



# **Bridging the Gap Accelerating Heat Decarbonisation**

# Welcome



# Speakers

## Hosts



**Abbie Badcock-Broe**  
Head of Strategy



**Daniela Rios**  
Customer and Stakeholder  
Engagement Partner



**Chris Unsworth**  
Strategy Manager

## Panel



**Anne-Marie Liszczyk**  
Whole Energy System  
Transformation Manager



**Rita Wadey**  
Head of Hydrogen



**Annie Truong**  
Consumer Strategy Lead



**Faith Natukunda**  
Regional Strategic planning  
manager



**Alex Hart**  
Zero Carbon Operation  
Manager

# Purpose

Share the major themes from stakeholder view on how to accelerate heat decarbonisation and to highlight next steps beyond this year's Bridging the Gap

# Agenda

What is Bridging the Gap?



ESO

Why Heat?



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How we do it



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Our Stakeholders



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What we heard



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Next Steps



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# What is Bridging the Gap?





**Bridging the Gap aims to explore how the gap to Net Zero could be closed through engaging on areas of uncertainty. This year the focus was on heat decarbonisation**

### Previous work timeline

**IOIO  
IOIO**

**March 2021**

Data, digitalisation, technology and markets for a decarbonised electricity system



**March 2022**

Peaks and troughs in the electricity system in 2035 and the actions required for flexibility



**March 2023**

2035 system flexibility in our Future Energy Scenarios



**March 2024**

Decarbonisation of heat

# Why Heat?



# FES 2023 highlighted the need for accelerating heat decarbonisation, with 3 core actions required



## Focus on heat

Accelerate the decision on the future of residential heat



## Empowering change

Ensure the transition is fair for everyone by identifying clear pathways for consumers who find it difficult to decarbonise



## Energy efficiency

Prioritise fabric efficiency improvement and grants for decarbonised heat



# How we do it



# Bridging the Gap



Identify a topic that is strategically significant to the sector

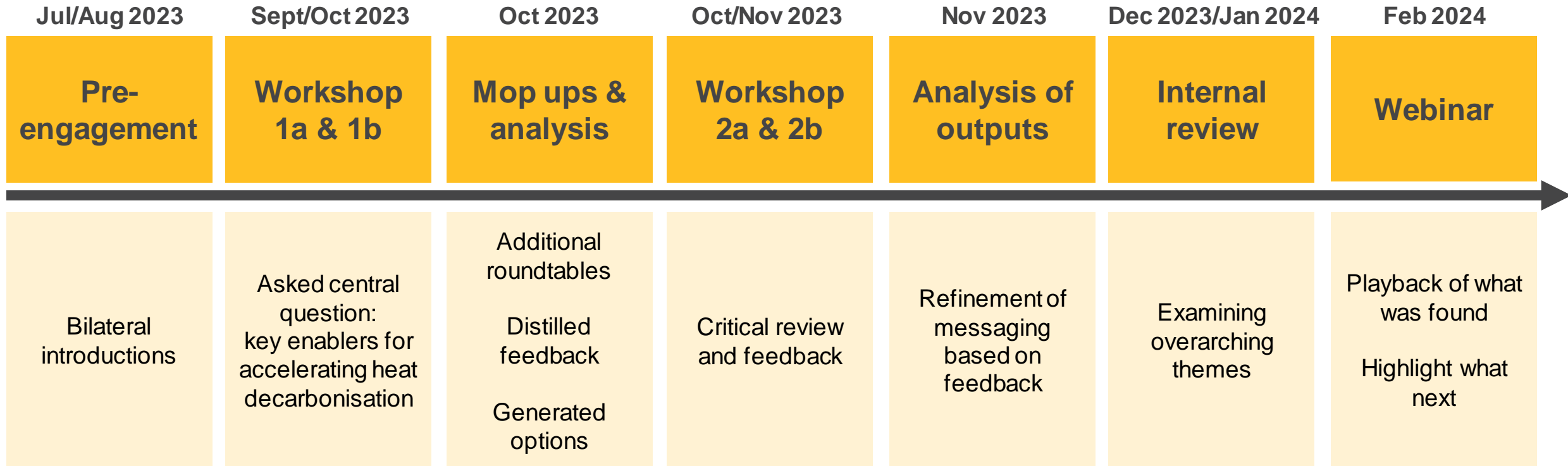


Engage with diverse and nationally representative stakeholders to listen and understand a broad range of opinions



Bring together stakeholder views into major themes to highlight how to progress

# For heat, we have synthesised and iterated the perspectives from a series of stakeholder engagements during 2023



# We digested the feedback from stakeholders and assessed it to highlight the views that were common across stakeholder groups

The final summary presented today has come from the content generated by stakeholders from different engagement opportunities (workshops, bilateral meetings and mop-up conversations). The content was grouped into major themes that emerged from the collection of stakeholder views and taken forward into the final summary. This summary does not represent an ESO position.

## We used 3 criteria to help in analysis:



### Consensus

The **proportion/quantity of stakeholders** behind each message



### Diversity

The **range of stakeholders** behind each message



### Evidence beyond our work

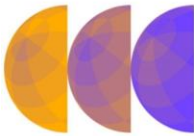
Whether the message is also supported by other evidence externally

# Our Stakeholders



# We engaged with a diverse range of stakeholders from across energy and development sectors

## Energy sector



UK



## Development sector

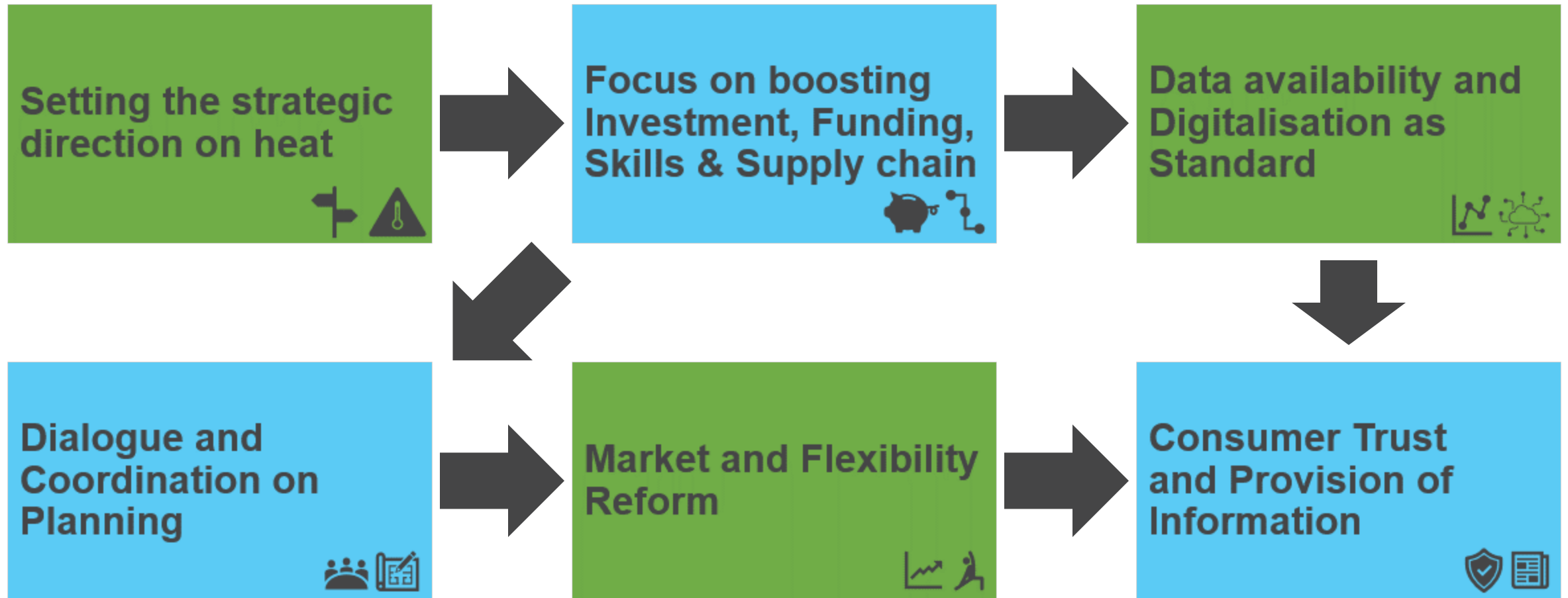


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# What we heard



# We heard that there are 6 bridges to cross to accelerate heat decarbonisation





# Setting the strategic direction on heat



# You said...

## Clarity

- Clear strategic direction on heat decarbonisation from Government is an important key enabler
- Clarity on roles in the policy framework is needed going forward

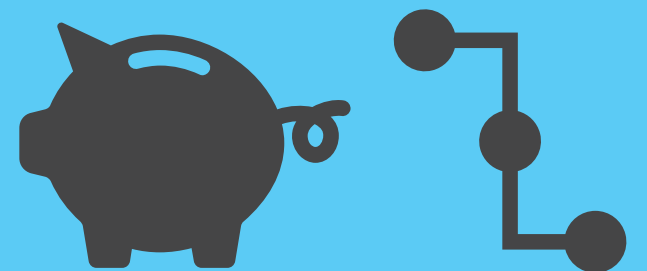
## Basis for Direction

- The following are foundational factors within the strategic decision on heat:
  - The proposed hydrogen network and location of industrial clusters is a basis for providing practical information needed for regional decision making
  - Hydrogen & Heat networks use needs to be considered within specific use cases

## Nature of Direction

- National entities need to work with regional entities to enable decisions for each community
- The earlier the decision is made by Government, the better

**Focus on boosting  
Investment, Funding,  
Skills & Supply chain**



# You said...

## Direction

- Heat decision is key to bring forward investment in heat decarbonisation
- Heat decision will give the certainty needed for supply chain development
- Heat decision will give the certainty needed to build the skills needed for delivery
- Certainty from decision will enable new entrants into the market to increase competition

## Training

- Widespread accreditation of installers is needed to help with quality and trust
- Central energy institutions should work with educational institutions to expand options
- Training institutions need to develop targeted and distinct talent pipelines
- Increase uptake by making career path attractive. Encouraging diversity is key

## Local & International Resilience

- Increasing the resilience of local and UK market is a key enabler
- This can be achieved through public and private coordination to develop domestic manufacturing in low carbon tech
- Recognising that supply chains and investments are international markets and coordination internationally is key

# Data availability and Digitalisation as Standard



# You said...

## Smart

- Smart technology rollout is an essential foundation for benefits realisation

## Data

- Open data and sharing of best practise across network owners would be a key enabler
- Home analysis to understand how to tailor options would help make progress
- More data on industrial waste heat sources will help identify opportunities for heat networks

## Digital

- Interoperability as standard for heat assets is a key enabler for realising consumer benefit
- Automation in heat assets could also be a key enabler for realising consumer benefit

# Dialogue and Coordination on Planning



# You said...

## Clarity & Roles

- A clear methodology, direction set and funding for local area energy planning & heat zoning would be key enablers
- NESO as Regional Energy Strategic Planner is well placed to coordinate from a whole national system perspective

## Involvement

- Coordination needs to involve local authorities, developers and network owners
- Dialogue to enable regional decision making needs to be with consumers in communities

## Alignment

- Planning reform is needed to enable quicker connection and lower lead time
- Zoning and local area energy plans need to flow through to longer term network owner business plans



# Market and Flexibility Reform



# You said...

## Pricing

- The ratio of electricity to gas price is an important signal that would enable fuel switching

## Options

- Review of Electricity Market Arrangements considering implications for retail market is key
- Charging reform sending strong signals could also be key
- Flexibility & Hydrogen markets could also help foster the transparent competition needed

## Products & Services

- Aggregators considering domestic and commercial consumers helps in benefits realisation
- Widespread deployment of time of use tariffs and/or the Demand Flexibility Service could also help in benefits realisation

# Consumer Trust and Provision of Information



# You said...

## Trust

- Focussing on meeting consumer need is an important accelerating enabler
- Trust is important and different consumers have different perceptions of who they trust
- Communications need to be aligned across consumer facing entities to provide consistent messaging
- Practical options for consumers needs to be decided through regional decision making

## Information

- Central energy institutions need to work with consumer facing entities on what information consumers need
- Consumers should be given information on practical options for them
- Information provision avoids consumers becoming distressed buyers

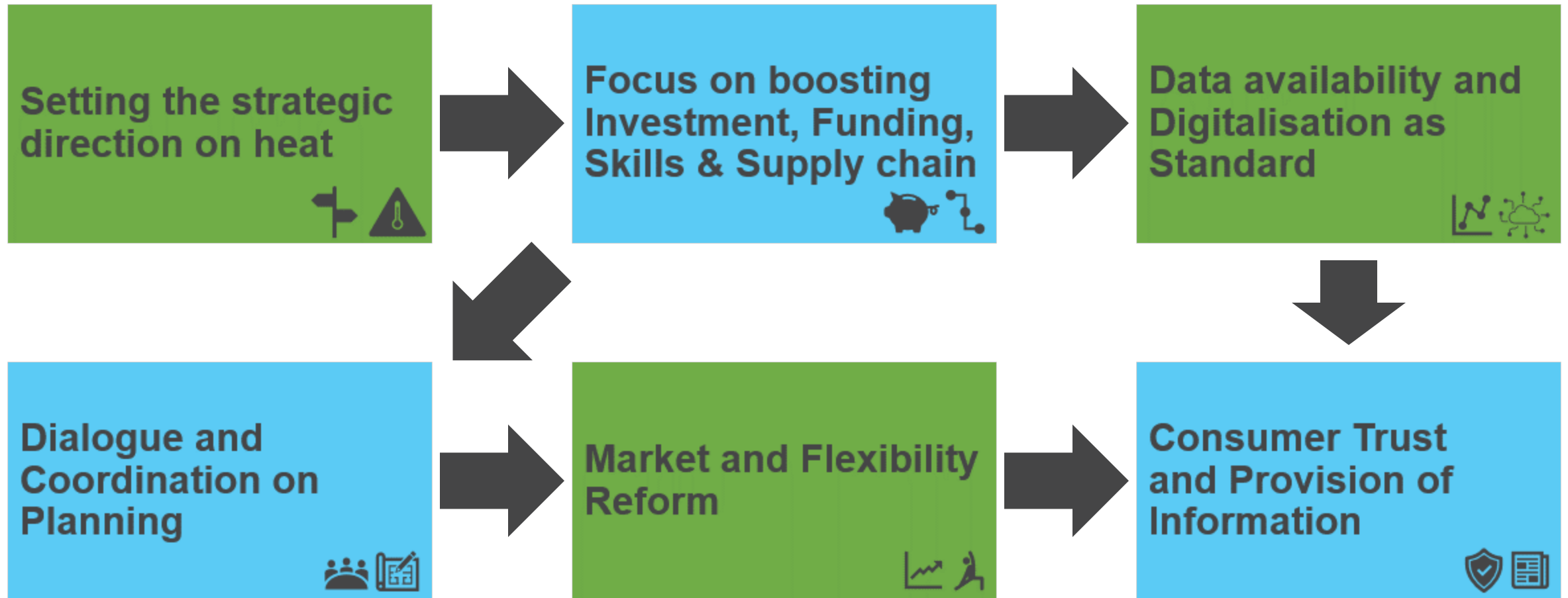
## Protection

- Creating a smooth consumer journey that minimises disruption is key
- Consumer protection is enabled through consistent information provision, concerning quality of installations and the risk of scams, delivered via trusted consumer entities
- There is a need to explore financing options that meet consumer needs

# Next Steps



# We heard that there are 6 bridges to cross to accelerate heat decarbonisation



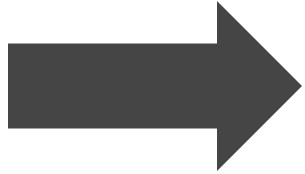
## Your feedback can feed into a range on areas going forward



This qualitative feedback will be fed into **FES 2024** alongside work aimed at updating the heat modelling with FES



Outputs from this work will also help contribute to our work on **Flexibility Markets Strategy** & Ofgem's ongoing work concerning the **Market Facilitator role**



Outputs from this work will also help in establishing **new NESO roles** such as the **Strategic Spatial Energy Plan** and **Regional Energy Strategic Plan**



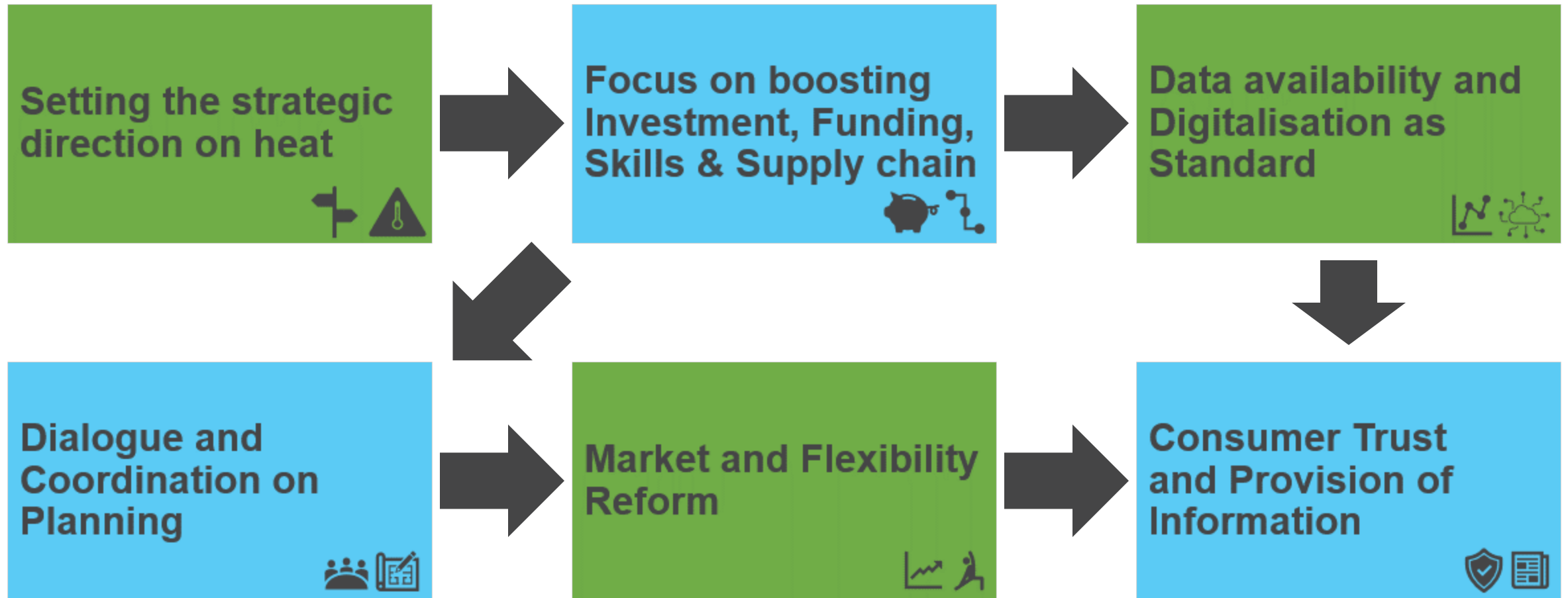
Further quantitative research may be useful for industry, Government and Ofgem as important upcoming decisions regarding heat are expected in 2026

# Q&A





# We heard that there are 6 bridges to cross to accelerate heat decarbonisation



# Coming up



# Becoming the National Energy System Operator (NESO)

More information [linked here.](#)

26<sup>th</sup> Feb, 2024

**National Energy  
System Operator  
Webinar:  
Resilience and  
Security**

[Recording will be  
available soon](#)

1<sup>st</sup> March, 2024

**National Energy  
System Operator  
Webinar:  
Strategic  
Planning**

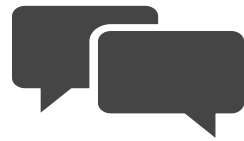
[Link to register here](#)

6<sup>th</sup> March, 2024

**National Energy  
System Operator  
Webinar:  
Market  
Development**

[Link to register here](#)

# Feedback



If you'd like to know out more about findings from Bridging the Gap 2024, please get in touch via our inbox: [box.FESbtg@nationalgrideso.com](mailto:box.FESbtg@nationalgrideso.com)

## Bridging the Gap 2024: Heat Decarbonisation - Final Webinar



