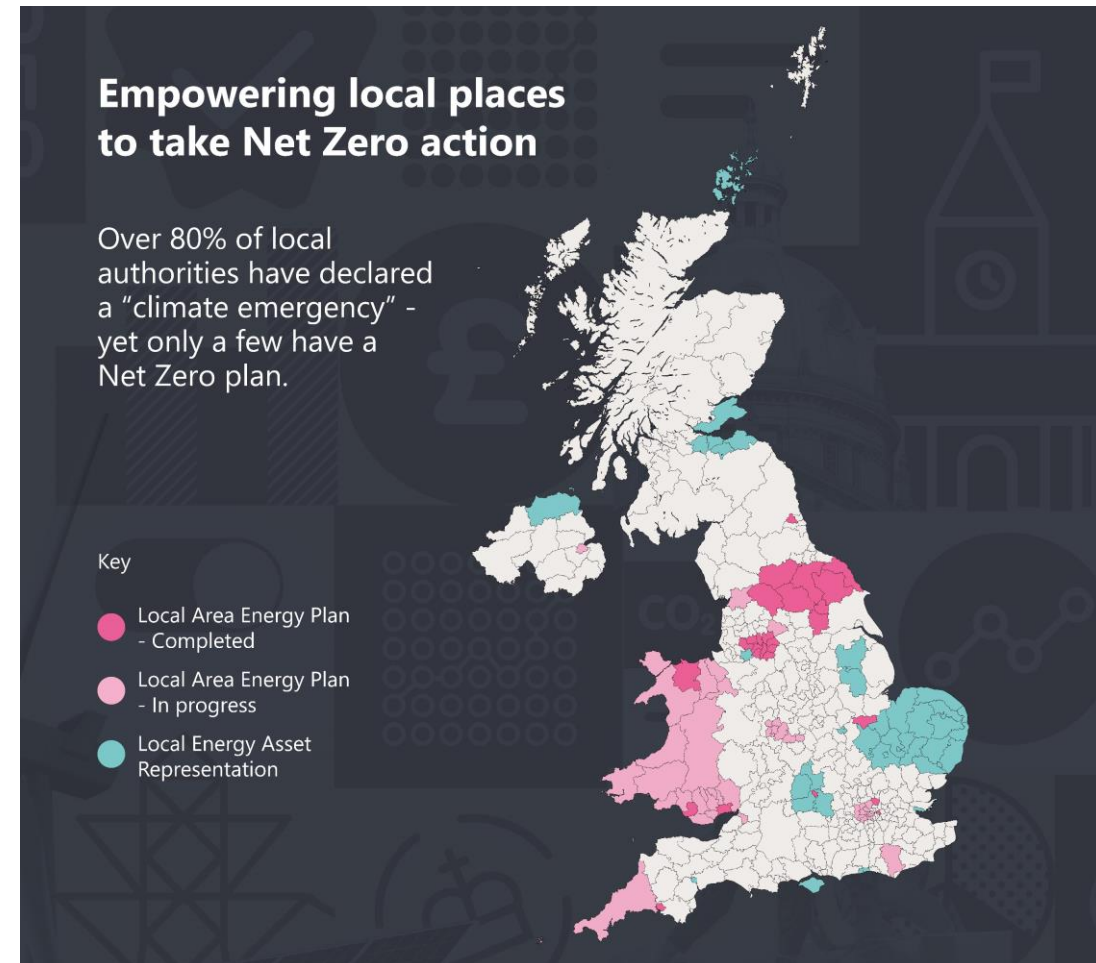


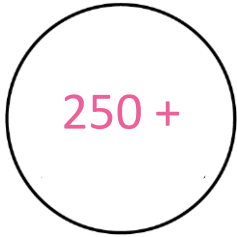
# Local Area Energy Planning: Taking a place-based approach to decarbonisation

**Tim German**

Senior Strategic Relationship Manager



# About Energy Systems Catapult



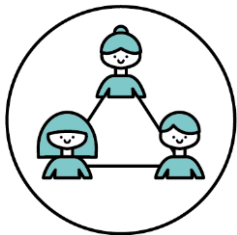
250 + Innovation experts



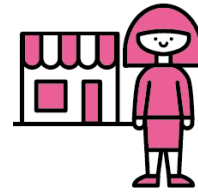
Based in Birmingham



Established, overseen and part-funded by Innovate UK. Independent from Government. Not for profit



Bridge the gap between stakeholders in the sector



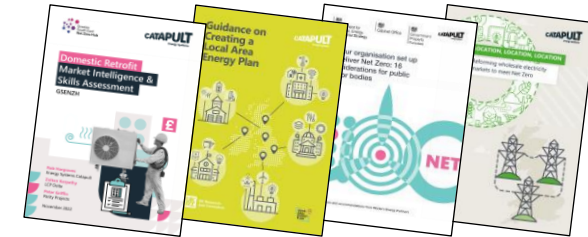
Supported over **100** SMEs and launched two challenge calls



Reached c.**2000** homes (across the UK) – went live with WESA



Completed over 120 Projects



Published **over 45 publications** (+35 Public Sector Decarb Guides) with **over 14,500+ downloads**



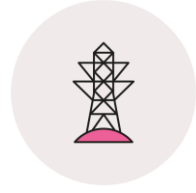
allowed us to help nearly **1,000** households to keep warm this winter

# Our approach: Whole Systems Thinking

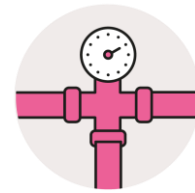
Joining up the system from sources of energy to the consumer



Generation



Transmission



Distribution



Buildings



Consumer

Breaking down silos between different parts of the energy system



Electricity



Heat



Transport

Joining up physical requirements of the system, with policy, market and digital arrangements



Physical System



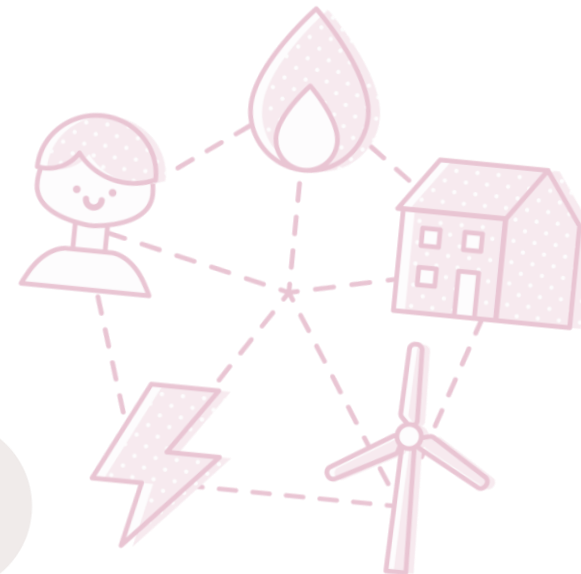
Digital System



Market System









Policy



## It's time To plan for Net zero

By using our pioneering local area energy plan which will give you...

-  A localised whole energy systems roadmap to decarbonisation.
-  Visual plan highlighting suitable technologies.
-  An evidence-based investment plan.
-  Joined up current plans and policies.
-  Engaged political and community buy in.
-  Identify and enable wider area benefits.



# What is Local Area Energy Planning?

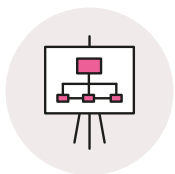
**Local Area Energy Planning (LAEP)** is a concept developed by the ESC to enable data-driven, spatial and collaborative planning, to help unlock investment and delivery of smart local energy systems



Each local area is different - its people, geography, building stock, energy networks and ambitions and priorities

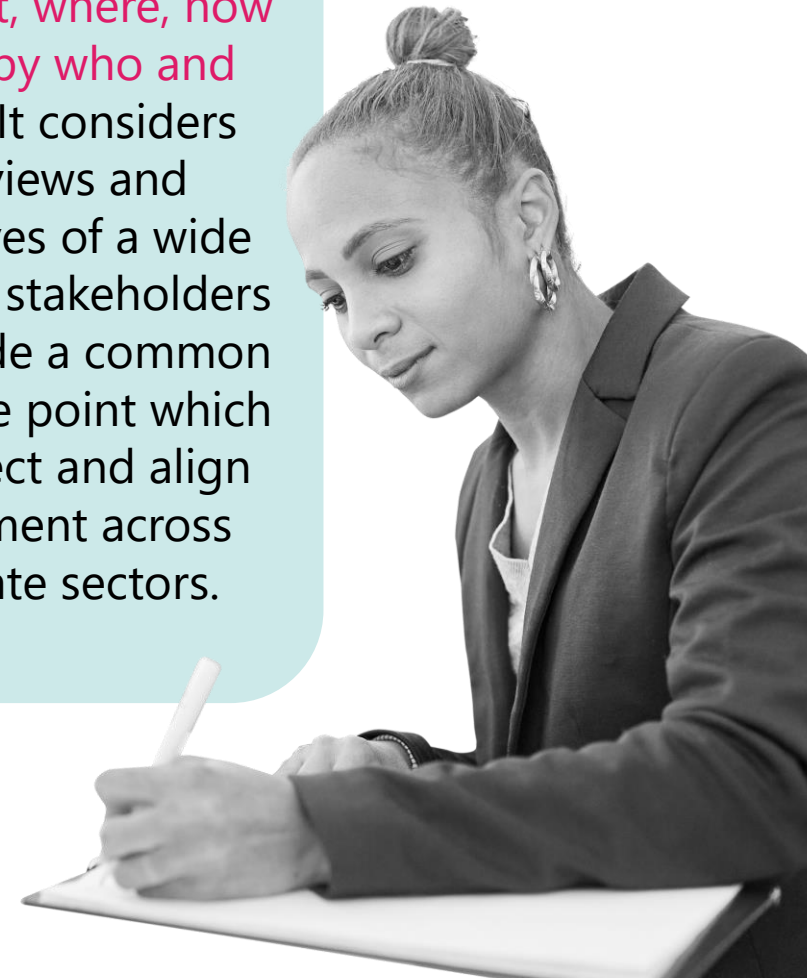


Local Area Energy Planning provides a data driven, spatial and collaborative means, involving local government & network operators, of exploring a range of possible future local energy scenarios to cost-effectively decarbonise



Resulting in the identification of energy network and system options to support carbon neutral aspirations - informing what local action is needed and where

Local area energy planning provides the 'what, where, how many, by who and when'. It considers the views and objectives of a wide range of stakeholders to provide a common reference point which can direct and align investment across separate sectors.



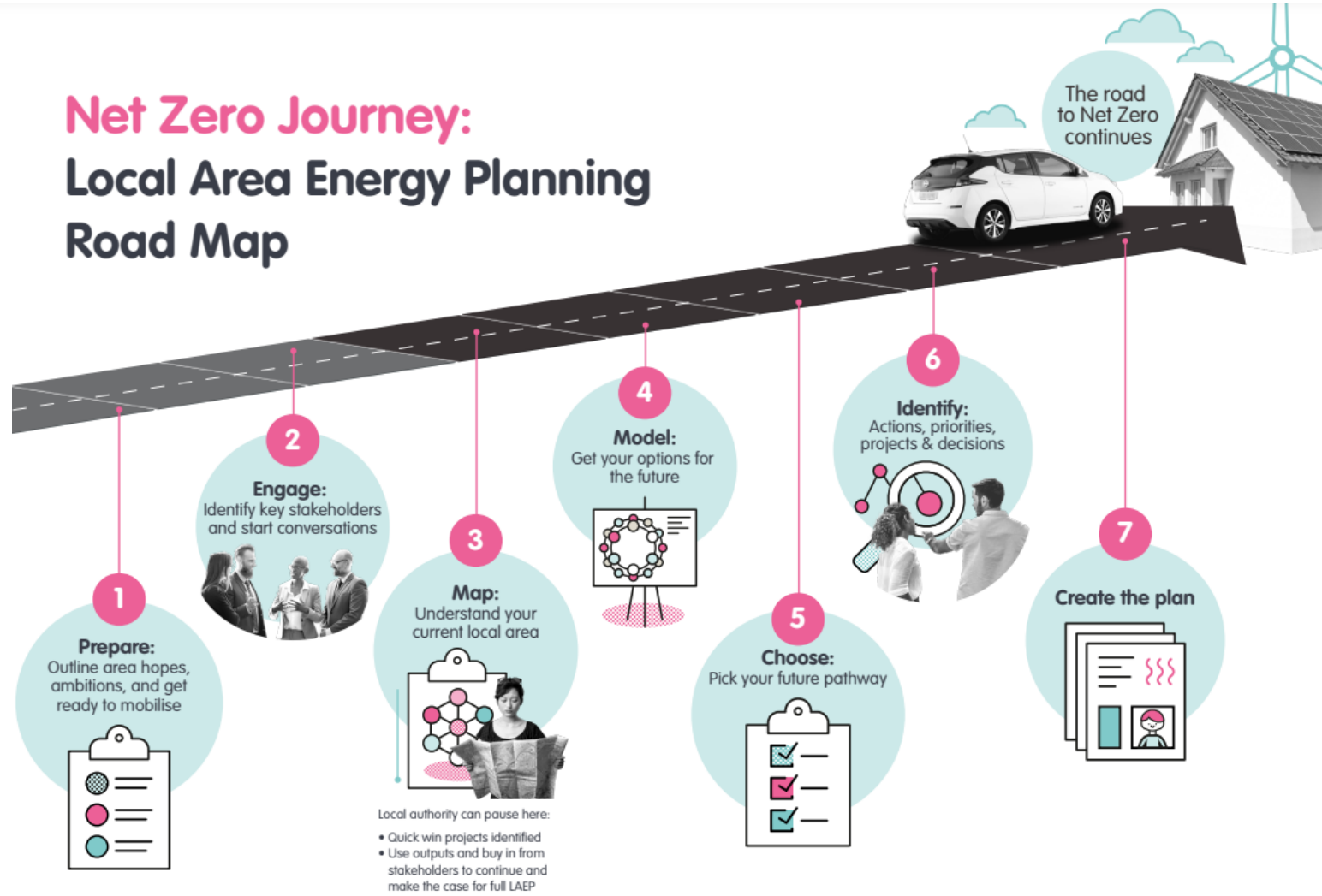
# The Journey to Local Net Zero

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



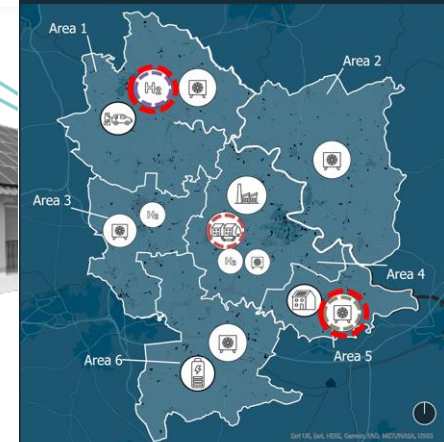
## Guidance & Governance for Local Authorities

### Net Zero Journey: Local Area Energy Planning Road Map



Local authority can pause here:

- Quick win projects identified
- Use outputs and buy in from stakeholders to continue and make the case for full LAEP



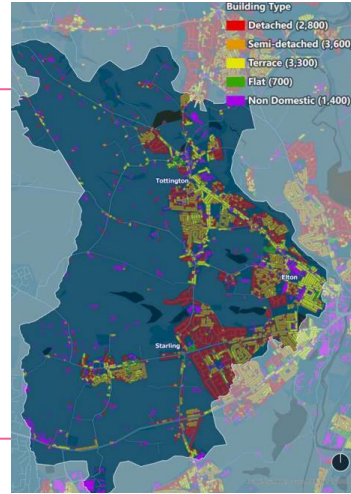
Resulting in a **long-term evidence-based plan to decarbonise LA areas**

with data and insight to deliver **net-zero innovation and deployment**

# Energy Systems Catapult Place-based activity examples

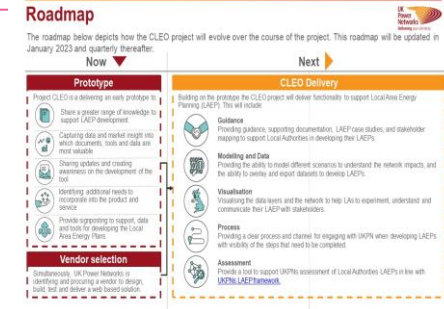
## Aiming GMCA's ten districts with a plan for carbon neutrality

- 10 district LAEPs for 2038 carbon neutrality
- Current baseline, future roadmap, projects, decision points
- Near term opportunities; 140,000 domestic retrofits; 4.5GW solar; 116,000 heat pumps; heat networks...
- Catalysing investor interest, political traction and delivery
- Referenced in trailblazer devolution deal



## Designing tools to align network and LA plans

- Supporting UKPN to develop a digital tool to allow LAs to input LAEP and other data onto network infrastructure data
- Stakeholder engagement, specification and use cases, value case, insights and sector implications



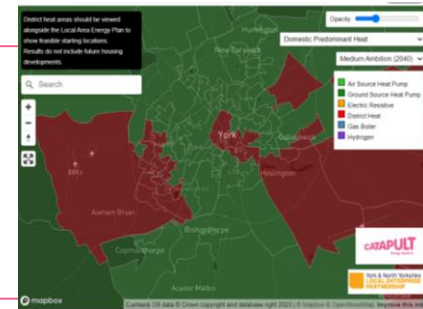
## Helping shape a national net zero energy plan for Wales

- Advisor to Welsh Government across the rollout of LAEP in Wales
- Delivering two mid-Wales LAEPs directly
- Advising on procurement, management, delivery and providing assurance across two other practitioners



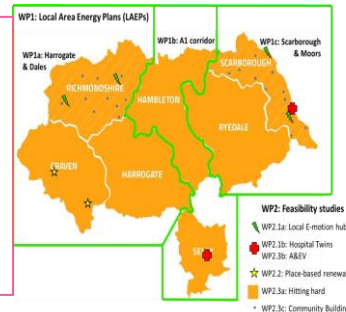
## Innovative solutions to non-technical delivery barriers

- Partner in five IUK Pathfinder Places projects
- Addressing non-technical barriers to net zero.
- Decision making frameworks & toolkits, green hydrogen, delivery zones, regulation, engagement, business models



## York and North Yorkshire LAEP using LAEP for

- Heat network zoning, transport planning, and the local plan (SPD)
- Accessing funding : incl: IUK Pathfinder, Net-Zero Fund etc
- Development of local net-zero education and skills development programmes to deliver the recommendations of the plan.
- Helping the understanding and action of local people



## Public Sector Decarbonisation Guidance

- Accelerating net zero across public-sector buildings, sites and estates ..... with simplicity & speed
- Commissioned by DESNZ and the Cabinet Office
- Takes learnings from the £12.4 million Modern Energy Partners innovation programme



Find out more at:  
[www.es.catapult.org.uk](http://www.es.catapult.org.uk)

**Thank you**

**Tim German**

Senior Strategic Relationship Manager, ESC

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