IDENTIFYING KEY GOVERNANCE CHALLENGES FOR THE DECARBONISATION OF RESIDENTIAL HEATING IN THE UK: STAKEHOLDER PERSPECTIVES

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PROJECT OVERVIEW

This poster displays preliminary results from a project investigating the key governance challenges for the decarbonisation of home heating combining stakeholder workshops with a structured literature review. These results come from the stakeholder workshop component.

Background

Governance challenges are issues, barriers and bottlenecks in decision-making structures; not just bad decisions, but the systematic characteristics that lead to bad decisions. They are an important area of study for societal transitions because they can either accelerate or impede progress towards given societal goals.

The challenge of emissions intensive home heating, is one such area where this might be important. As a 'wicked problem,' characterised by the need to overturn established and stable material realities and modes of doing, the heat transition will be drastically shaped by the decision-making structures that underpin it.

This poster showcases preliminary results from a project aimed at charting key challenges in the governance of home heating. It highlights how qualitative data was analysed to reflect the attributes of the energy transition being investigated.

Methods

This component of the project involved the qualitative thematic analysis of 50 stakeholders and experts participating in 5, hour-long, workshops each discussing answers to the question 'What are the governance challenges in decarbonising heat?'. Workshop participants included stakeholders from universities, local/national government, regulators, civil society and social enterprise. This data was collected in November 2023

Workshop transcripts were thematically analysed following an adapted version of Braun and Clarke's six stages², represented in the above graphic. A network of codes was developed from a crosstabulation table, and a modularity analysis was conducted to identify clusters amongst co-occurring codes in the data. A link between two codes was made if both had been applied to the same data extract at some point, this is known as co-occurrence.

These clusters in the network do not alone form themes but present fertile ground for the type of interpretive work that goes into searching for, revieing and defining themes in further analysis.

Network analysis techniques were used in response to the complex and interdependent nature of the heat transition. Rather than developing a series of qualitatively discrete themes from this data, network methods are used to aid the perception of connections not just within but between themes. The ability to visualise connections and clusters graphically also allowed for the realisation of latent groups and connections that might not be explicitly obvious to the researcher.

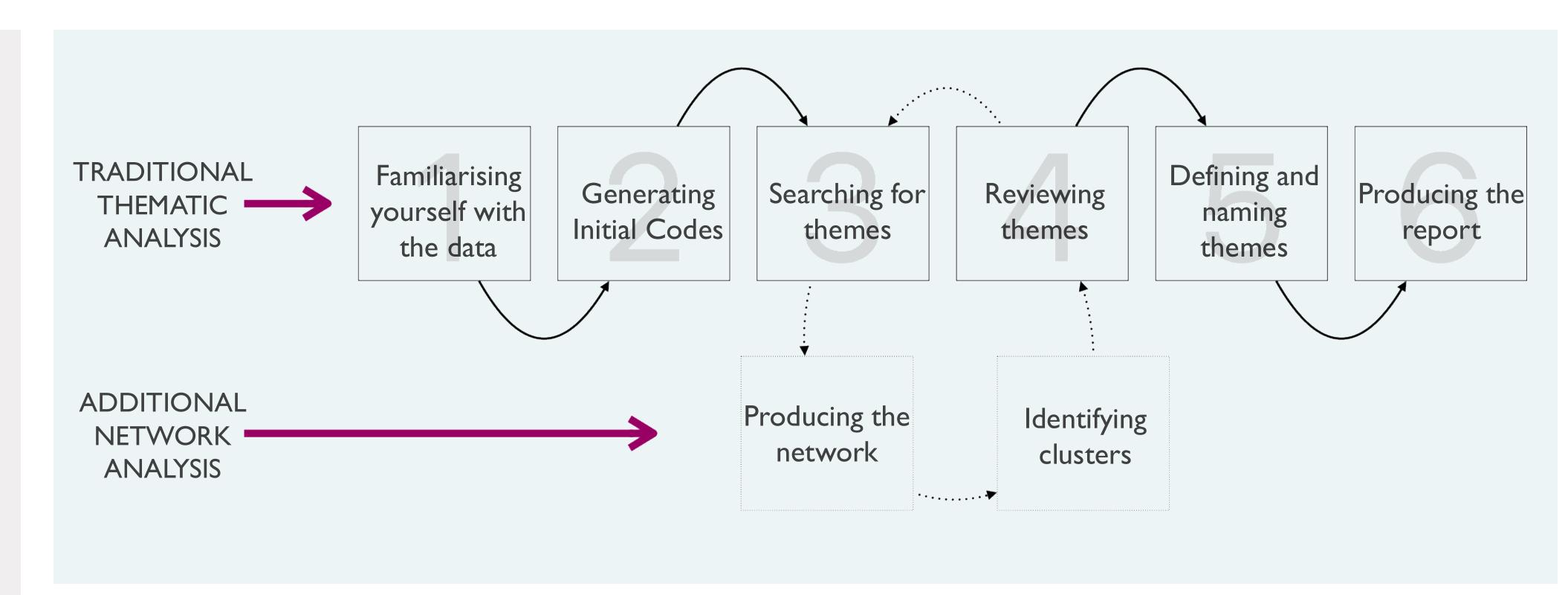
Limitations

There is a desire to see this style of computerised analysis as objective due to the use of algorithms to identify and arrange clusters³. This is not necessarily the case; this process starts and ends with the interpretive interaction between researcher and data as the codes must be generated and applied manually and the themes must be interpreted, explained and given significance though reasoning. This can only make apparent implicit thinking that might not be readily accessible in explicit analysis.

This work and findings are in the process of being reviewed and therefore results depicted here are preliminary.

References

- 1. Cowell, R. and Webb, J., 2021. Making useful knowledge for heat decarbonisation: Lessons from local energy planning in the United Kingdom. Energy Research & Social Science, 75, p.102010
- 2. Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. Qualitative research in psychology, 3(2), pp.77-101.
- 3. Kristanto, Y.D. and Padmi, R.S., 2020. Using Network Analysis for Rapid, Transparent, and Rigorous Thematic Analysis: A Case Study of Online Distance Learning. Online Submission, 24(2), pp.177-189.



FINDINGS

Legend:

Node: Each code used in analysis

Edge: (connections): An instance of cooccurrence

Colours: Indicate denser than random clusters

Perception & trust

- Participants noted the low awareness and often poor perception of heat pumps.
- This was identified of being symptomatic of politicised rhetoric and often competing (mis)information.
- Establishing trust was seen to be essential in sharing legitimate information on low carbon heat technologies.
- Stronger citizen engagement and involvement was also highlighted.

Scan to explore the network



Governments' role: local & national

- One of the biggest issues concerned the role of government in the heat transition at both, and between, national and local levels.
 A lack of a clear structure and devolution of roles and responsibilities was part of this challenge.
- At national level, this concerned a was a lack of strong policy direction and commitment.
- At local level questions surrounded coordination/ delivery and the necessary resources and capacity for this.
- The complex nature of heat lead many to comment on the high degree of holistic planning and cross cutting coordination required.

Markets

- Participants identified that market forces steer much of the heat transition.
 - Market goals (in their current state) seem poorly aligned with the requirements of a place-conscious heat transition.
- Many highlighted the need for stronger regulation and more company obligations.
- Others identified the opportunity for more collective and community projects

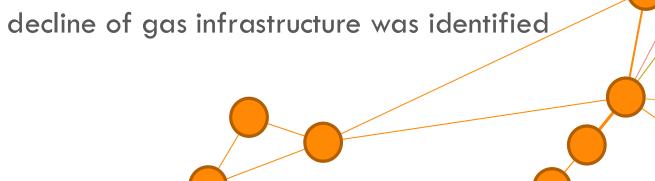
Incumbent power

- The inertia of the gas industry was often
- mentioned.
- Participants noted several institutional features still heavily favouring incumbents: the spark gap and the capacity for lobbying.
- However, the need for care in the managed

Overarching mission

strategy.

governance was also noticed.



Skills, Training & Accreditation

- A significant amount of training is required to generate the labour capacity for a heat transition.
- The current standards and systems of accreditation were seen as confusing, costly and subject to change.
- Training programs, strong signals and incentives will be important in developing necessary skills.

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ENERGY & DATA THOUGHTS:

A distinct lack of a wider, overarching vision and mission driving

This concerned particularly a lack of a sense of urgency and

- o How well does a network help visualise potential themes?
- O How important is governance in the energy transition?
- o Is it important to investigate thematic interconnections with networks or will traditional thematic analysis suffice?