



Local delivery of heat and energy efficiency

Workshop 3: Supply chain and skills development





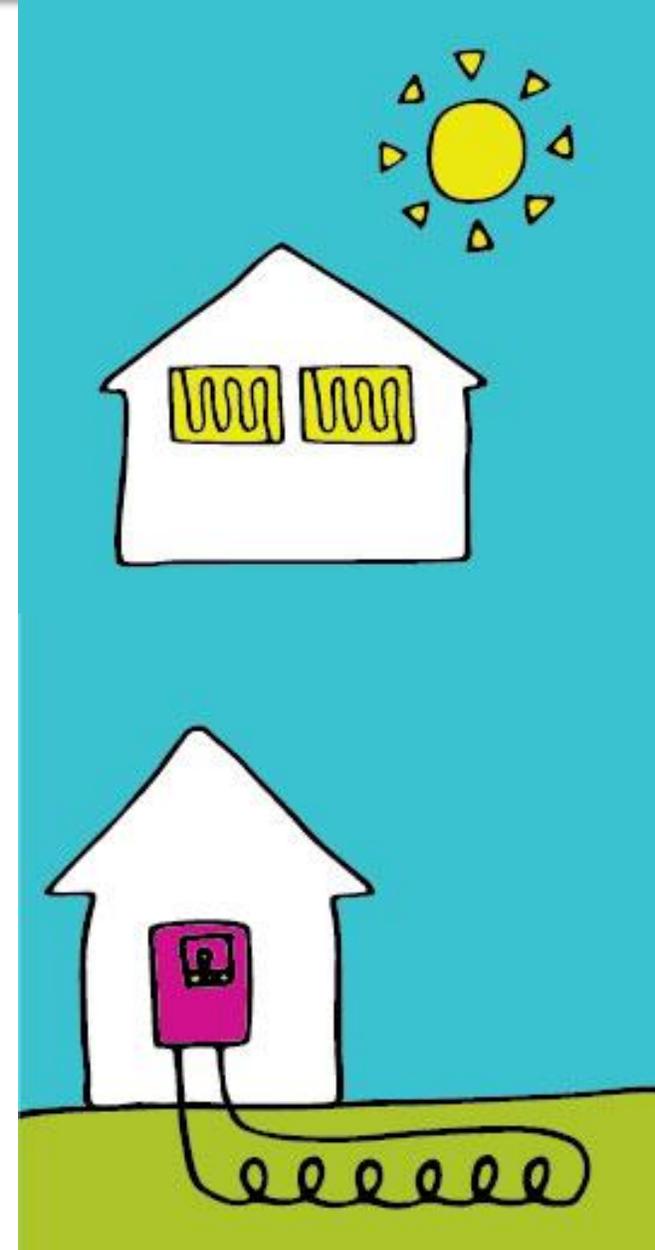
WORKSHOP OUTPUTS

Different roles in advice and retrofit assessment

- There was both a clear national and local role in this. In many areas national should lead but the local authority has the particular role in the customer journey, locally specific requirements and benefits.
- LAs should be looking to support early stage engagement and awareness raising with customers and SMEs
- The role of Retrofit assessor and coordinator are good in theory and could save both the householder and installer time - but are challenging in practice.
- Sign off and design of systems (including energy efficiency) – could be taken or done separately from the installation. LAs (or an agency) could then have a roll in scrutinising and signing these off.

Retraining and career switching

- There needs to be much more emphasis on how interesting and specialist a career in green heating is, not only to get general numbers up, but to widen diversity
- LA's can and should be focusing on helping schools highlight the great career prospects of low carbon heating apprenticeships and NVQs.
- This needs to happen now as the median age of gas safe engineers is about 55. They will be less likely to upskill and we will be left with an even small pool of installers in 5-10 years' time.



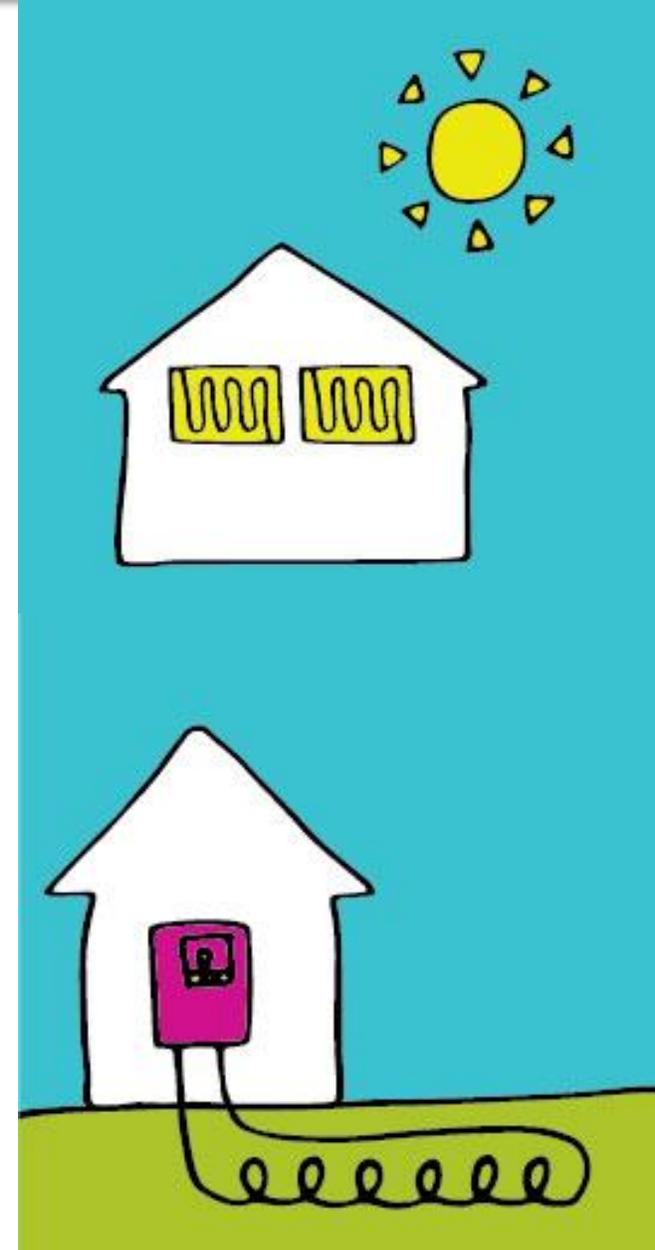
Key takeaways from session

Entry level skills

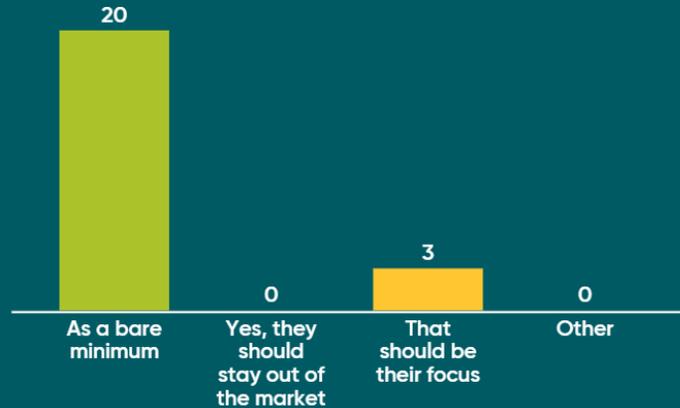
- Apprenticeships are good, and businesses like them, but the pay is terrible so they are not attractive. That needs to be addressed and the status needs to be elevated.
- SMEs are a core part of the market here and so processes need to be better tailored to small or sole trader businesses. For example it's very hard for sole traders to take on an apprentice. So NVQs are very important, but uptake is low.
- Important to make grants / loans available to those businesses who take on apprentices and help them develop 'on the job' skills.
- The need for strategic skills roadmap was discussed, in order to go further than apprenticeships or grants, and that this should come from national government.

Creating demand

- Local authorities have a clear role in supply chain through their own procurement – but can be limited in those without housing stock.
- Sufficient funding, skills and resource in a LA is critical to deliver on these local benefits – many don't yet have the internal skills to engage.
- LAs working in partnership with communities can have big benefits (for example Devon in delivery home assessments) However this is not universal and there are a lot of barriers.

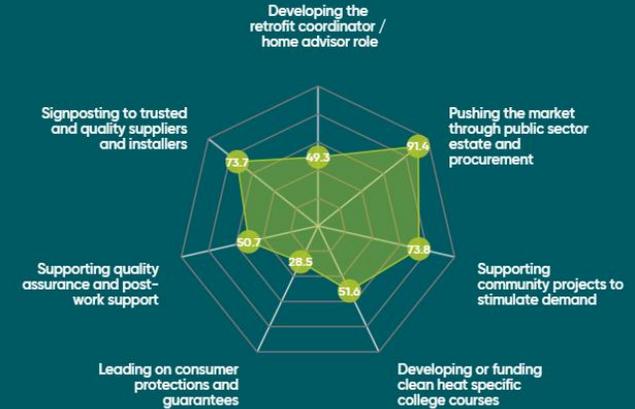


Statement: Local authorities should focus on their own estate and procurement practices



23

What is the type of local authority intervention required?



24

1. The consensus from the delegates indicated that local authorities should not only focus on their own estate and procurement practices when developing skills and supply chain but also support and encourage development across other organisations and projects.
2. Delegates highlighted that further intervention from local authorities could be done through supporting community projects to stimulate demand, pushing the market forward with the local authorities own procurement, and signposting to trusted suppliers and installers. Delegates believed it was less important for them to lead on consumer protections and guarantees.

Cara Jenkinson, Ashden
Nathan Gambling, BetaTeach
Sassy Crawford, Brighton & Hove City Council
Kevin Wilson, Brighton & Hove City Council
Kayla Ente, Brighton & Hove Energy Services Co-op (BHESCO)
Emily White, Bristol City Council
Brenda Boardman, Environmental Change Institute, University of Oxford
Charlotte Large, EQUANS
Jonathan Morris, Essex County Council
Belinda Humphrey, Gateshead Council
Bean Beanland, Heat Pump Federation
Joshua Emden, Institute for Public Policy Research
Holly Jones, Isle of Wight Council
Grace Abel, Local Government Association
Vicky Kingston, Local Partnerships
Sarah Jarman, MCS Foundation
Jacob Hall, Mendip District Council
Jorge Luis Aguilar-Santana, Midlands Energy Hub
Alejandro Garcia, Midlands Energy Hub
Madeleine Gabriel, Nesta
Marissa Granath, North East Local Enterprise Partnership

Sophie Whinney, Regen
Poppy Maltby, Regen
Fraser Stewart, Regen
Robert Evans, Regen
Tim Crook, Regen
Hazel Williams, Regen
George Middlemiss, Regen
Neil Pendered, Sedgemoor District Council
Nadia Smith, South East London Community Energy
Cara Naden, South Somerset District Council
Kieran Sinclair, The Association for Decentralised Energy
Richard Lowes, The Regulatory Assistance Project
Gavin Derbyshire, Totus
Karen Barrass, UK100
David Elmes, Warwick Business School
George Simms, West Midlands Combined Authority
Marouane Azennoud, West Northamptonshire Council
Nadia McPherson, West Yorkshire Combined Authority
Neil Johnson, West Yorkshire Combined Authority
Leah Robson, Your Energy Your Way

- We need heat decarbonisation at **scale** and **speed**. Delivery needs to be **efficient** to minimise cost.
- The Net Zero Strategy accepts the need for a **national/local partnership** to deliver this.
- What is the **role for Local Authorities** in this? What powers, funding and capacity are needed?
- **What is most efficient** to be delivered at a national level? Methodologies, regulation etc.

The project is based around three themes where the relationship between national and local roles will be **key to efficient delivery**:



1. Heat zoning and planning



2. Citizen/community engagement



3. Skills and supply chain development

- 10:10** **What role should local authorities have in upskilling the supply chain for deployment of low carbon heat at scale?**
Tim Crook, Senior Project Manager, Regen
- 10:20** **Training from the installer's perspective**
Leah Robson, Technical Director, Your Energy Your Way
- 10:30** **A regional approach to heat, skills and supply chain**
Marissa Granath, Programme Manager – Energy Accelerator, North East Local Enterprise Partnership
- 10:40** **Q&A**
Short break
- 11:00** **Facilitated breakout groups**
- 11:45** **Feedback from breakout groups and voting**
- 12:00** **Close**





TIM CROOK

SENIOR PROJECT MANAGER, REGEN

Why do we need to think about low carbon heating skills now, and who should do what?

- **Decarbonising heat is no-one's job (no single mandate)**
- **Heat is an unregulated market**
- **Our housing stock generally has poor energy efficiency**
- **Most homes are owner occupier. So applying a 'stick' is politically sensitive**
- **There is significant uncertainty about centralized solutions, such as heat networks and the role of hydrogen**
- **The money has to come from somewhere, and it's a lot to do it all properly**

English housing by tenure in 2021
(24m total homes)



Key Policy Timeline

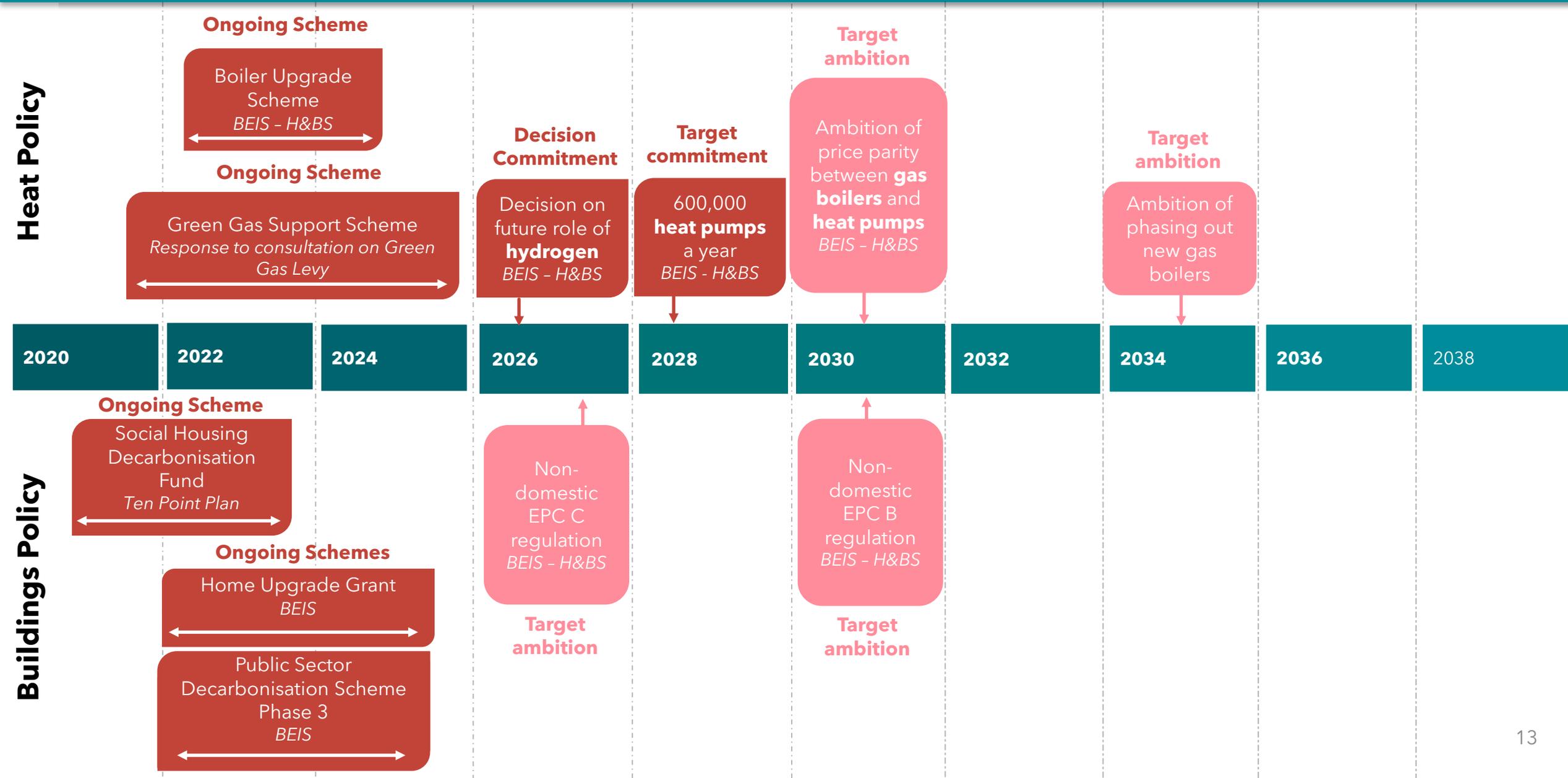
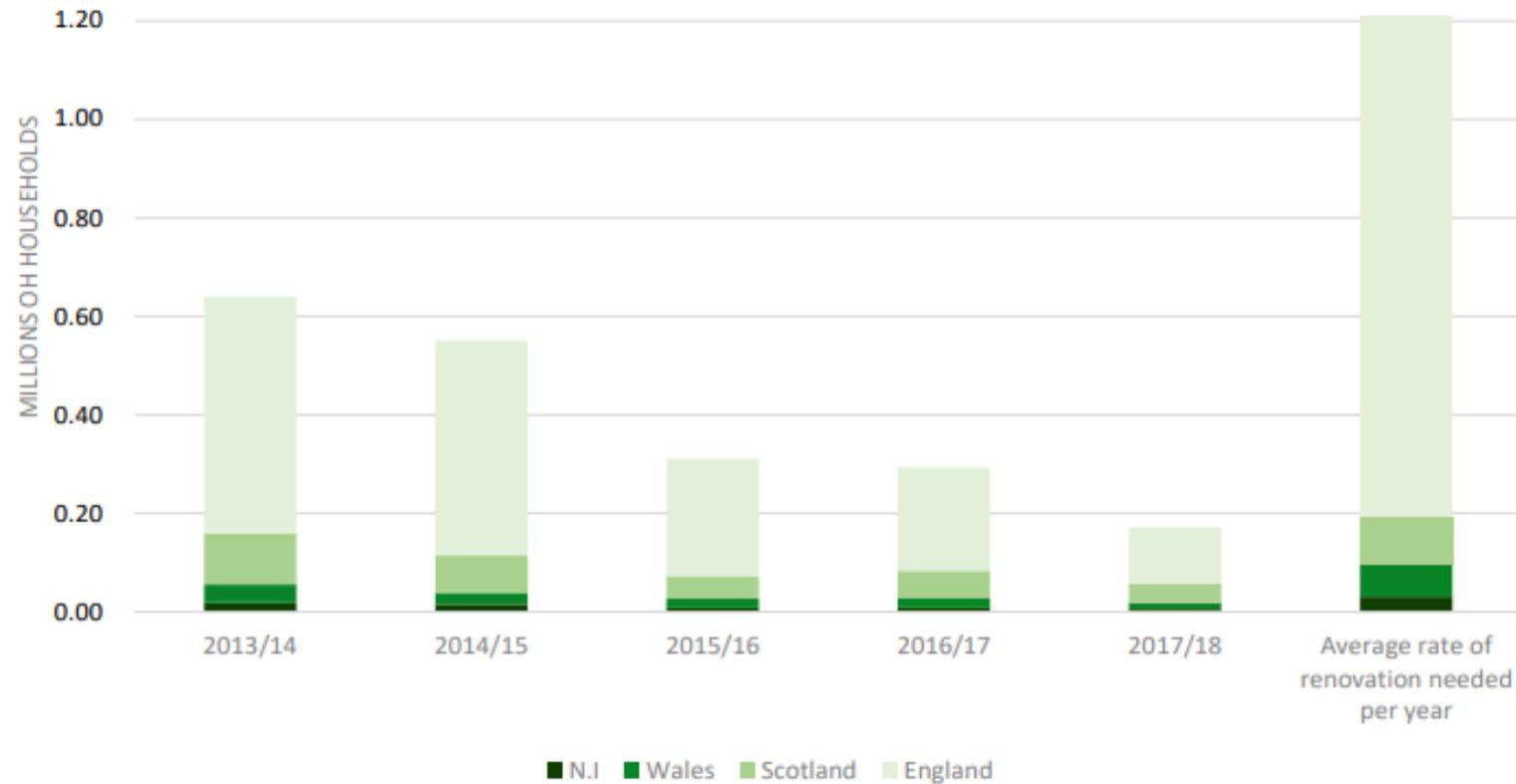
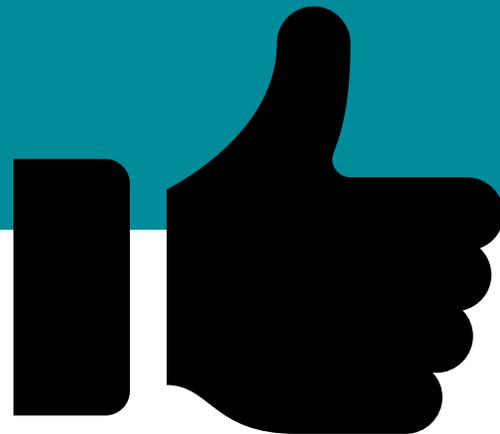


Figure 2: The number of homes across the UK improved with significant energy efficiency measures with government programme support compared to the rate required to meet the 2035 EPC C target.



BUT LET'S JUST ASSUME ALL THAT IS FIXED



How does skills and training normally work?

Green Jobs task force
(Nov 2020)



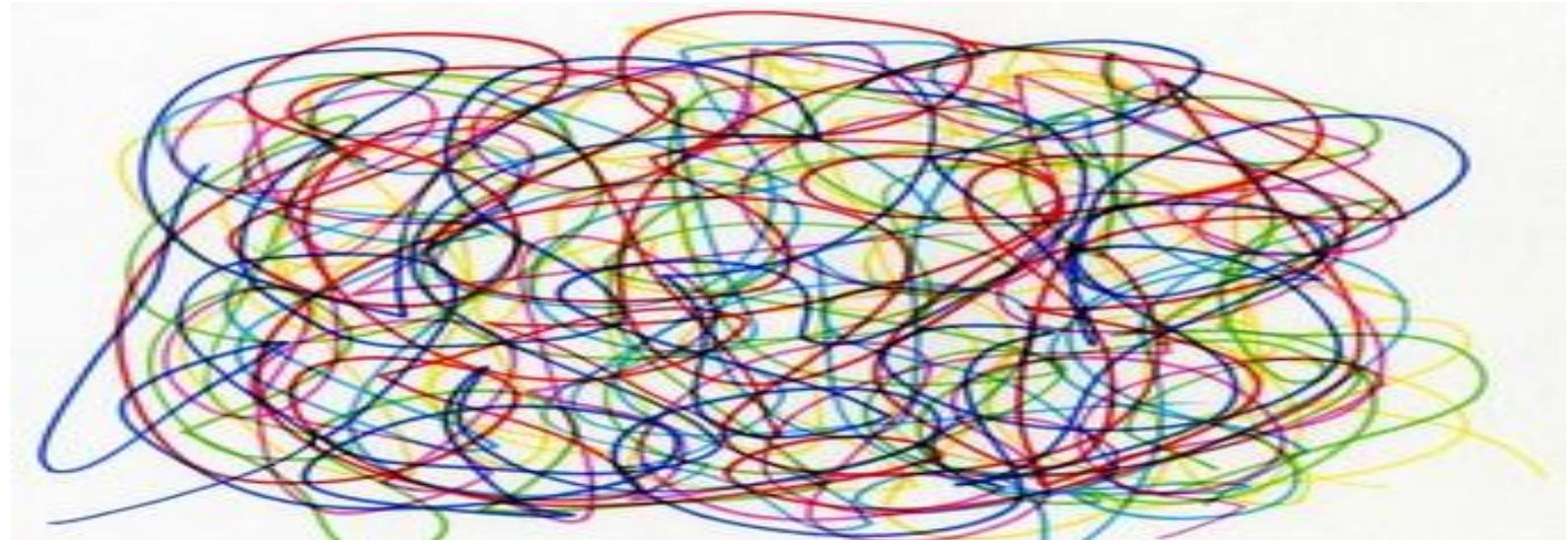
Government

DWP

DfE

Local Authorities

Businesses



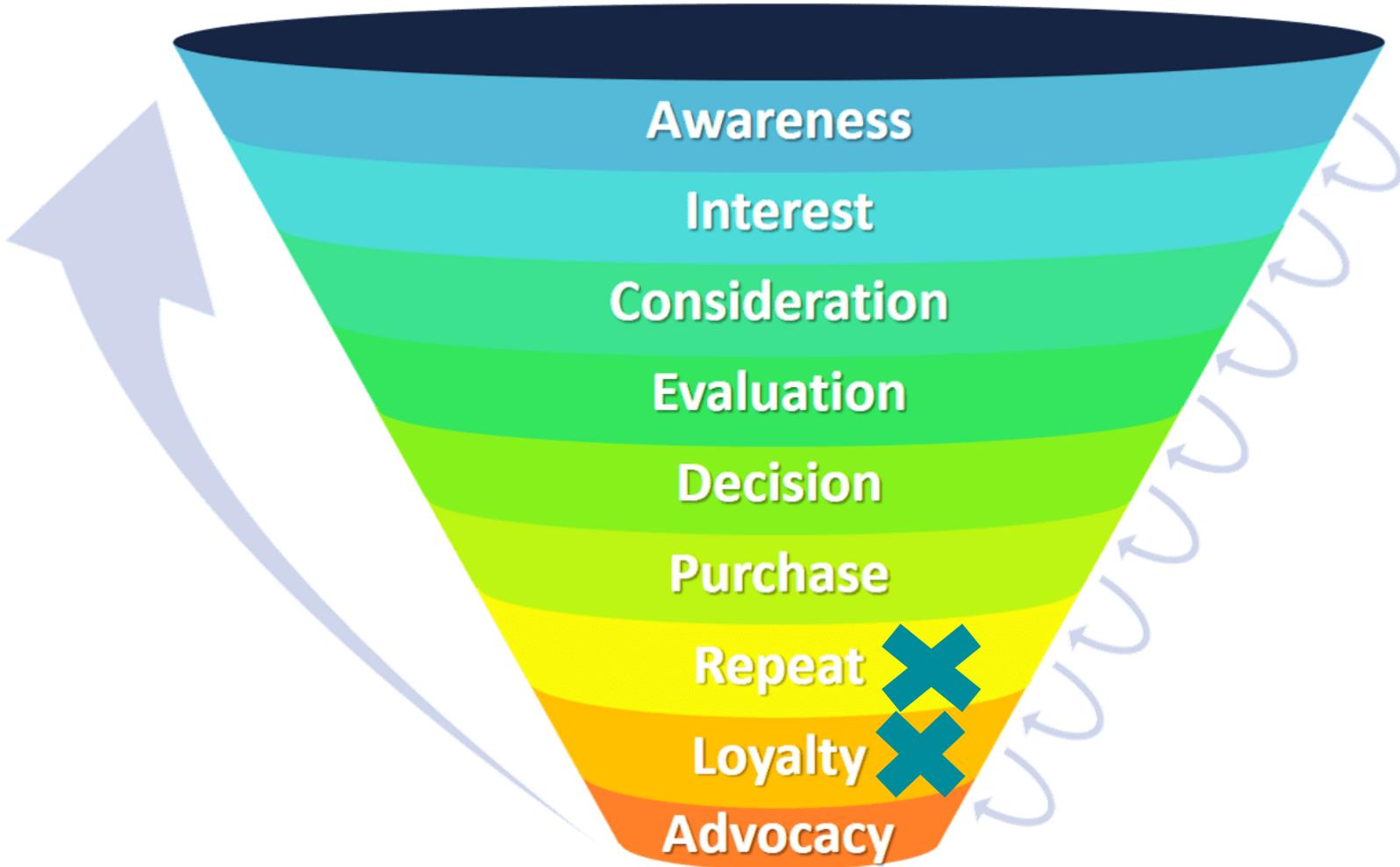
Universities

Colleges

Private training providers

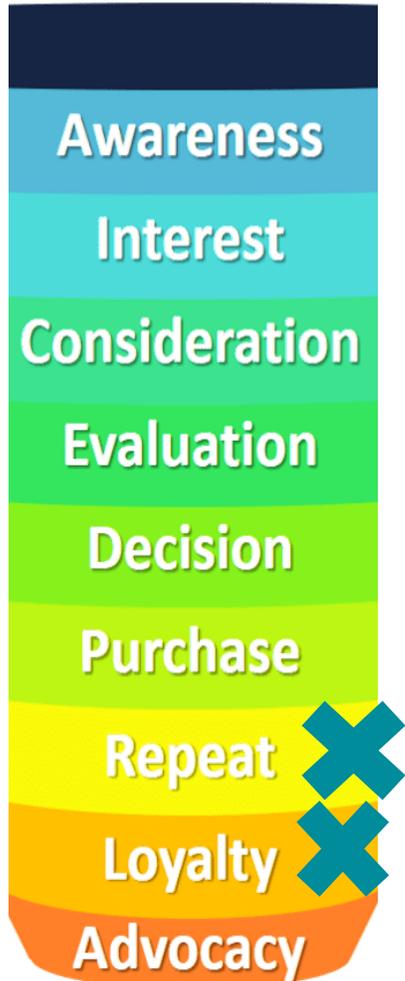
Assuming there is demand and funding, what is missing?

Low Carbon Heat customer journey funnel thing



LA?	Supply chain
Yes?	A bit?
Yes?	Yes, but not too much
Not sure	Yes
Maybe	Yes
No	Yes
Hell no	Yes please
(Forget these ones)	
Sort of	Why not

So let's assume those things are addressed



LA role?	Supply chain role	SKILLS Gap
Yes?	A bit	🙄
Yes?	Yes, but not too much	🙄
Not sure	Yes	🙄
Maybe	Yes	🙄
No	Yes	Depends
Hell no	Yes please	Fine
(Forget these ones)		
Sort of	Why not	N/A



For low carbon heat deployment at scale, I think these bits are missing from the customer journey.

Who's job is it to fund and build those skills?

What could a LA do help s/c companies plug the gap?



Closing the UK's green skills gap

Industry

- A UK-wide body and framework for green jobs, to match supply and demand regionally and across sectors.
- Local skills plans that link businesses with universities and colleges and reflect local dynamics.
- A requirement for sector boards to collect frequent, granular labour market intelligence for the green transition.
- A super-deduction for training, providing 130 per cent tax relief for investment in employees' green skills.

Institutions

- New green courses, using the new framework to understand the landscape of the future workforce.
- Environmental modules in other courses as the new skill requirements are not confined to green jobs.

Individuals

- A public facing campaign to increase knowledge about green skills and their benefits, complementing efforts by industry.
- Support for workers while they retrain, in the form of loans, grants or maintenance payments.
- Use existing programmes to boost green skills, such as Kickstart and the digital skills bootcamp model.

Assuming that interest in low carbon heating increases, and policy/regulation supports it, what should the LA/LEP role be then?

1

LAs/LEPs don't have to do anything special. SMEs will invest in the right skills mix to deliver end-to-end delivery for customers as the demand increases, including new provision

2

LAs/LEPs should be lining up funding to help SMEs invest in training and skills, particularly new training, but stay out of the customer protection and awareness raising stuff

3

LAs/LEPs are a critical element of raising awareness amongst homeowners and linking customer to accredited businesses, but developing new provision is too slow

4

LAs/LEPs should be doing it all. Helping homeowners find solutions and funding, and helping SMEs train new staff by supporting schemes and skills hubs. One-Stop shopping

National support: grants, schemes, targets, apprenticeships, new quals, work?



LEAH ROBSON

TECHNICAL DIRECTOR, YOUR ENERGY YOUR WAY



An Installer's Perspective on Training

Produced by: Your Energy Your Way CIC

4 May, 2022



What is the current training landscape?

There are 3 routes into plumbing and heating:

- Fastrack courses that give you a City and Guilds Level 2 Diploma in Plumbing Studies in 8 – 10 weeks with no work experience.
- 2 year City and Guilds Level 3 Diploma in Plumbing and Domestic Heating, typically undertaken by students of A-level age with very little work experience.
- Traditional 4 year apprenticeships to achieve a City and Guilds Level 3 NVQ in Plumbing and Domestic Heating combining on the job training and day/week release to college.



What are the barriers to entrance for new joiners?

General barriers

- Lack of employers offering apprenticeships
- Image problem compared with graduate jobs
- Lack of opportunity to see the work first hand
- Poor apprenticeship wage discourages older candidates

Barriers for diverse candidates

- Lack of supportive environment once in the role
- Lack of role models
- Difficulty of career changing into the role

Source: [How to cut carbon out of your heating - BBC Future](#)



Why do we need diversity in the sector?



- According to data from the Gas Safe Register, released in 2017, 10% of gas engineers were over the age of 65, 29% were aged between 55 and 64, with a further 38% between 45 and 54.
- More worryingly only 7,500 engineers (6%) of the workforce are under the age of 35 and, if current trends continue, there may only be a further 7,500 new gas engineers in the next decade. This would mean that, by 2029, the total workforce would shrink by over 30,000, even if engineers continue to retire later than the current average.
- Source: [HVP Magazine - The heating workforce is shrinking and that's a problem](#)
- There are approximately 12,000—15,000 female plumbers in the UK, or around 1% of the total number, which sits somewhere between 120,000—150,000
- The BBC reported in September 2021 that nearly 60% of young people approached said they felt very worried or extremely worried about climate change. The heating and plumbing industry needs these young people to make the link between reducing CO2 emissions and a career in the sector.
- **We believe the female population of this country is a massive untapped resource when it comes to the renewable heating industry.**

What could help?

Installer Ideas:

- Local Authorities can ensure that Local Value is captured throughout the supply chain
- All contracting bodies could set apprentice quotas for directly contracted works
- Work with local schools to organise work experience with heating and plumbing engineers
- Create a loan fund to aid retraining into the sector
- Award grants or loans for businesses that are willing to take on apprentices
- Speed the creation of relevant training courses in both design and installation of heat pumps
- Aid the creation of networks of installers in your area to work together with you on the apprenticeship issue





MARISSA GRANATH

PROGRAMME MANAGER – ENERGY ACCELERATOR, NORTH EAST
LOCAL ENTERPRISE PARTNERSHIP

A Regional Approach to Heat, Skills and Supply Chain

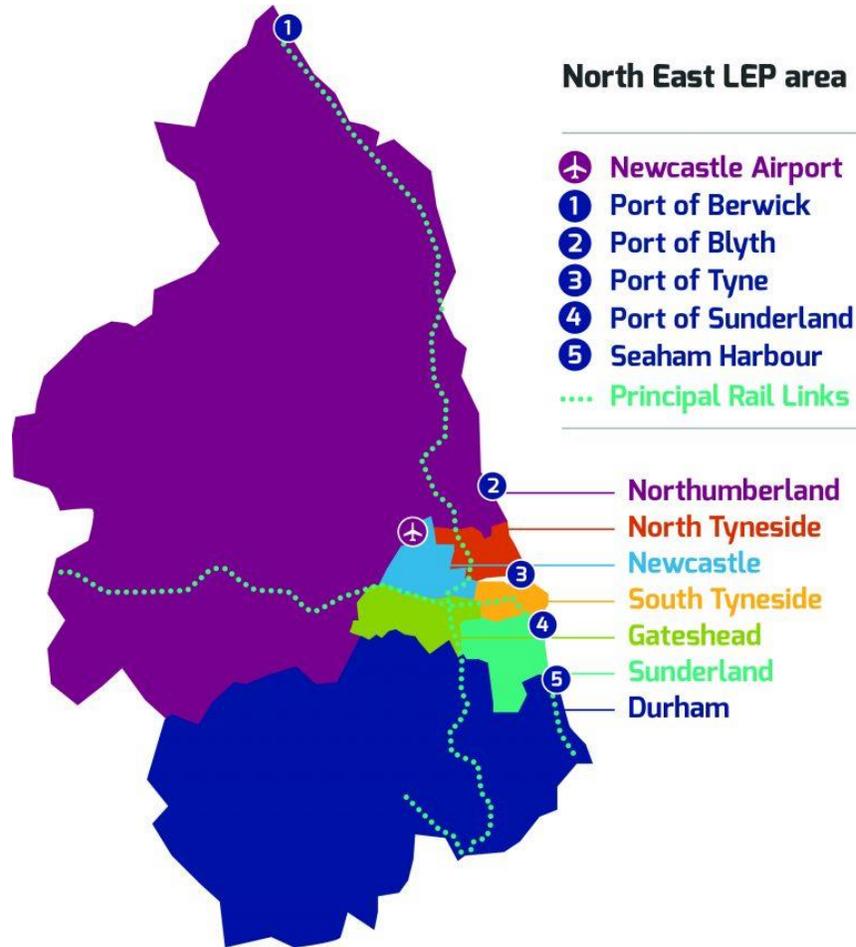
Marissa Granath

Energy Accelerator Programme Manager

North East
Local Enterprise Partnership

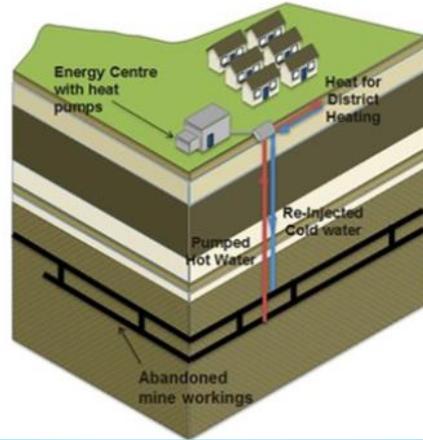


The North East LEP – at a glance



- One of 38 in England. A public, private and education sector partnership
- Develop and deliver the region’s Strategic Economic Plan – **“more and better jobs”**
- Covering 2 Combined Authority and 7 Local Authority areas
- 2 million residents, 52,500 businesses
- Energy identified as key sector for delivering economic growth and prosperity
- Leading to the creation of the “Energy for Growth” strategy
- **£500mn heat network project pipeline**

The Energy Accelerator Programme

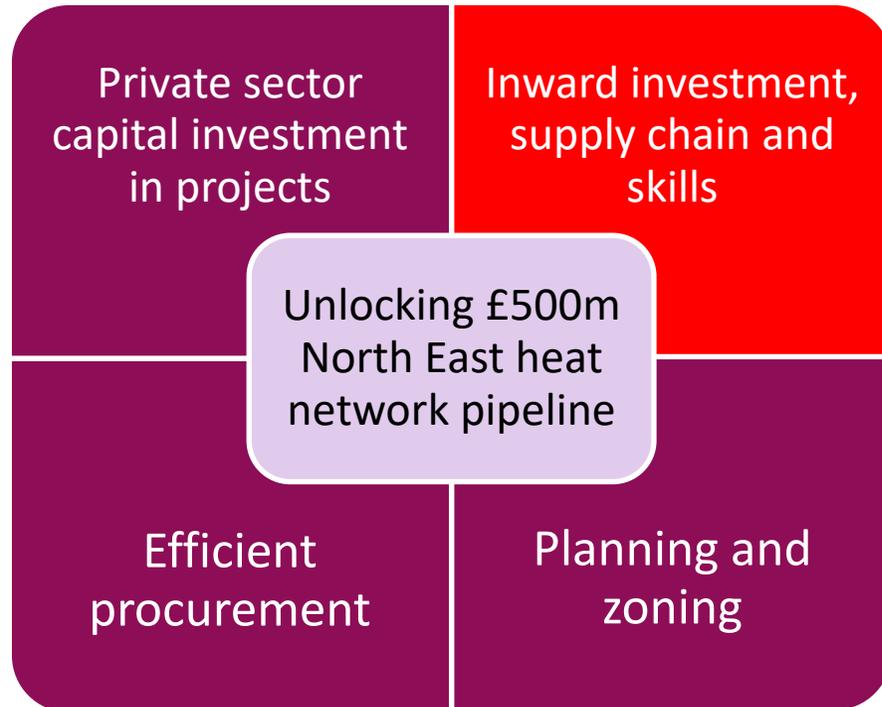


- Supporting local authorities to accelerate development of low carbon projects through:
 - £900k to fund up to 50% consultancy work
 - And / or our time and expertise
- We support projects that:
 - Have buy in and clear delivery route
 - Have clear benefits
 - Need our support to go ahead
- Currently supporting 10 projects
 - 8 low carbon district heating
 - £150m value



A regional strategy to accelerate pace and scale of delivery

Focussing on 4 key strategic themes:



- Aggregating projects into a **regional pipeline** sends a clear signal to the market
- Demonstrates **scale** of opportunity in the North East
- Enables **collaboration** and **partnership working** across the region
- Encouraging **supply chain** investment, **job creation**, and **skills programmes**

The LEP's involvement in delivering skills and supply chain growth

Examples of activities

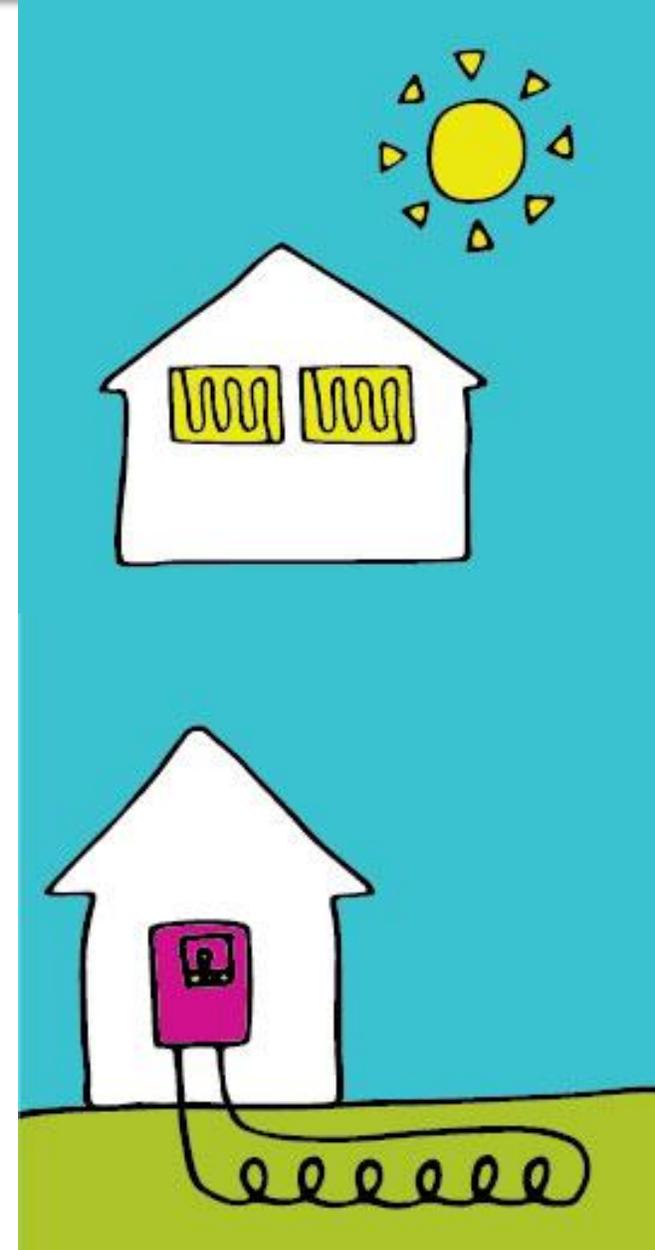
- **Supporting sector development** – Energi Coast offshore wind cluster
- **Building the evidence base** – heat decarbonisation skills and supply chain study
- **Developing action plans** – Domestic Energy Skills Assessment
- **Funding** – e.g. South Tyneside Council Renewable Energy Centre of Excellence

Key to success:

- **Strong regional partnerships** public sector, businesses, education, sector bodies etc
- **Shared sense of purpose** – what are we all trying to achieve?
- **Sector expertise** – evaluate, prioritise and communicate opportunities
- **Communication** – make it exciting!
- **Coordination** – who keeps this moving?
- **Collaboration** – no one can do this alone

- 1. How active or passive should local authorities be in supporting the existing low carbon heat supply chain to upskill?**
- 2. What is the local authority role in tackling emerging needs of the retrofit journey, such as retrofit assessor and coordinator?**
- 3. What is the local authority role in funding/shaping new courses and training, and recognising them in their own procurement?**

In general, how should national government best support local authority activity, to speed up low carbon heat deployment, across these themes?

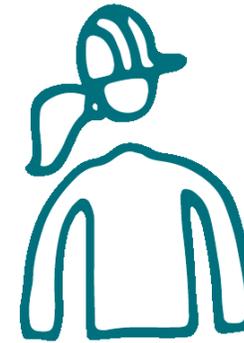




BREAK

- ✓ Workshop 1: Heat zoning and strategic planning
- ✓ Workshop 2: Citizen and community engagement
- ✓ Workshop 3: Supply chain and skills development

Paper launch in July



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4 May, 2022