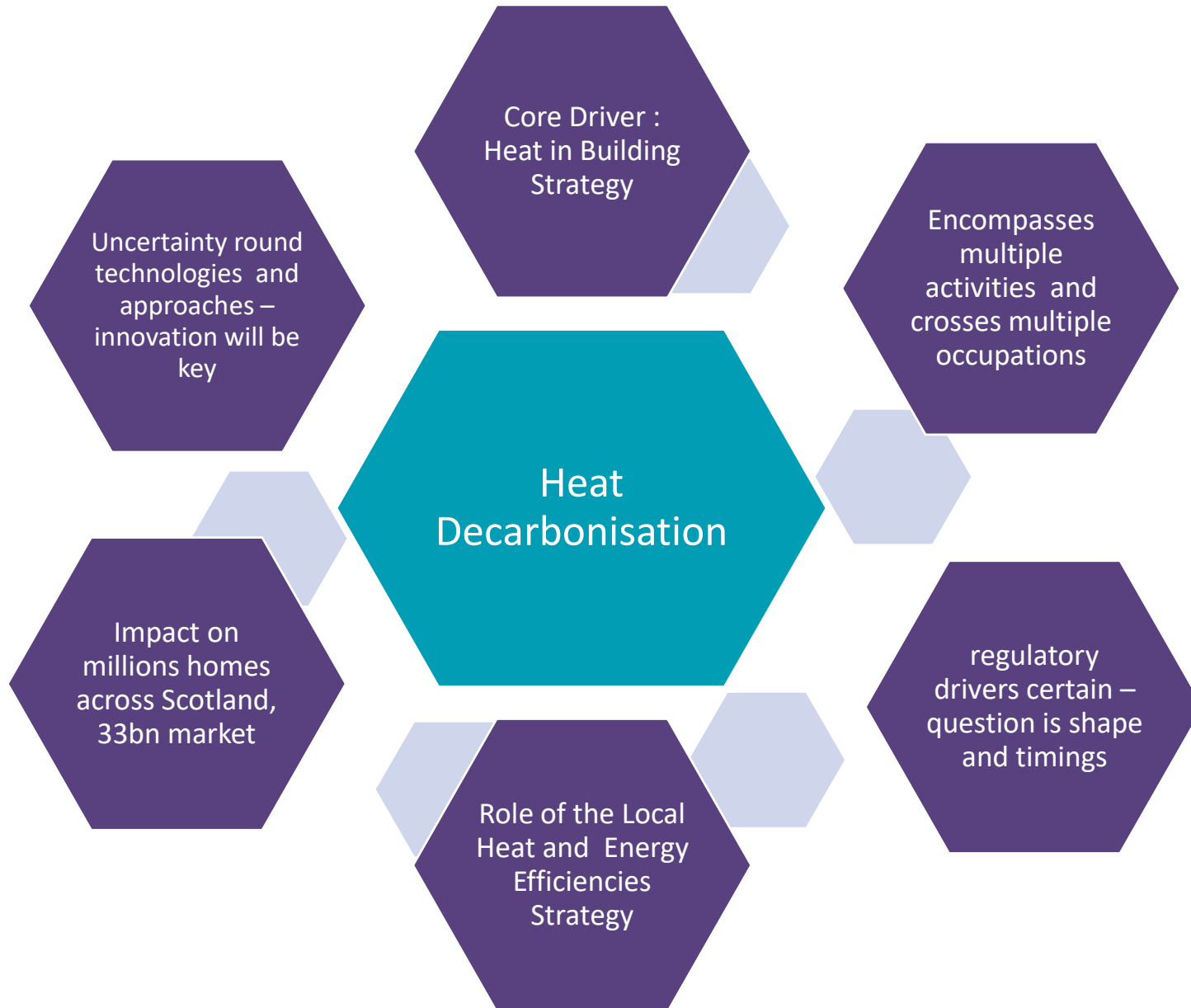
APSE Scotland Building & Housing Event

Feb 16th 2023



Making skills work for Scotland

Identifying Priority Areas for Skills Action



CESAP Dec 2020

Cross-Scotland Economic Issues ;

- Economy
- Climate Change
- Inclusive growth & equality
- Demographic Changes
- Labour Shortages

Some key numbers...

- 2.5 million homes in Scotland – only 262,000 are heating using from low carbon sources

- SDS Sectoral Skills Assessment
- 2022 and 2025, need 20,000 people (16,000 replacement and 4000 expansion)
- From 2025 and 2032, (37,600 replacement demand and 10,900 demand)

Most of these positions are within Skilled Construction and Building Trades

- *CITB ONS data shows that we need to recruit an additional 3910 workers a year to meet demand and over 19,550 extra workers needed by 2027, SDS data shows workforce growth and a requirement for an additional 20,000 people.*

- 4500 - 5000 Thermal Insulation Installers (1700)
- 5100 - 12700 Heat Pump Installers (900)
- 580 – 1200 direct electric installers (900)
- 320 - 4000 Heat Network Installers (no data)

Clean Heat and Energy Efficiency Workforce Assessment Report



Heat Decarbonisation Pathfinder background

- Need skills & training eco system in place
- Need to have sufficient number of existing workforce skilled in Heat Decarb
- Pathways and capacity to train additional people
- Timing is critical, years to train for some roles

Risks if don't address skills

Time Delays
Waiting list for work becomes unacceptable

Price Increases;
Cost of labor becomes artificially high

Damage quality:
Incompetent workforce or pressures on existing

Pathfinder Research

Regional Focus

Glasgow Region and Shetland

Mapping HD Investment

High level Job Demand

Job Insight : New & Emerging

Mapping Skills Provision

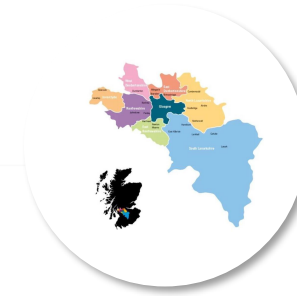
Analysis of strands and understanding impact across different stakeholders

Results



Shetland

- £19 million investment already underway
 - Combined energy efficiency and low carbon heat
 - £18 million domestic sector
 - £1 million mixed
 - Majority committed to retrofit projects



Glasgow

- £370 million investment already underway
- Majority is commercial in Glasgow
 - £289 million commercial
 - Over £80 million domestic

Issues and Barriers to Heat Decarbonisation

Issue/Barrier	Glasgow City Region	Shetland Islands
Fabric first approach	● ● ●	● ● ●
Fear of inducing fuel poverty	● ● ●	● ● ●
Changing rules of schemes	● ●	● ●
Lack of supply chain capacity	● ● ●	● ●
Increasing material and labour costs	● ●	● ● ●
Local authority rent cap	● ●	-
Achieving homeowner participation	● ● ●	● ●
Match funding	● ●	●
Conflicting information on best decarbonisation approaches and technologies	● ● ●	● ● ●
Lack of economic driver	● ●	● ●

Current & Future Skills Requirements

Skills Need	Glasgow City Region	Shetland Islands	Comment
Basic trades	●●●	●●	Competition seen as less of an issue in Shetland.
Installation engineers	●●●	●●●	Limited appetite to support Shetland from mainland.
Project development	●●●	●●	Seen as less of an issue in Shetland. Staff mobility less able to address issue in Shetland.

Jobs and Skills Demand

Skills

Skills required to help with heat decarbonisation that were mentioned include:

Design/ specification	Maintenance
Installation	Selling/ customer service
Retrofitting	Communication

- Some employers believe **all the skills we need exist** they just need **adapted** to new technologies, others think there are **skills gaps**.
- Most respondents agreed that they **struggle to obtain confident and competent staff** to work on heat decarbonisation due to **labour shortages**.
- **Employers need help to identify the skills** needed for their business.
- The [Scottish Installers Skills Matrix](#) for Energy Efficiency Measures sets out the recommended minimum qualifications for the various trades doing this work.

Jobs

Many job roles will be needed in **increased demand** to meet heat decarbonisation targets. These include:

Plumbers & HVAC engineers	Surveyors
HVAC electricians	Quality assessors
Architects	Management roles
Roofers	Sales people

New and emerging job roles that will be created include:

Heat pump installers	Retrofit designers and coordinators
Heat pump designers	Net zero heating sales and communication

*“The pipeline of staff needs to come from three sources: **upskilling** existing staff, **growing the overall size** of the workforce, e.g. through apprenticeships, and looking for **staff from adjacent sectors** such as oil and gas”. - Interviewee*

Challenges

Lack of widespread consumer demand

“Accessing domestic market is currently difficult due to cost”

Workforce data limitations

“Difficult to identify low carbon jobs and measure workforce”

Lack of awareness

“Lack of understanding of the technology from public and industry”

Timelines need to be clearer

“Need a long-term delivery and skills plan”

Fear of fuel poverty

“Need to make sure no one is left behind”

Financial concerns

“There is a big question of who will pay for all of this”

Technological difficulties

“The technology needs to be carefully installed or it won’t work – requires skilled people”

Lack of collaboration

“Industry, government and education system need to align”

Accessing skilled staff

“Need to ensure the workforce is skilled before demand picks up”

Opportunities

High levels of motivation

“People want to meet targets – could drive investment”

Job creation possibilities

“Huge opportunity this brings in driving employment”

Improving energy efficiency

“Taking a ‘fabric first’ approach will reduce the demand for heat”

A chance to improve diversity

“Creates an opportunity to improve diversity of the industry and reflect society better”

Technological opportunities

“Opportunity to bring about technological and scientific advancements”

Scotland could lead the way

“Scotland has the opportunity to lead the way in this space if we can get it right”

Benefits to the Scottish economy

“The investment going into this could hugely benefit Scottish businesses and the economy”

Thank You