Department for Energy Security & Net Zero

Ready for RESP:

Net Zero Planning Masterclass: Socio-economic factors



Greater South East Net Zero Hub

MIDLANDS NET ZERO HUB

north east & yorkshire NET ZERO HUB

north west net zero hub

South West NET ZERO HUB

Programme delivered by CATAPULT Energy Systems

Catapult team:
Chris Brierley, Dr Anna Stegman, David Lee & Elis Jackson

Housekeeping







Ready for RESP

AGENDA

1. Welcome and reminder on Ready for RESP programme (Chris Brierley)
2. Deep dive – How LAEP considered socio-economic factors (Elis Jackson)
3. Q+A
4. Update on RESP progress and development (Anna Stegman)
5. Insights from NZ Hubs (Chris Brierley)
6. Wrap up (Chris Brierley)

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Outcome from todays session

… what we want you to take away

Better understanding of how socio-economic factors inform and shape Local area energy planning.

Introduction to how RESP is including socio-economic factors and an update on the RESP progress and what to look out for

Sharing insights from your colleagues to help you better understand common challenges and needs

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Ready for RESP

Literature review, stakeholder consultations, and Catapult experience collated

Library of evidence collated

Series of simple language guides
1: Ready for tRESP
2: Ready for RESP
3: Local Government Resourcing plan
4: Local Net Zero Plan Guidance

Hub engagement plan

Game style workshop to bring the interactions of local and regional stakeholder objectives together, demonstrating the value RESP and planning can provide.
Plus follow up in person regional sessions

Change Management training day

Deliver subject specific webinars (buildings, renewable generation, energy networks, transport, industry, hydrogen)

National stakeholder engagement plan

Disseminate guides with 3 interactive online briefing sessions for each region

LA survey and findings to understand regional readiness for Local Net Zero planning
Briefing notes to summarise Guide content for different audiences

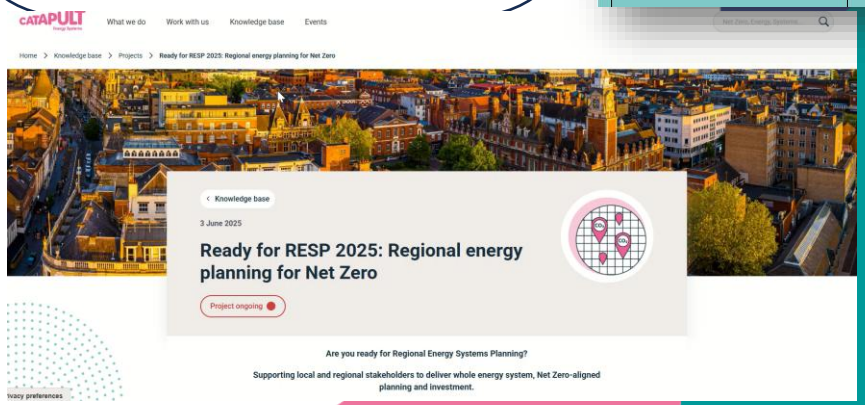
Outputs from each activity hosted on Net Zero Go





HEURISTIC

IMPACT FACTORY



Ready for RESP

The creation of Regional Energy Strategic Plans means local needs and priorities will directly influence how energy networks are developed, resulting in a more democratic, low carbon, energy system.

Local Authorities should act now to ensure their strategic priorities are submitted to the NESO so they can inform the transitional Regional Energy Strategic Plan.

A joined-up approach



National ⟷ Regional ⟷ Local

Providing consistent system-level forecasts and network investment needs that shape the strategic direction of the RESP

Bringing together place-based data and local priorities to ensure the RESP reflects real local needs

This year the priority is the **transitional RESP** but then focus on the longer-term **enduring RESP** due to be published in Late 2027

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What would help you / local authorities when it comes to Net Zero Planning / RESP process

Please put questions / thoughts / challenges in the chat throughout so we can discuss later in the session.

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What do we mean by socio-economic data and why is it important?

Socio-economic factors:

- Demographics
- Fuel poverty
- Housing – ownership, type, EPC
- Employment
- Transport and mobility – car ownership
- Community engagement – local groups

Why its important:

- Help understand local areas – what are their priorities and ambitions
- Help to inform possible scenarios for future supply and demand of the energy system
- Can tailor solutions and engagement with certain communities
- Prioritise interventions based on social benefits

Ready for RESP

QUICK POLLS:

1. How familiar are you with LAEP or similar local energy planning approaches?

5) Very familiar – I've led or contributed to one
- Somewhat familiar – I've read or supported one
- Heard of it but haven't been involved directly

1) Not familiar at all

2. To what extent do you currently use socio-economic data in your support to local authorities?

5) Routinely – it's a core part of our analysis
- Occasionally – for specific aspects or projects
- Rarely – we rely mostly on technical data

1) Not at all – we haven't used it yet

3. The below are some examples of national datasets - what data at a local level that you have found helpful or think would be valuable to include?

- Census or ONS datasets (e.g., income, tenure, age)
- Fuel poverty or vulnerability indices
- EPC or housing stock data

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Socio & economic factors in Local Area Energy Planning

Elis Jackson

Senior Modelling Analyst

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Socio economic factors in LAEPs

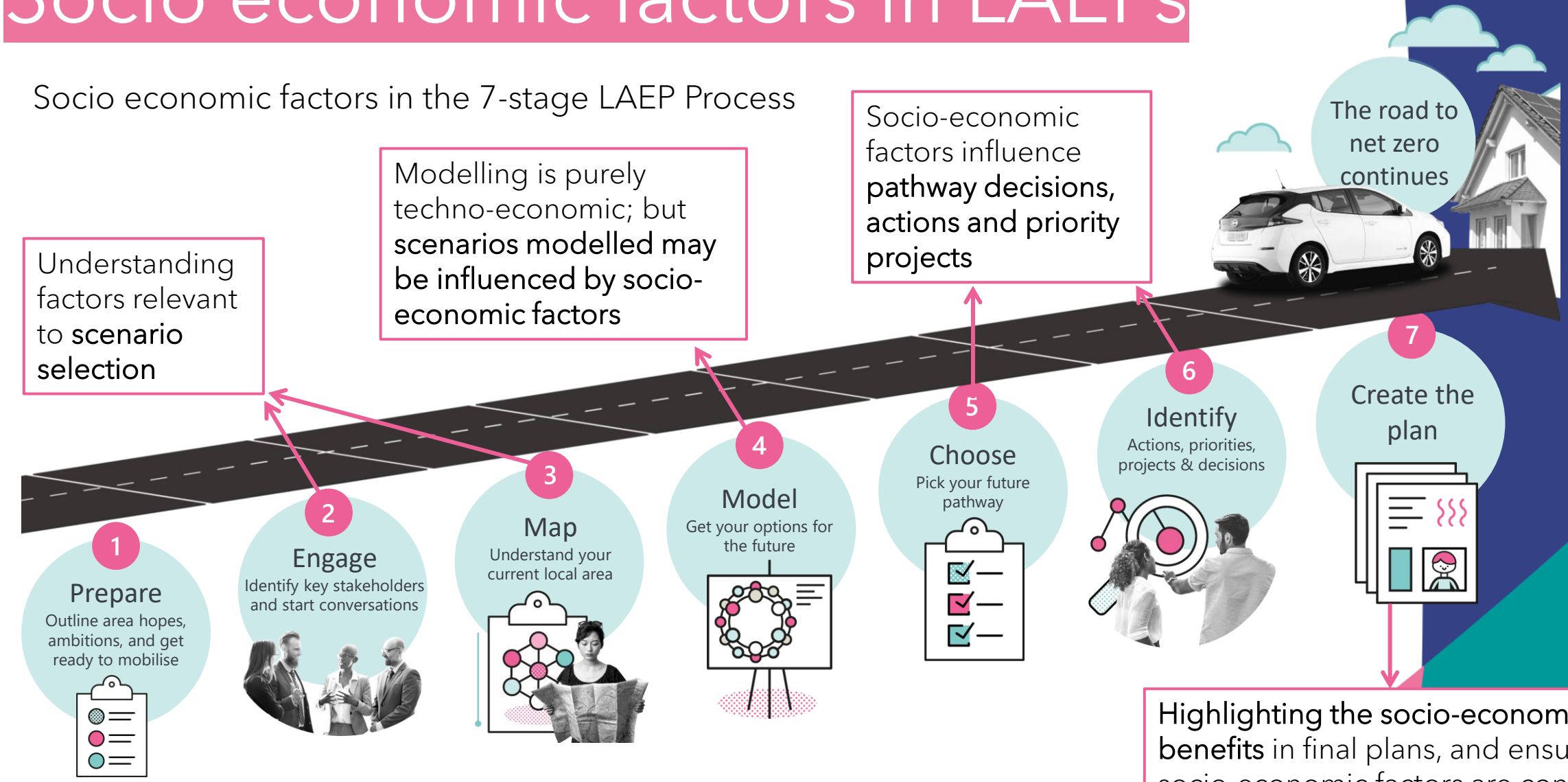
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Socio economic factors in the 7-stage LAEP Process

Understanding factors relevant to **scenario selection**

Modelling is purely techno-economic; but **scenarios modelled may be influenced by socio-economic factors**

Socio-economic factors influence **pathway decisions, actions and priority projects**



Highlighting the socio-economic benefits in final plans, and ensuring that socio-economic factors are considered in progressing the plans

https://es.catapult.org.uk/guide/guidance-on-creating-a-local-area-energy-plan/

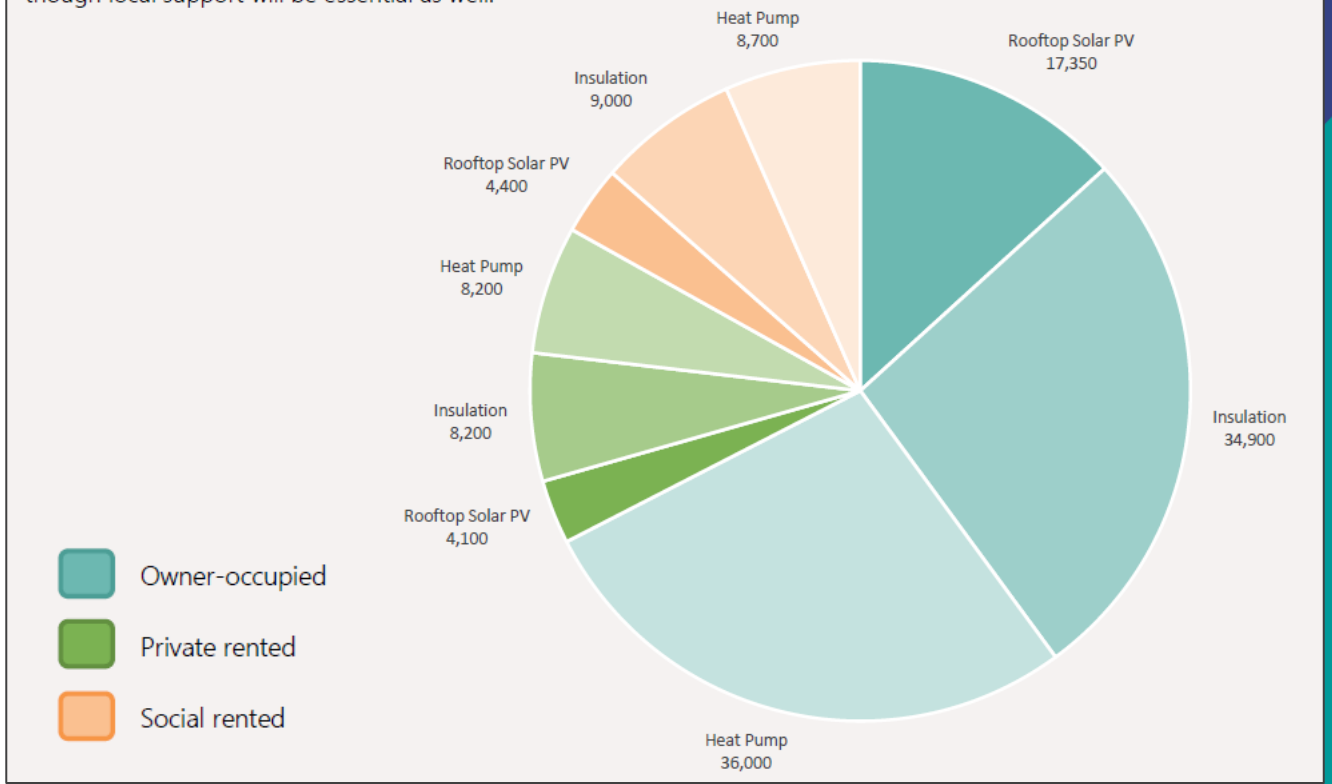
Factors considered (1)

Examples of socio economic factors that are typically considered in LAEPs:

- Fuel poverty – focus zones for domestic fabric retrofit and rooftop solar PV deployment to reduce fuel poverty
- Housing ownership:
  - Social housing – focus zones for fabric and heating system upgrades, where the local authority has greater influence over upgrades
  - Tenants and homeowners – highlighting the different approaches required to encourage the uptake of fabric and heating system upgrades

Actions and Responsibilities: Tenures

The chart indicates the split of home technology installations across tenure types (based on the National Net Zero scenario). This clearly shows how crucial it will be to reach the owner-occupier segment to deliver the bulk of emissions reductions. This will, of course, be challenging, with the local authority having less direct influence over the choices of private homeowners. Incentives and restrictions from central government, such as a confirmation of an end date for gas boiler sales, similar to the existing date for petrol and diesel cars, will play a key role in driving this change, though local support will be essential as well.



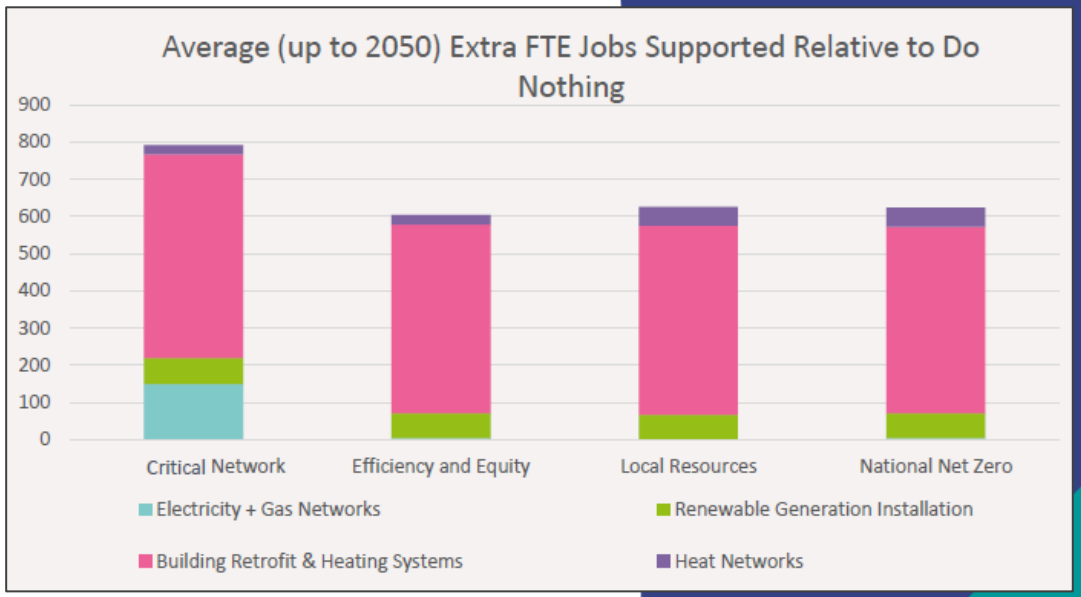
Factors considered (2)

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Factors whose economic value can be estimated:

- **Job creation** – additional full-time equivalent jobs supported
- **Air quality improvements** – costs reflecting the health effects of air pollution

Note, since not all these economic benefits are seen at the local level (e.g. reduced NHS costs due to improved air quality), some of these types of benefits can be of less importance to local authorities.





LAEP examples – Plan on a Page

LAEP Plan on a Page gives an at-a-glance view of high level technology deployment figures, and the agreed Focus Zones.

In this plan we highlighted focus zones for areas with high fuel poverty, to prioritise fabric efficiency upgrades.

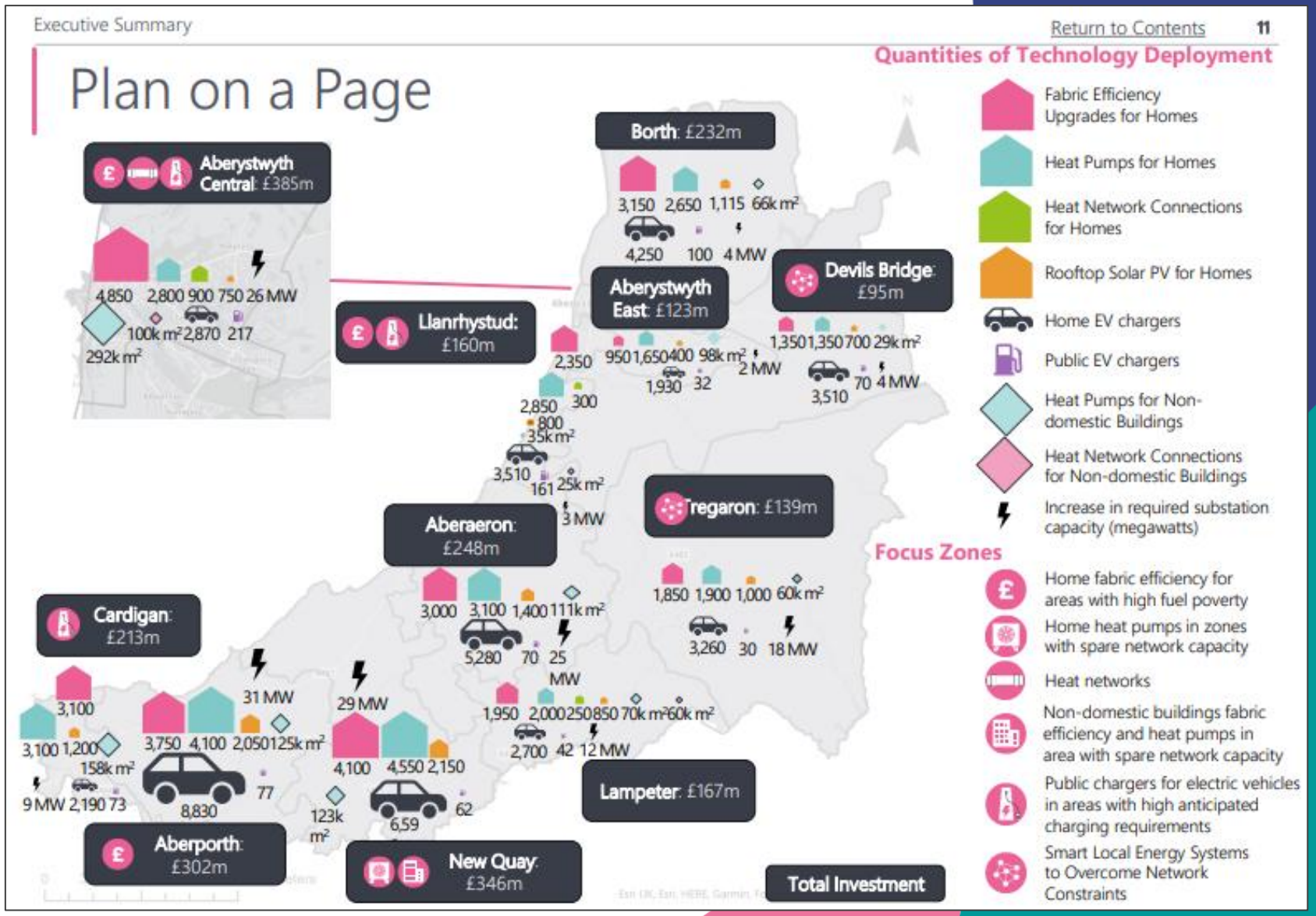
Main LAEP stages involved:

6 **Identify**
Actions, priorities, projects & decisions



7 **Create the plan**





LAEP examples – output detail

Further detail can be provided to show neighbourhoods where interventions can be applied to help reduce fuel poverty.

LSOA-level fuel poverty statistics, in combination with model outputs, are used to create these outputs.

Main LAEP stages involved:





Factors not typically considered

Some factors are more challenging to consider within LAEPs, often due to limitations in data or assumptions availability. For instance:

- Index of Multiple Deprivation – a mixture of indicators
  - Data from the income indicator could be used, though fuel poverty data is more relevant to energy decisions
- Health deprivation data or Age profiles – could influence focus zones for improving comfort and health outcomes
  - Some programs exist which target social benefits as well as decarbonising – e.g. Warm Homes Prescription.
- Local air quality metrics - some areas have air quality monitoring stations installed, which could be used to prioritise areas for EV infrastructure deployment or heat pump installations.
  - Data is not always available, or coverage is too incomplete
- Energy security or power supply stability
  - LAEP modelling is not detailed enough to inform these types of outcomes

Making a positive case

Commonly in LAEPs, socio-economic factors are considered as constraints, e.g. concerns about intervention costs in fuel poor areas.

There could be scope to use them to try and identify areas where change could be pushed. For instance:

- Relatively affluent areas
- Areas where care for the environment is higher
- Areas with many owner occupiers
- Areas whose inhabitants aren't likely to move house soon

And using these to find areas where decarbonisation could be easiest, or where the wider benefits can be highest.

Socio economic datasets available

Datasets available for all areas

- Fuel Poverty
- Index of Multiple Deprivation
- Housing ownership
- Job creation – ONS Employment Multipliers
- Valuing air quality – *DEFRA Air quality appraisal: damage cost guidance*

The utility of some of these is limited, e.g. fuel poverty – as the granularity is at LSOA level, rather than individual households. There are potential ways around this - e.g. Coventry EDIS project integrated data to help to prioritise interventions at a more granular level.

Data that may be available at a local level

- Air quality (e.g. monitoring sites)
- Local skills availability
- More detailed public health data
- Others?

Poll discussion

Earlier question - What data at a local level that you have found helpful or think would be valuable to include?

We sometimes are asked about:

- Air quality
- Local household surveys
- Local public health data

Other suggestions from the poll included….

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Any Questions / comments



tRESP – Request for Information experience

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4. Did you help local authorities to complete the Request for Information for tRESP?
- Yes/No

5. Were you able to find information to help complete these sections and what did you use?

Strategic Value			
Regional Significance		**Response**	**Further Information**
Dropdown	Scale of Benefits (Local/Regional/National)		*>>Please provide further information, if available<<*
Dropdown	Number of jobs created throughout Delivery & Operation of Energy Need		*>>Please provide further information, if available<<*
Dropdown	Direct/Indirect alignment with relevant Regional/Local policy & strategy		*>>Please provide further information, if available<<*
System Value		**Response**	**Further Information**
Text (Max.150 words)	Description of associated social impact	*Please provide in further information cell -->>*	
Text (Max.150 words)	Description of associated economic impact	*Please provide in further information cell -->>*	
Text (Max.150 words)	Description of associated environmental impact	*Please provide in further information cell -->>*	

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Regional Energy Strategic Plan (RESP) Updates

Dr Anna Stegman

Advisor

Programme delivered by

CATAPULT Energy Systems

RESP updates

Public

Transitional RESP (tRESP)

We're taking a collaborative approach to the development of tRESP. We've been sharing our work and inviting and taking on board comments since March 2025.

What is tRESP?

1. Serves as a transitional bridge to full RESP



2. Focused on strategic direction of electricity DNO (Distribution Network Operator) business plans
3. A request from Ofgem
4. Intended to drive consistency and ambition

Why now?

1. Urgent change: Energy sector transformation and CP30 demand immediate action
2. Unlocking value sooner: Full RESP won't be ready until 2027
3. DNO business planning dates are fixed: Next DNO regulatory period is fixed (2028-2033) and input is needed for business plans in 2026
4. Early stakeholder engagement to integrate national and regional needs within energy planning

NESO
National Energy System Operator

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tRESP consultation

Jul 2025	Sep 2025	Sep – Dec 2025	Jan 2026	By end 2026
Draft tRESP outputs shared with DNOs	*tRESP consultation published*	*Product development, address feedback*	*tRESP products released*	*DNOS produce ED3 network plans and then business plan, as advised by Ofgem*



Nations and Regions Contexts



Pathways



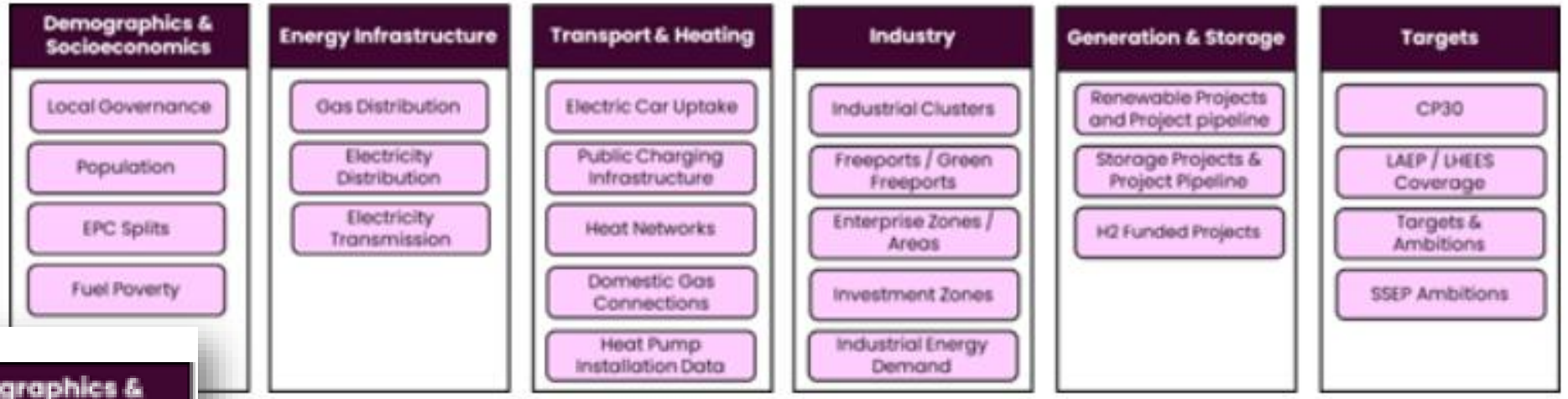
Consistent Planning Assumptions (CPA)



Strategic Investment (SI) Need

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tRESP – socio-economic factors



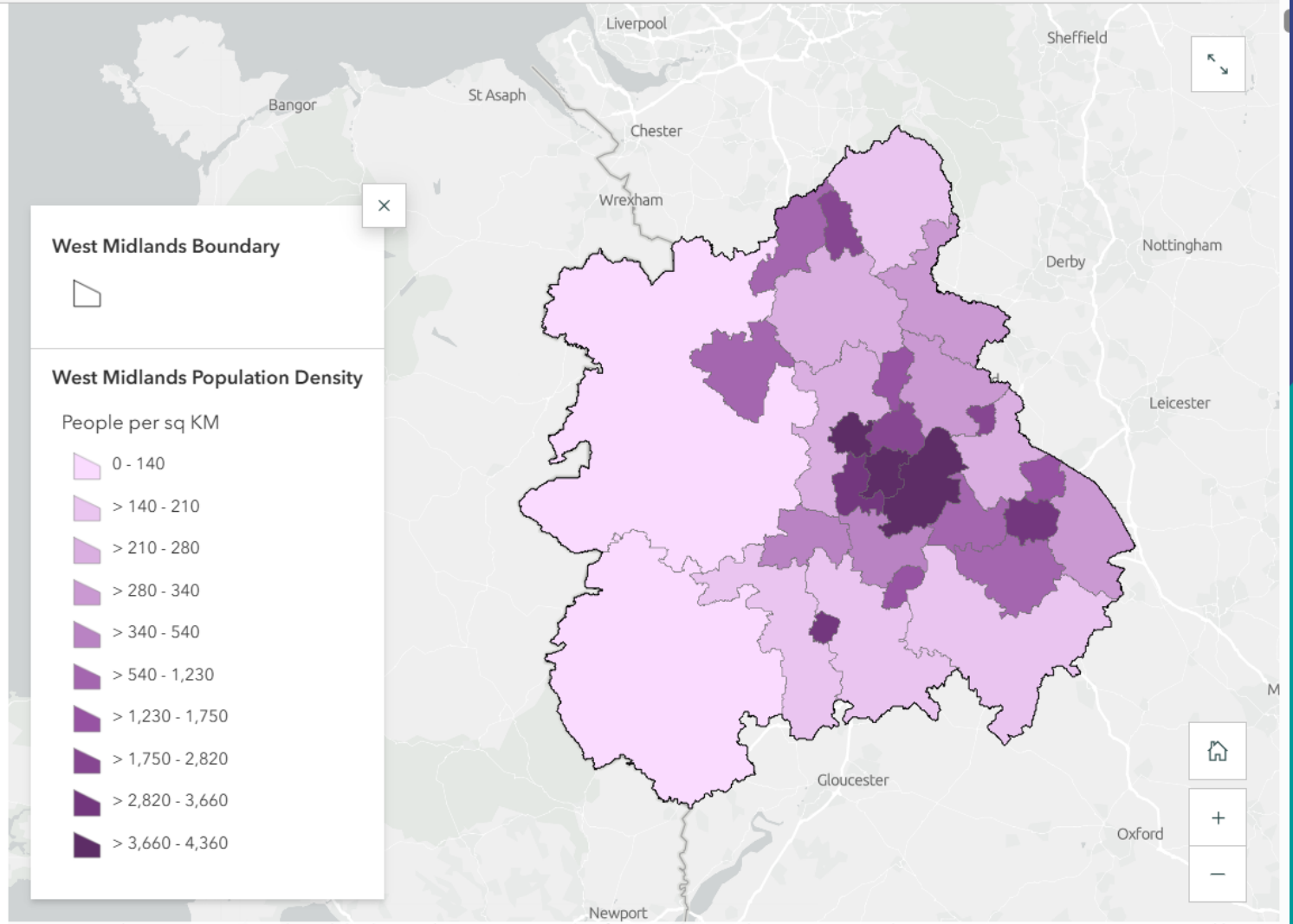
Quantitative and qualitative elements of the tRESP



NESO National Energy System Operator — West Midlands Context

Population density

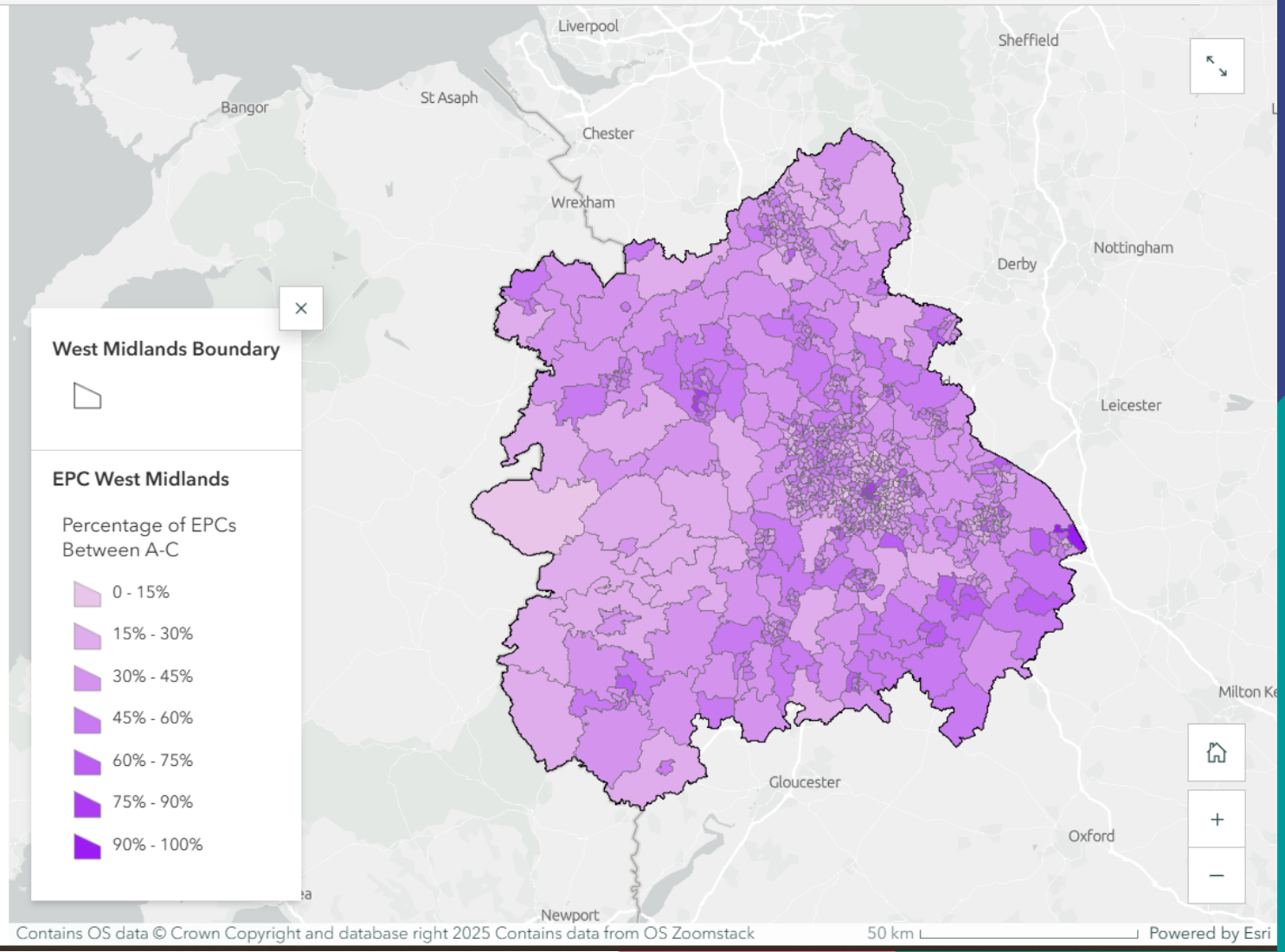
The West Midlands has a population of just over 6 million people, with an average workforce age of 39 years old. The graph shows since 2011 the West Midlands has had a steady 9% increase in population size, 1% higher than the GB average. The region has a significant urban and rural landscape, including Birmingham as the second most populous city in the UK. Other major cities include Coventry, Stoke-on-Trent and Wolverhampton, smaller cities include Hereford, Lichfield and Worcester. There are large rural areas in The Marches (Shropshire, Telford and Wrekin and Herefordshire), Worcestershire, Warwickshire and Staffordshire.



Energy Performance Certificate (EPC) Splits

An Energy Performance Certificate (EPC) provides a measure of a building's energy efficiency, rating it on a scale from A (most efficient) to G (least efficient) and provides recommendations for improvement. The underlying Standard Assessment Procedure (SAP) methodology is used across Great Britain, with England and Wales sharing an identical system.

The West Midlands includes a significant variety of housing stock in terms of construction type and associated energy performance. The map above shows the percentage of domestic properties within each Lower-layer Super Output Area (LSOA) which have an EPC rating between A-C across the West Midlands. The majority of homes in the West Midlands have a rating of C (29%) or D (39%). Higher ratings (A and B) account for 11%, while lower ratings (E and F) represent 5%.



NESO National Energy System Operator — West Midlands Context

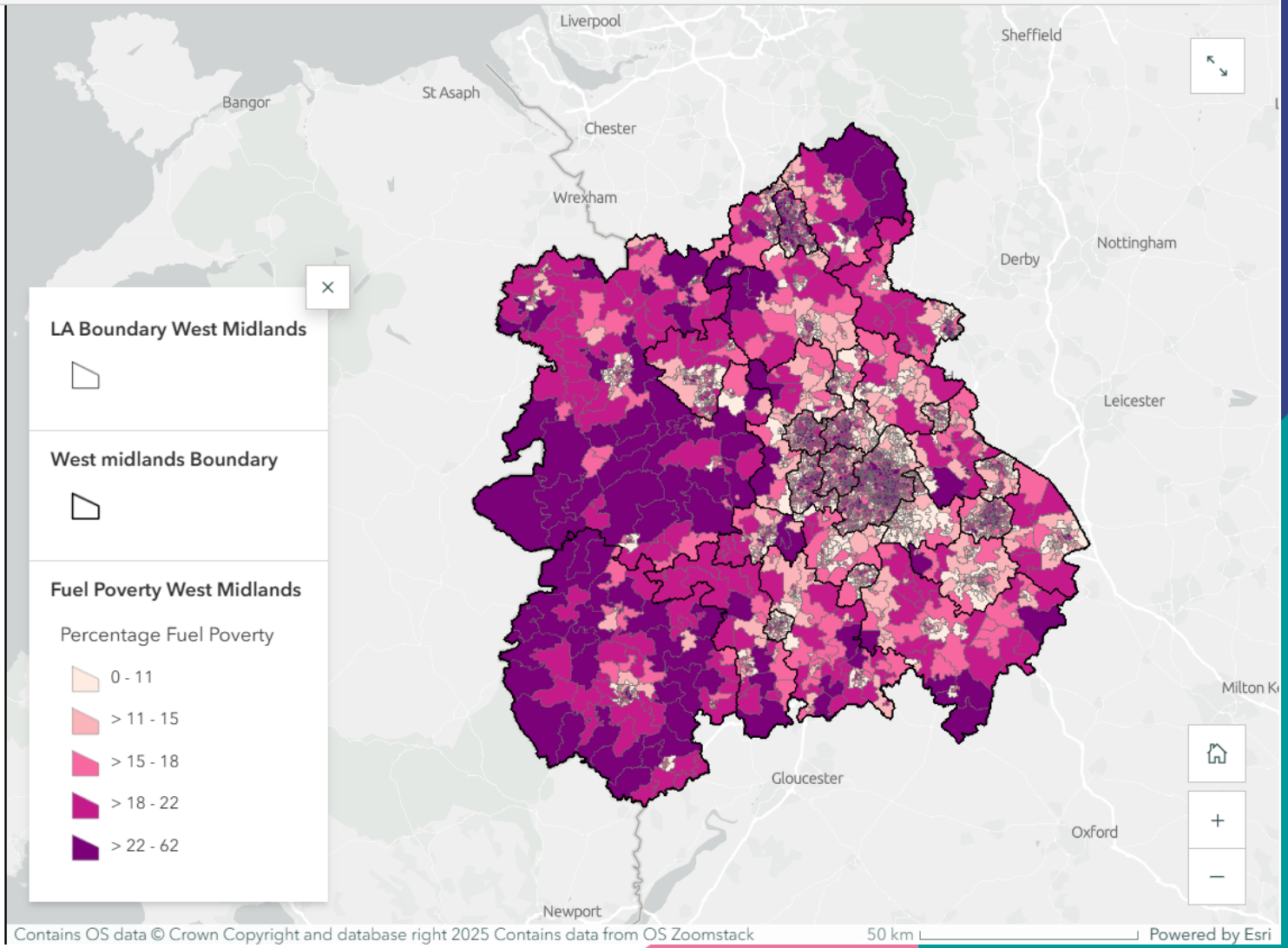
Introduction and Overview | Section 1: Demographics and So... | Section 2: Energy Infrastructu... | Section 3: Transport and Heati... | Section 4: Industry and Econom... | S →

Fuel poverty

Fuel poverty occurs when a household cannot afford to heat its home to an adequate temperature, and is defined differently in England, Wales and Scotland (fuel poverty can therefore not be directly compared across all nations and regions).

In England, a household is defined as being fuel poor if it would need to spend more than 10% of its income (including housing benefit, income support for mortgage interest or council tax benefits) to maintain a satisfactory heating regime. Households who are required to spend more than 20% are considered to be in severe fuel poverty. (https://www.gov.uk/government/collections/fuel-poverty-statistics).

The inability to maintain a warm home can



Main takeaways

- Socio-economic data is included throughout tRESP
    - The **Nations and Regions context** reflects an initial view of the regional conditions and priorities – highlighting key challenges
    - The Strategic Investment Need submissions required data on specific projects social and economic benefits which will be used to help assess (assuming method to do this included in RESP methodology)
    - SI needs and context will be compared to **identify any gaps in energy infrastructure and demand** to help inform and develop clearer understanding of the regions and support stakeholder engagement
    - Strategic energy planning is supported by the context providing a view across key themes and topics in a consistent and comparative way
- Details of how assessments are made and what data is most useful however still unclear – methodology published Nov

Key insights from across the Net Zero Hubs

- Capacity is the universal barrier – staff gaps, turnover, low energy literacy
- Grid connections are the live issue – hook for RESP engagement ?
- RESP must be simple, plain language: ‘what it means for my place, my plan’
- RESP is not a substitute for Local Area Energy Plans (LAEPs) and other local Net Zero energy planning
- Hubs want regional LA briefings + ESC ‘101’ sessions in autumn

Key asks of NESO (or Govt)

Ready for RESP

1

Clarity on role

What will RESP do but also what it won't do.

2

Grid Capacity

Show how RESP could help with the connection delays

3

Consistency

How RESP will provide a consistent baseline dataset to avoid patchwork

4

Funding & mandate

Councils are hard pressed for time, capacity and money so does it need a mandate / funding to help ensure local input

5

Usability

Need to ensure the outputs from RESP can be used for example by planners. Need to embed in other council plans

6

Join up

NESO, Hubs, CSA, Las and others.

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What's coming next

- Webinars
  - 22nd October: Flexibility and Smart Local Energy Systems
  - 5th November: Heat Networks

- Guides and e-learning
  - Local Decarbonisation Planning (end October)
  - Resourcing and Governance for Local Decarbonisation Planning (November)
  - RESP methodology and local authority preparedness (December)

- Regional Round Table briefings – (TBC Jan)

Feedback on todays webinar

6. How well did this webinar meet my expectations?

7. How could it be improved for next time?

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Thank you

Any questions/comments please email us:
Anna.Stegman@es.catapult.org.uk or
Chris.Brierley@es.catapult.org.uk

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