

A place-based approach to Net Zero:

The role of local level data to drive co-ordinated action

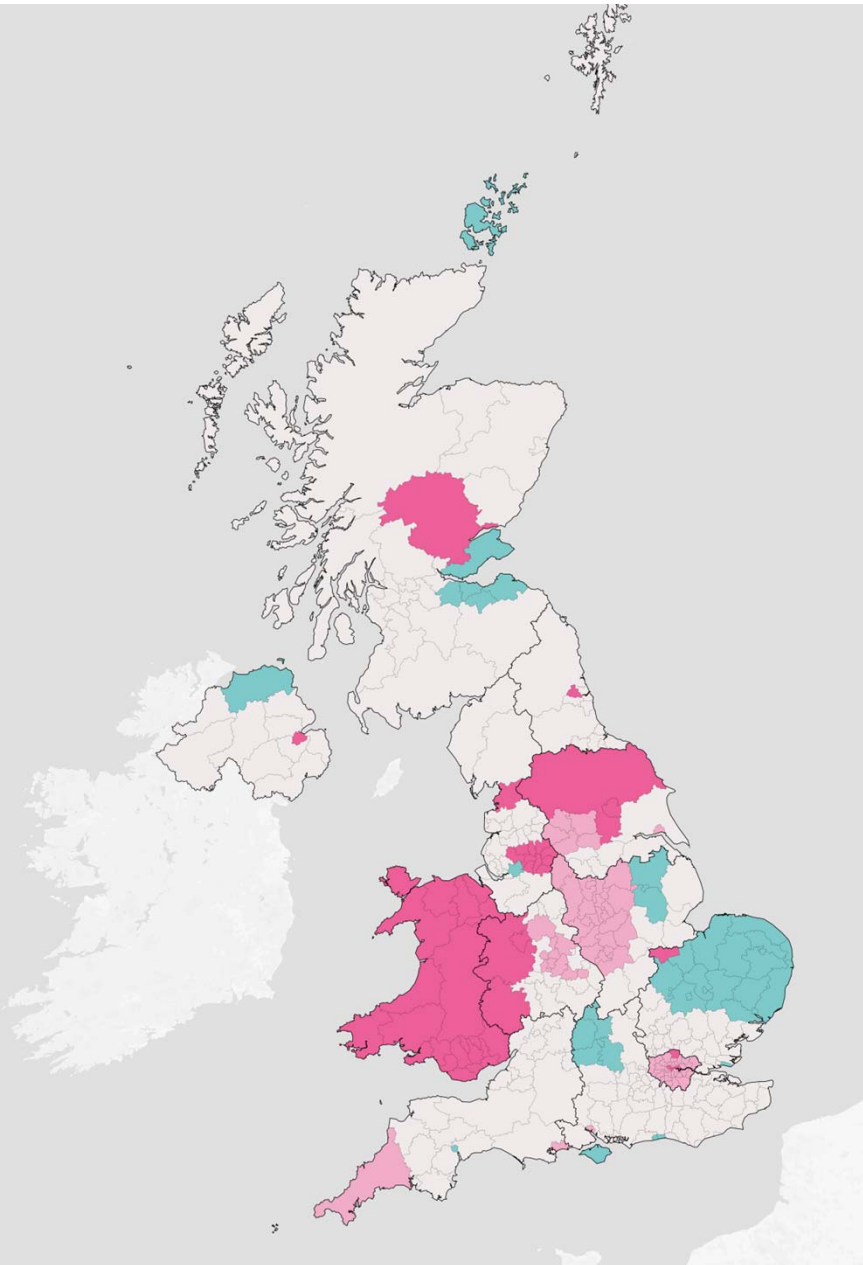
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80% of local authorities in the UK have declared a climate emergency.

Over 31% of local authorities in the UK have, or are developing, a Local Area Energy Plan*.



- Local Area Energy Plan – Completed
- Local Area Energy Plan – Working towards
- Local Energy Asset Representation (a LAEP building block) – Completed



*Feb 2025

Why local data matters now more than ever...



A co-ordinated plan

Data rich with local information including scenario modelling through a whole systems lens leading to the most efficient and effective local plan to deliver Net Zero.



Local Uniqueness

A good plan needs to truly reflect a local areas and its priorities and growth plans. Stakeholder engagement is key combined with granular building level modelling it provides robustness and confidence to act.



What, where, when & how

A good LAEP will help local areas understand what LCT they can deploy, where and in what time frame and how to do it in a coordinated way to get to Net Zero



Data led decision making

With evidence and data and a plan an area can prioritise as well as delivering. It creates certainty and highlights the low regret options. By creating certainty it derisks decisions.

A siloed approach

If projects are done in isolation and not understanding the future energy system needs, decisions based on limited data and knowledge can lead to stranded assets and wrong investment decisions and this method will not get you to Net Zero.



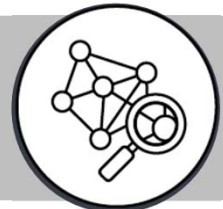
Modelling only

Substation scale modelling as opposed to building level results in having to make lots of assumptions and risk top-down decision making with oversized outputs and its made even worse with no local engagement / knowledge included.



High level aggregation

Producing outputs that are aggregated at too large scale lacks the detail to be able to spot local opportunities and properly define and action projects for change. This approach will need further work and cost to understand and determine projects.



Project by project approach

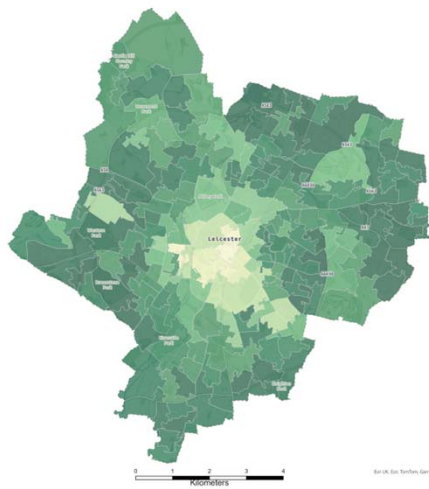
This piecemeal approach will not get you to Net Zero as its uncoordinated but crucially you won't know what the true options are, and it does not provide certainty for investors as its not based on evidence.



LAEPing forward, delivering quicker

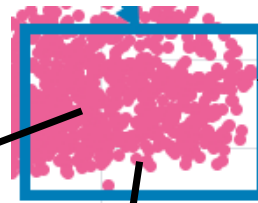
Scenario #47 sits in the middle of all Effective Scenarios. This Scenario features a high use of domestic ASHPs

Scenario #400 gets one of the biggest carbon reductions but at a relatively high cost. This Scenario features a relatively high level of domestic insulation.

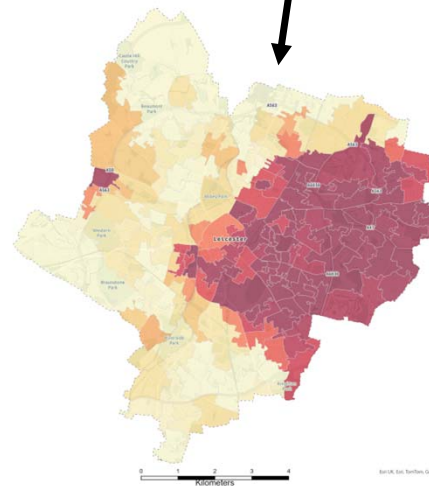


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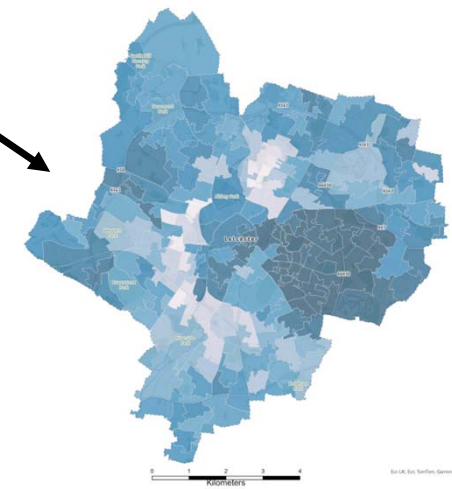
Annual cost



Carbon reduction



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Scenario #259 is a relatively low-cost scenario. This Scenario features a relatively large district heat network.

LAEPs are driving investment in projects, infrastructure and resources

£26m (projects)

Solar investment across Greater Manchester delivering 18MW of the 80MW identified in LAEP

GMCA GREATER MANCHESTER COMBINED AUTHORITY



£50m (project)

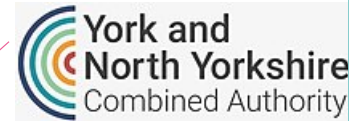
10-year contract to treat waste in the city and turn it into energy whilst also looking into hydrogen.

£620m (infrastructure)

Required investment in heat network infrastructure to supply clean heat to at least 23,000 homes



Belfast City Council



£280m (infrastructure)

The savings expected in energy infrastructure investment from adopting a LAEP

£2m (resources)

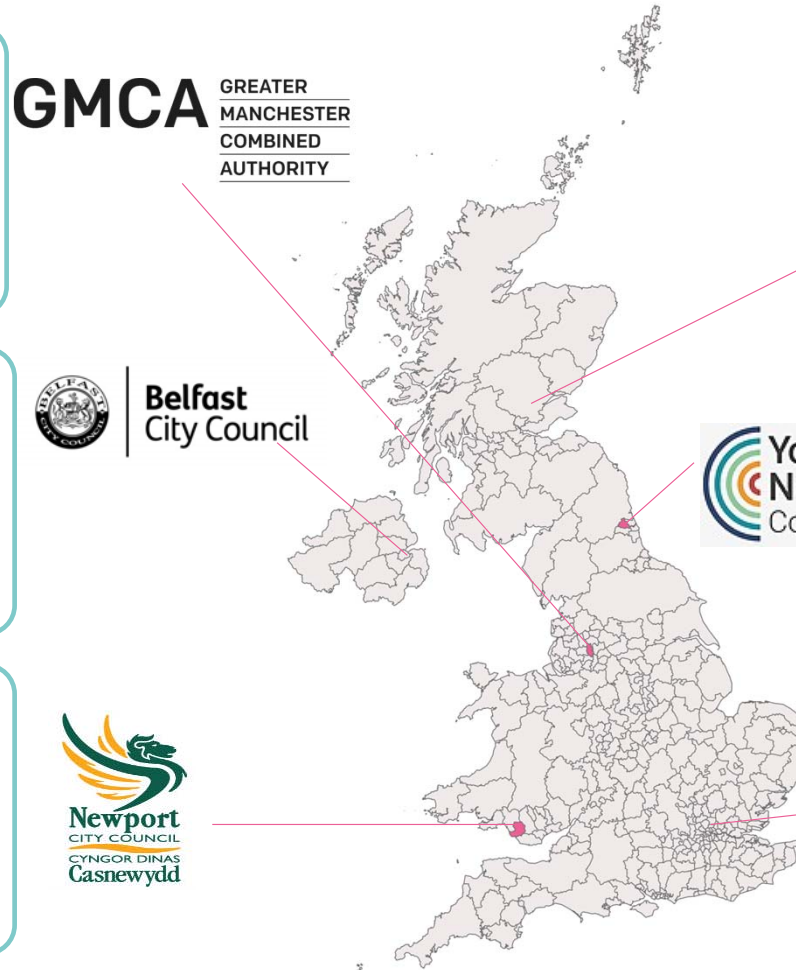
Expansion of Climate Change Team and EV charging hub rollout + community projects



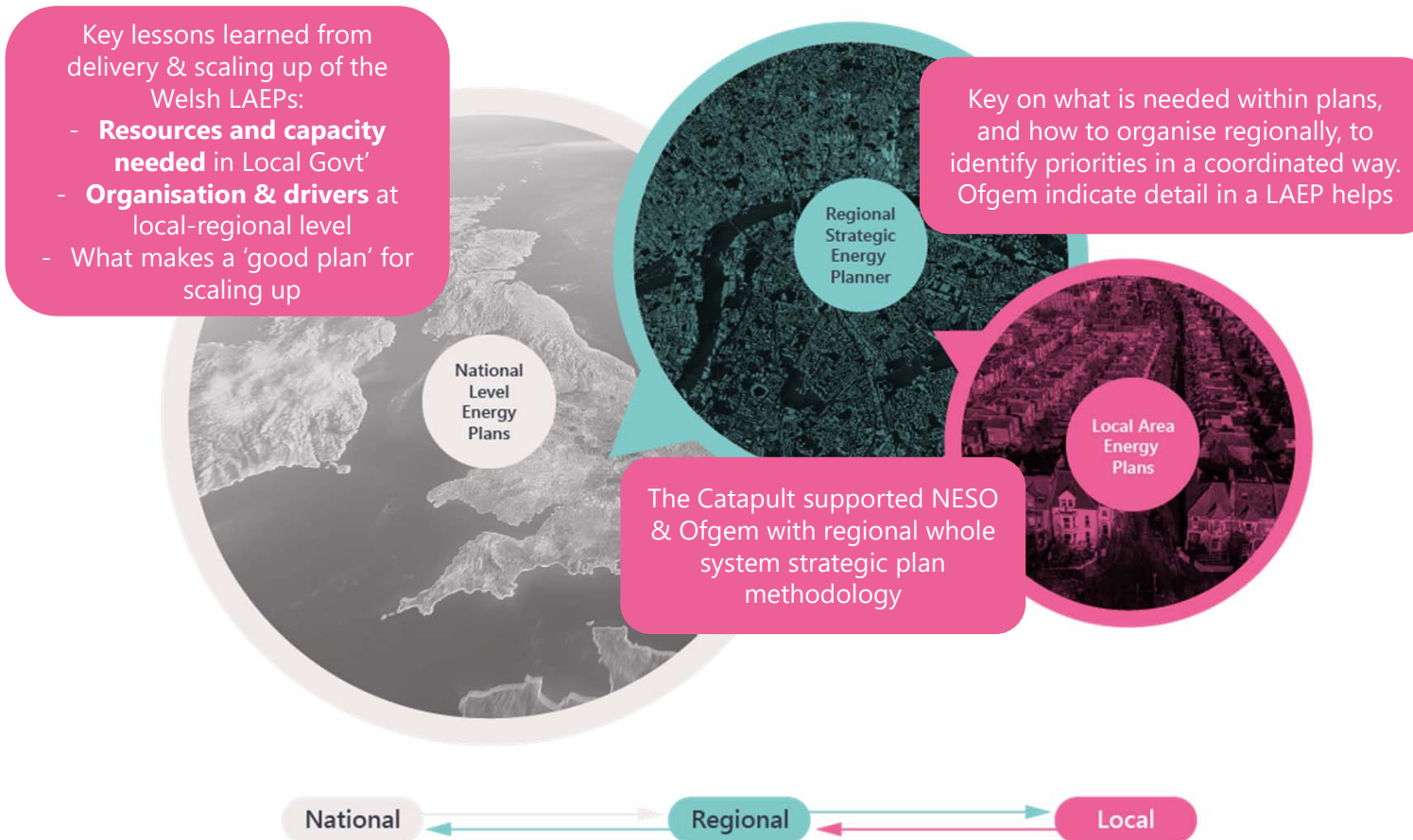
GREATER LONDON AUTHORITY

£53m (projects)

Pipeline investment across London Councils on the back of the LAEP programme

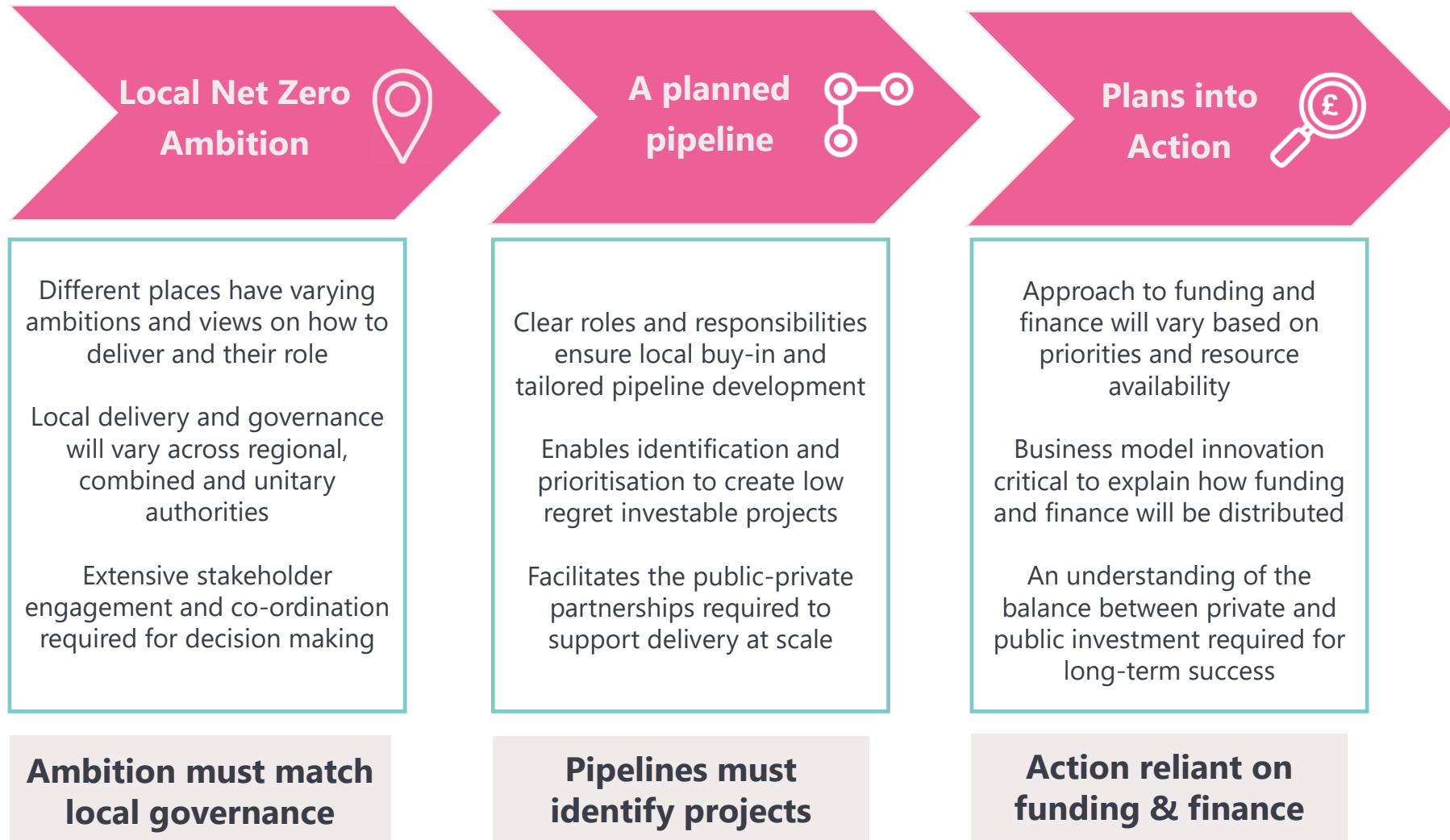


The opportunity in front of us...



- Enable short-term delivery and investment where its needed.
- Take an adaptive and agile approach to account for future uncertainty.
- Provide a clear long-term vision and objective.
- Be robust across a range of future scenarios.
- Provide spatial context

Co-ordination is key for local delivery





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Energy Systems

Thank you

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