

**UK
RI**



Innovate
UK



The Best Laid Plans

Exploring how RESP can
allow local governments
to focus on what matters

FEB 2026



Acknowledgements

About Net Zero Living

Net Zero Living is a programme of work run by Innovate UK. The programme provides support to local authorities, their partners and communities to overcome non-technical systemic barriers to the scaling and adoption of net zero solutions.

Within the programme, there are 52 local authorities, the Net Zero Living participants, at various stages in the development and delivery of their local net zero plans.

About Regen

Regen provides evidence-led insight and advice to transform the UK's energy system for a net zero future. We know that a transformation of this scale will require engaging the whole of society in a just transition. We have 20 years' experience in transforming the energy system for net zero and delivering expert advice and market insight.

About the Carbon Trust

The Carbon Trust, a consultancy committed to accelerating the transition to a decarbonised future, has pioneered positive climate action for over 20 years. It partners with governments, public bodies, leading businesses and financial institutions to drive progress towards net zero. Its global team of more than 400 environmental sustainability experts, including engineers and specialists in finance and policy, collaborates with diverse organisations, industries and business sectors worldwide. Recognising the critical importance of transition planning and collaboration across public and private sectors in achieving net zero, the Carbon Trust places this focus at the core of its work. To date, its experts have supported over 3,000 organisations and cities across five continents in their journey towards net zero.

If you have any questions or feedback about this document, please contact the authors.

Authors

Andrew Barry,
Principal Analyst, Regen
abarry@regen.co.uk

Poppy Maltby
Associate Director - Local, Regen
pmaltby@regen.co.uk



Contents

Background	4
<hr/>	
Executive summary	5
<hr/>	
Benefits and challenges	8
Local net zero planning has provided significant value, but authorities also report challenges, particularly with translating plans into action.	
<hr/>	
Using the RESP	10
The RESP aims to rationalise several aspects of local and regional energy system planning. This provides opportunities to overcome common challenges.	
Four key opportunities:	
1. Delivery	12
Focusing on turning plans into delivery	
2. Scale	21
Aligning pathways across scales	
3. Silos	27
Breaking down silos through shared evidence	
4. Resources	30
Making data and resources go further	
<hr/>	
Next steps	33
Strengthening local net zero planning using RESP.	
<hr/>	
References	35
<hr/>	

Background

Throughout the Innovate UK-funded Net Zero Living programme, Regen and The Carbon Trust have examined the role of net zero and energy planning in delivering successful projects.

Our objective has been to learn from local authorities to improve the way that planning and delivery are undertaken.

The research involved engagement with representatives from over 50 local authorities, providing a detailed picture of how local areas act on climate and how net zero and energy plans support this. We have held interviews and workshops, convened a quarterly energy planning policy group and provided direct technical assistance to local authorities on energy planning and delivery.

We also engaged with experts from the energy sector, from organisations including the National Energy System Operator (NESO), Distribution Network Operators (DNO), Ofgem, the Energy Systems Catapult, Department of Energy Security and Net Zero (DESNZ) and others, to understand the evolving context for regional and national energy planning. In November 2025, Regen hosted a Chatham House roundtable with relevant stakeholders from NESO, the civil service, industry and local government to discuss this report and 'Join the Dots'.²² Points made in the session are reflected throughout.

This work builds on our earlier research including 'Enable Embed Enact: Maximising the Value of Net Zero Planning', (2025)¹ and 'Planning for decarbonisation at a local level' (2023).² Both reports underlined the importance of linking energy analysis explicitly to the systems, governance and partnerships that turn plans into projects.

It also responds to the major shift now underway with the development of Regional Energy Strategic Plans (RESP) by NESO. RESP will, for the first time, connect local ambition and infrastructure requirements within a single regional and national framework for investment and planning. Roundtable attendees also noted a rapidly shifting policy context for local government and the energy system, with factors including political uncertainty, budgetary pressures, local government reorganisation, the Local Power Plan, the Warm Homes Plan, GB Energy and the forthcoming Planning and Infrastructure Bill. Among these changes, uncertainty around the exact nature of local governments' roles and responsibilities in net zero planning were raised, particularly in the absence of statutory functions.

This paper provides background and insight for local authorities, regional energy planners and national stakeholders involved in shaping this next generation of integrated planning. It examines how RESP can support local delivery, and how local areas can, in turn, help shape the wider energy system.

Following the roundtable, NESO confirmed a revised programme for RESP development, with full plans now expected in 2028, later than originally indicated. The transitional RESP remains in progress, but the extended timeline underlines the importance of maintaining local planning capacity and iterative engagement during the interim.

Executive summary

Local net zero planning has created real value for councils by clarifying the scale of the challenge, convening partners and embedding climate action across local government.

Yet, despite these gains, delivery remains slow. This paper explores how the emerging RESP process can strengthen local planning and accelerate delivery.

Existing approaches are valuable

Local net zero and energy plans, like Local Area Energy Plans (LAEP), Local Heat and Energy Efficiency Strategies (LHEES), emissions reduction pathways, climate change strategies and climate and environment plans have proved invaluable for local governments pursuing climate action. They have:

- **Articulated the scale** of the net zero transition and the level of intervention required.
- **Conveyed opportunity**, helping local areas understand the economic and social benefits of decarbonisation.
- **Convened stakeholders**, providing shared evidence to guide collaboration.
- **Established a formal process**, raising the visibility of energy and climate planning and enabling councils to act strategically.



These achievements demonstrate that structured planning adds value far beyond its analytical outputs.

Despite plans being valuable, councils struggle to act

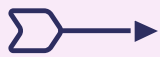
Implementing decarbonisation is highly complex, requiring finance, governance, detailed project design and alignment with wider infrastructure and statutory duties. While planning can provide a strong foundation to tackle these obstacles, many councils report that the link between analysis and implementation remains weak. Local authorities highlighted four recurring challenges that limit progress.

These issues leave councils less well-equipped to implement their ambitions than they could be. Local authorities also highlighted a need for better, clearer national guidance on roles and responsibilities, a theme mirrored in our report *Join the Dots: embedding climate action in local authorities*, Regen, Carbon Trust and Innovate UK, November 2025.²²

RESP provides an opportunity to improve outcomes

The RESP, being developed by the National Energy System Operator, introduces a consistent, multi-scale planning framework that could provide significant opportunities to help address these challenges and improve outcomes for local authorities.

Current challenges



Delivery

There is no clear link between planning and project delivery.



Scale

Local areas form a national whole - national and local plans must recognise each other, but are not always formally aligned.



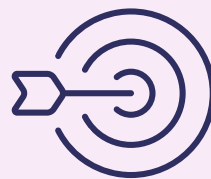
Silos

Local energy strategies can be developed without linking to statutory responsibilities and energy system plans.



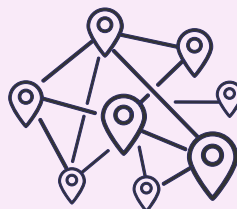
Resources

Current approaches are often resource-intensive without producing desired outcomes.



Refocusing on delivery

RESP pathways provide a shared baseline, shifting local analysis toward deliverable projects aligned with local ambition.



Aligning local and national

RESP links local ambition with national pathways and network investment, strengthening place-based energy system delivery.



Reducing silos

RESP's role and data standards could help integrate energy planning across local authority teams and partner organisations.



Using resources efficiently

Standardised RESP data and methods reduce duplication and cost, freeing local capacity for project delivery.

However, RESP will not replace the need for local analysis.

Instead, we view it as a potential standardised starting point from which authorities can interrogate delivery implications, identify opportunities and feed practical insight back into future RESP iterations.

Participants in our November roundtable expressed support for RESP's potential to provide a single shared starting point for analysis ("a single version of the truth"), reducing the need for parallel modelling. However, they also noted very high expectations being placed on RESP ahead of its publication, particularly around governance, representation, transparency and the management of competing interests.

In December 2025, NESO revised timelines for the first full RESP, extending delivery into 2028. This, along with the uncertainties around roles, resources and alignment reinforces the continued need for local analysis and interim processes as RESP matures.

Once RESP is established, the regional leadership of RESP may prove especially useful in the context of uncertainty driven by local government reorganisation, by offering continuity, consistency and coordination as institutional boundaries change.

Next steps for strengthening net zero planning

In our view, pragmatic next steps to help improve outcomes from local net zero planning hinge on making use of available resources through the RESP, making local net zero planning less about modelling scenarios and more about how to deliver. This could include:

- 1. An integrated methodology for local and regional energy planning**
- 2. Adopting existing data, such as RESP pathways, DFES and other data as the common starting point for local analysis**
- 3. Focusing local resource and analysis on delivery using the 'Embed Enable Enact' framework**
- 4. Prioritising transparency, usability and communication between RESP and local authorities**

RESP offers an opportunity to build on the strengths of existing approaches while addressing their structural challenges, moving towards coordinated, resource efficient, delivery-focused decarbonisation across all levels of governance.

Benefits and challenges

Local government has a significant role to play in the delivery of the UK's net zero targets.

In recognition of this, and stemming from a desire to take action against climate change, many local authorities have embarked upon ambitious net zero planning such as LAEPs, LHEES, Emissions Reduction Pathways, Climate Change Strategies and Climate and Environment Plans to chart the course for net zero in their region.

This has been valuable: the energy transition is now understood in increasing detail at the regional level and local governments see the opportunities in low-carbon infrastructure. Developing net zero plans has also sparked innovation, as efforts to implement them reveal systemic barriers to decarbonisation. Engagement carried out by Regen and the Carbon Trust with local government representatives showed that net zero planning activities broadly provide value in the following ways:¹

- **Articulating the scale of action required for net zero delivery**
Local net zero plans give councils a sense of what net zero really means. The plans bring home the level of required interventions and investment, as well as the rate of change required to achieve ambitious targets.
- **Convening stakeholders and decision makers around net zero action**
Councils cannot deliver decarbonisation by themselves. Local net zero plans have acted as a useful evidence base for authorities to influence stakeholders and create a shared understanding of the future of energy use in their region, as well as the economic and social opportunities decarbonisation can bring.
- **Identifying local opportunities and gaps**
Undertaking a localised decarbonisation planning process can help identify project opportunities and 'low regrets' actions which can galvanise local action on net zero. Equally, it can help identify where existing delivery capacity, skills and infrastructure fall short of requirements.

A key theme is the difficulty in translating plans to delivery.



An overarching theme, reinforced by participants in our November roundtable, is that having a formalised process during which the local authority examines where it is and where it needs to be, is highly useful for developing a strategy and putting a clean energy transition high on the council's agenda. Another theme, though, is the difficulty of translating plans into delivery.

Local authorities face common challenges

Delivery

Local authorities often find that the link between planning and implementation is weak. Local Area Energy Plans and similar studies produce credible scenarios but stop short of establishing actionable project pipelines – a point echoed by attendees at our November roundtable. Plans therefore risk becoming stand-alone reports rather than the foundation for investment pipelines. This disconnect reflects the absence of a common process for translating analytical outputs into local action.

Scale

Local energy systems form part of an interconnected national whole. Yet most current approaches plan within administrative boundaries, treating the local area as a self-contained system. This limits the realism of outputs and can create conflicting expectations between local authorities, regional actors and national planners. The absence of a formal mechanism to align plans across these scales means that valuable local insights are not consistently fed into strategic energy planning, while national initiatives may overlook local constraints and opportunities.

Silos

Energy and climate planning is frequently developed in isolation from other statutory and corporate functions – discussions at the roundtable highlighted significant variations between local authorities. Local net zero objectives are not always embedded within local plans and other strategies, and responsibilities for delivery are dispersed across departments. Externally, plans can sit apart from regional and national energy-system processes, making it difficult for network operators and government to reflect local ambition in their own investment and policy decisions. The result is duplication, inconsistent assumptions, and missed opportunities for collaboration.

Resources

Developing a comprehensive local energy plan is resource intensive. Councils report that commissioning bespoke data, modelling and stakeholder engagement can consume substantial budgets and staff time, often without yielding investible projects. Skills shortages and turnover further reduce continuity. In many cases, similar analyses are repeated by multiple local authorities using different methodologies, leading to inefficiency and fragmentation. Without shared data platforms or ongoing support, maintaining plans and keeping them relevant becomes impractical.



There is no clear link between planning and project delivery.



Local energy strategies can be developed without linking to statutory responsibilities and the energy system.



Local areas form a national whole - national and local plans must recognise each other, but are not always formally aligned.



Current approaches are often resource intensive without producing desired outcomes.

Using the RESP

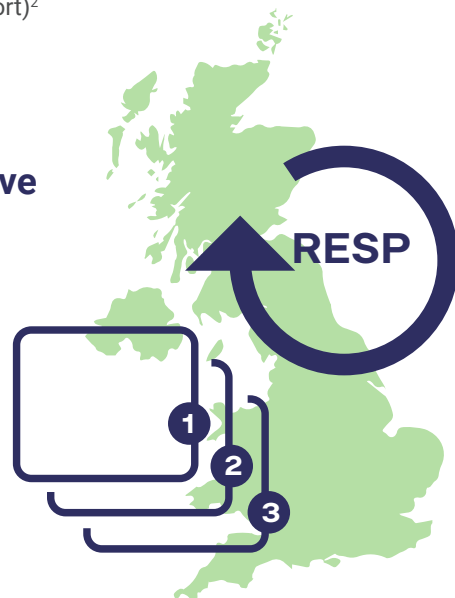
Regen’s earlier research around this topic concluded that the development of standardised, high-level ‘overarching decarbonisation plans’ would be a pragmatic and cost saving approach to help local authorities progress their net zero strategies.

Such plans would provide spatially granular baselines of current demand and high-level future scenarios for key sectors, giving local areas a common starting point for conversations about delivery. Local refinement and opportunity development could then build on this shared foundation. In addition, a wide array of literature including the Energy Systems Catapult’s review of spatial and temporal mapping, and Regen’s ‘Enable, Embed, Enact’ report recommend an iterative approach – highlighting that any plan is a snapshot in time which requires agile updates.^{1,3}

Figure 1: Overarching decarbonisation plan graphic (2023 report)²

Development into an overarching decarbonisation plan requires an iterative approach as outlined in past reports:

1. [Planning for energy decarbonisation at a local level](#)
2. [Enable, Embed, Enact](#)
3. [Energy Systems Catapult review of spatial and temporal mapping](#)



RESP could fulfil this role. NESO is resourced to produce spatially detailed regional pathways across energy vectors and key low carbon technologies, integrating local factors into uptake trajectories. Unlike locally developed energy plans, RESP carries regulatory authority within the new strategic planning framework, and explicitly formalises the link between local ambitions and national infrastructure investment.⁴ Participants at our roundtable in November 2025 stressed the importance of co-developing RESP processes with local government to ensure credibility and usability.

Though the precise nature of RESP methodologies, outputs and governance arrangements are still under development, the establishment of RESP has the potential to directly address several of the net zero planning challenges facing local authorities:

- **It could allow local areas to focus more strongly on delivery**, giving a clear view of infrastructure planning while allowing councils to focus less on scenario design and more on translating system pathways into identifying opportunities, engaging communities, structuring governance and identifying routes to commercialisation.
- **It lays the groundwork for integration across scales**, embedding local data and priorities within regional and national energy-system plans.
- **It supports collaboration**, providing a shared dataset and a regular update cycle that encourages cross-authority working and breaks down institutional silos.
- **It could reduce duplication and cost**, providing a consistent, open evidence base that saves resources otherwise spent on bespoke modelling.

However, the RESP does not replace the need for local analysis and action. Insight developed by existing LAEPs, LHEES and other plans remains vital and will help define future iterations. The crucial shift is that RESP could provide a single, consistent baseline, avoiding duplicated scenario modelling built on separate assumptions and models. RESP moves Britain closer to an integrated, multi-scale energy planning process that serves all parties.

RESP pathways set out what is needed, but not how to achieve it. Therefore, local authorities can add value by identifying projects, assessing feasibility, interrogating delivery implications, and building the evidence base for investment. They can also spend more time engaging with the 'enabling ecosystem', which underpins the deliverability of plans.¹

Through this work, local net zero planning becomes less about parallel modelling and more about translating system pathways into projects that attract funding and get built.

The following sections explore some ways in which RESP, as it develops, could help local authorities overcome their shared challenges of moving towards delivery, coordinating across scales, overcoming silos and managing limited resources.

Focusing on turning plans into delivery



By providing a high level plan to build on, the RESP could enable local authorities to focus more effort on delivery, governance and finance, accelerating the development of investible projects and avoiding analysis paralysis.

Action off the back of a net zero plan has, however, proved difficult for many. While modelled outputs provide a valuable view of future low-carbon technology uptake and the investment and development potential, local authorities report that a focus on the mechanics of project delivery is often lacking during the development of plans.

Regen's report 'Enable, Embed, Enact', set out the value of local net zero plans to date and ideas for how processes could be streamlined to provide a more explicit focus on project delivery.¹ The report was based on extensive stakeholder engagement with local authorities through the Net Zero Living programme and experts from across the energy planning sector.

Enable, Embed, Enact

Our earlier research with Net Zero Living participants identified a need for a clearer link between the net zero planning approach – including the depth of data modelling and analysis – and the anticipated role of the local authority and their ability to deliver. The paper suggested that a local authority, having assessed its energy landscape and priorities, and having developed a high-level plan, could tailor additional, more detailed planning and analysis on a thematic basis. Across delivery areas, or ‘themes’, a local authority can broadly:

- Enable partners and stakeholders to act. This is particularly suitable for focus areas without centralised support and not within the authority’s direct influence.
- Embed delivery in existing departments where appropriate, particularly any actions which are closely aligned with, or involve local authorities’ statutory responsibilities and ongoing activities.
- Enact plans themselves and ultimately take some level of responsibility for the development and deployment of net zero interventions themselves. This is closely related to (but not solely reliant upon) policy and funding support.

The level of ownership and risk taken on by a local authority increases with each of these roles, as does the requirement for additional funding, capacity and resource.

Figure 2: Enabling, Embedding and Enacting sit on a scale of authority risk and resource requirements

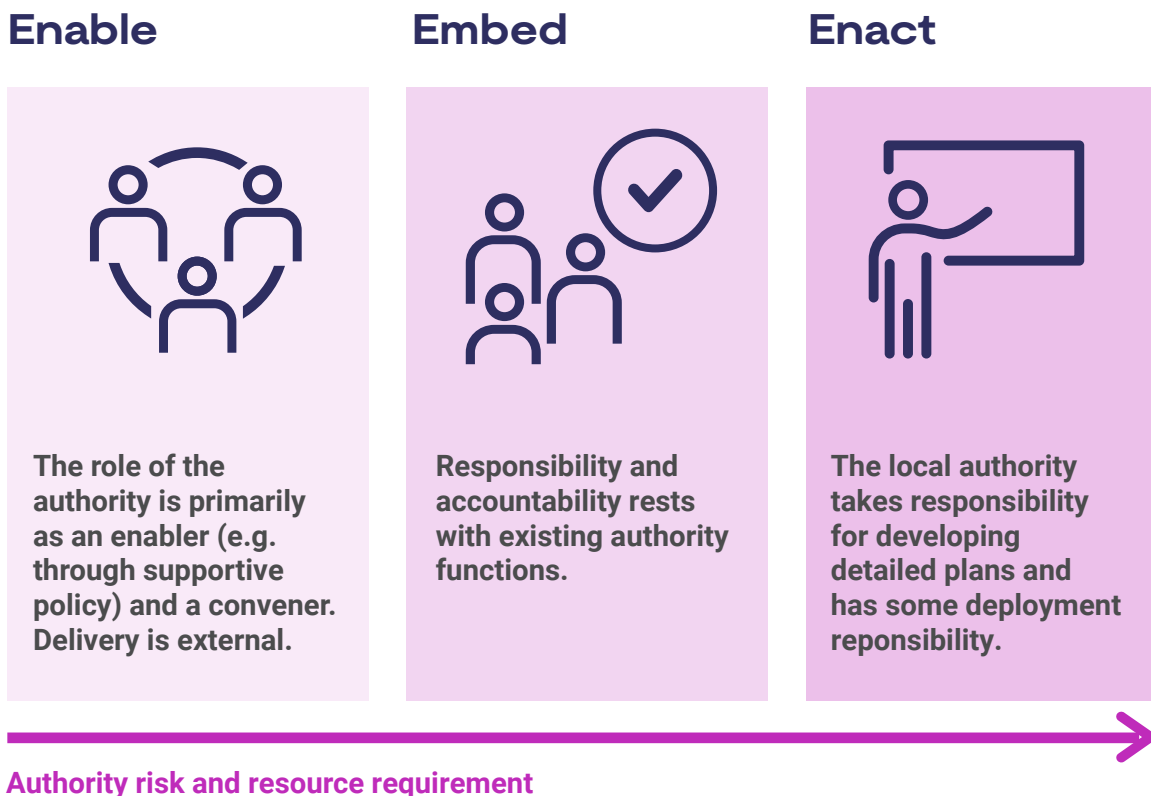


Figure 3: Illustrative mix of roles across key net zero interventions

	Enable	Embed	Enact
Heat networks			✓
Industrial decarbonisation	✓		
Public transport		✓	
Renewables development	✓		
Etc			

Figure 3 provides an example of how a local authority’s role might vary in net zero planning across different sectors and interventions. While real-world implementation will occur along a spectrum and differ by location, the ‘Enable, Embed, Enact’ framework serves as a high-level illustration.

The requirements for a local authority adopting an enabling role in a given sector would differ from those of an authority directly enacting a project. Equally, so would the level of risk borne directly by the authority. Consequently, varying depths of analysis may be appropriate, as well as tailored approaches to stakeholder engagement priorities and governance.

Different intervention areas require different levels of analysis, depending on the ambition and delivery role of the local authority.





Case study

Southampton City Council

Building a foundation for Local Area Energy Planning

A pragmatic, data-led approach and the Enable-Embed-Enact (EEE) framework has helped Southampton rapidly clarify its role in local energy system planning. The city now hopes to move towards targeted analysis and pipeline development.

Southampton City Council commissioned the Carbon Trust, through the Net Zero Living technical assistance support programme, to lay the data foundations for a LAEP and assess how Scottish and Southern Electricity Networks' [Local Energy Net Zero Accelerator \(LENZA\)](#) tool could inform local decarbonisation.

This produced a data-mapping matrix summarising what data is available from which sources, what information stakeholders may already hold (particularly those planning projects in the Southampton area), and what additional information could be provided by targeted analysis through the LENZA tool.

The team also applied the EEE framework to a longlist of possible intervention types across the city, including high-level stakeholder mapping, data and analysis requirements, and qualitative energy system impacts.

The rapid visualisation and analysis enabled by tools like LENZA, paired with action prioritisation via the EEE framework can help facilitate efficient opportunity identification, and Southampton council have valued the pragmatic approach and the speed at which insight has been developed, which can now inform targeted analysis aimed at developing a pipeline of opportunities.

Going forward, Southampton will use the data matrix to identify priority datasets and stakeholders, apply the EEE framework to refine interventions and decide on the scope and focus of its ongoing net zero plan development.

Using the existing data to develop a delivery pipeline

Regional energy pathways from RESP will describe what a net zero energy system could look like, providing detail on how much electricity will be needed, what share might come from renewables, and how quickly technologies such as electric vehicles and heat pumps must scale. The challenge for local government is to interpret what RESP pathways imply for delivery on the ground, and, where realistic, how local ambition could go further. This is also true of other similar sources, such as DFES.

Turning system-level scenarios into action requires asking practical questions about what scenarios mean for residents, businesses, land use, transport networks and buildings. Rather than testing new 'what-if' futures, local authorities can use the existing data from the RESP and DFES to work backwards from these scenarios, assessing what each assumption would require locally.

For example, if regional modelling indicates that a certain area will see a tripling of domestic heat-pump installations by 2035, the local authority can translate that into delivery-focused analysis:

- How many homes does that represent, and of which types or tenures?
- Does data reflect the Local Plan, new developments, etc?
- What supply-chain capacity and workforce will be needed to achieve it?
- Which policies, incentives or partnerships could drive this pace of change?
- Where do these interventions fall within the authority's remit versus national or market drivers?

Analysis could go further too, by looking into community capacity, the implications for local climate resilience, overlaying data on vulnerability and fuel poverty, cost modelling and optimisation, and so on.

This form of 'reverse engineering' shifts attention from theoretical optimisation to the tangible steps, governance structures, financing models, partnerships and resources required for implementation. It can also show where local ambition diverges from system projections. For example, local authorities aiming for 2035 net zero can use the 2050 baseline as a reference, before assessing what additional pace or support would be required to accelerate deployment in pursuit of their greater local ambition.

Figure 4: Iterative improvement of regional and local plans



By starting from modelled futures and working backwards, local authorities can direct effort towards building delivery capacity, identifying investible projects, and engaging internal and local stakeholders. This will then enable an iterative process of regional pathway development, where over time the RESP (and resulting infrastructure investment plans) will become better aligned with the ambitions and capacities of places.

Making full use of the RESP

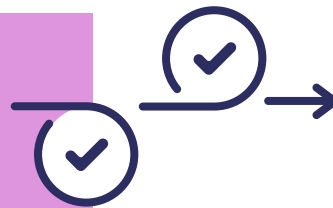
The RESP will not simply be a dataset. NESO is looking to develop a range of targeted, free local actor support to help local governments appropriately engage with the development of regional plans and the associated governance and processes, such as democratic regional boards which have accountability for final outputs.

Local areas making use of data developed by NESO as a starting point for their analysis will aid the seamlessness of this process, but to be feasible and effective, the availability and transparency of data will need to be high.

Therefore, full transparency on the RESP's input assumptions, modelling techniques and results will be important to help local authorities make full use of the data without the need to introduce additional assumptions into the analysis. Consideration should also be given to how information is communicated to councils and other stakeholders – data on its own can be impenetrable, requiring a lot of work and expertise to correctly interpret. The regionally bespoke 'Nations and Regions Contexts' reports NESO is developing are an important first step towards this and show that NESO recognises the importance of this element of their responsibilities.⁵

It should be noted that the Consistent Planning Assumptions (CPAs) published for the recent 'transitional' RESP (tRESP) consultation are aimed at DNOs, and the technological focus of the tRESP is also narrower than full regional plans. The thinking in this report is forward-looking, and refers to RESP use cases for local areas which may develop over time but are not currently baked in. This is covered further in the sections 'tRESP insight' and 'Compatibility, consistency and communication' below.

The RESP will continue evolving, providing more data and information over time, as well as targeted support for local areas.





Case Study

South West Net Zero Hub

A regional partnership supported by the South West Net Zero Hub worked with Regen, the Centre for Sustainable Energy and local authorities to complete stages one to three of LAEPs across four counties.

The project combined detailed baselining, review of existing strategies and targeted stakeholder engagement to produce forward plans that focus on practical delivery rather than additional scenario modelling.

Each plan sets out short, medium and long-term actions, developed through workshops with officers, DNOs and community energy groups, to align local activity with the forthcoming tRESP and RESP publications. This decision was taken out of pragmatism, as RESP development was imminent and would overlap with later LAEP stages. Further actions will be refined based on interactions and data from the RESP.

Common elements across counties' forward plans

- Governance and coordination: Establish joint working groups, climate partnerships and clear responsibility for data and decision making across different intervention areas.
- Skills and capacity: Upskill officers across planning, housing and transport; create shared specialist roles; continue collaboration with the Net Zero Hub for finance and delivery support.
- Data and evidence: Consolidate local energy datasets, maintain repositories or tools such as LENZA, and formalise data-sharing agreements to support consistent analysis.
- Integration with economic planning: Embed energy priorities within local plans, transport strategies and economic-growth initiatives to connect decarbonisation with investment and skills.
- Delivery pipelines: Use the forward-plan roadmaps to move from planning to implementation by developing project pipelines, supporting community energy, accelerating retrofit and renewables, and maintaining active RESP and DNO engagement.

The forward plans provide a replicable model for coordinated regional energy planning, and target local authority action at building governance, capability and delivery pipelines that align with national energy-system planning, and avoid pouring time and resource into further whole-systems analysis.

In addition, the adoption of this cross-county and energy system aligned approach has provided several useful insights.

Conducting the analysis and engagement across a wide region containing multiple counties enabled productive knowledge sharing and collaboration, particularly around topics such as establishing local climate groups and developing senior buy-in within local government. In addition, a coordinated modelling approach unlocked significant efficiencies. This included highly locally specific topics such as 'area characterisation', skills and capabilities assessments, where it was found that there were benefits to having shared outputs across all four areas as a shared methodology allowed direct sideways comparison.

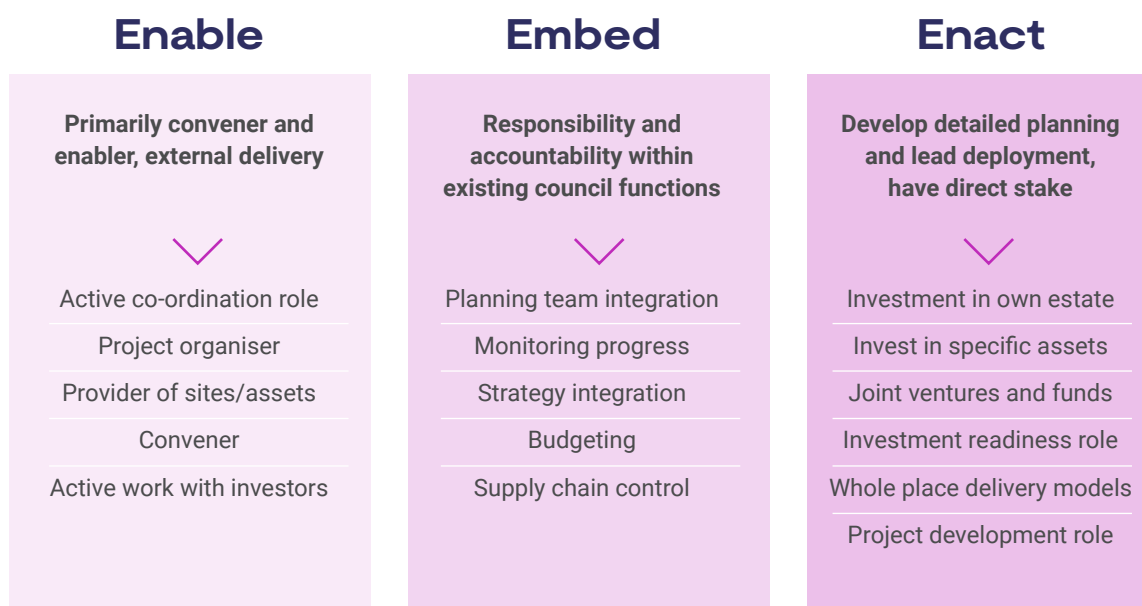
Further, the direct involvement of the DNO throughout the project was highly beneficial. Though this is not unique to this project, stakeholders valued the steering of the analysis and project direction towards pipelines of projects and focus areas rather than broad scenario projection, in alignment with the needs of DNO and RESP analysis (i.e. strategic investment needs).

Delivering a pipeline of projects

Moving from plans to a tangible pipeline of projects is one of the hardest stages of local net zero delivery. It is important to note that standardising local net zero planning approaches, evolving methodologies to better align with the RESP, and directly considering a local authority's delivery role will not automatically lead to a pipeline of investible, shovel ready projects. Local authorities face myriad challenges to delivery, such as a poorly defined remit, a huge shortfall in funding availability, and conflicting remits – as outlined in detail in UK100's reports Powers in Place and Local Net Zero 2.0.^{6,7}

Developing projects that can attract investment requires aligning multiple moving parts: internal governance, procurement routes, risk allocation, and private sector partners. This is not solved by more detailed modelling or additional scenarios, but by adopting a leaner approach to plan development. Building opportunities on existing resources from the RESP may allow more resource to be focused on these complex, non-analytical elements. Innovate UK have funded several pieces of work which investigate and advise on how to move from plans to delivery, including City Science and BwB's work on Unlocking Climate Capital, and PwC's 2023 review of net zero investment.^{8,9} Crucially, the anticipated role of the local authority is central to the advice throughout these reports – showing the pragmatism of allowing local authority roles to take centre stage in net zero planning.

Figure 5: Local authority investment actions and options, mapped against EEE roles by City Science and BwB for Net Zero Living⁸



→ Insights— Building an Investible Project Pipeline

Turning local net zero plans into a bankable pipeline of projects is not straightforward. While analytical tools and scenarios reveal what needs to happen, they rarely show how to make it happen. Recent Innovate UK funded work highlights the need for structured, finance-ready approaches that help authorities navigate the realities of governance, risk and delivery.

Unlocking Climate Capital – City Science and BwB⁸

City Science and BwB introduce a standardised business-case framework aligned with the HM Treasury Green Book. It helps local authorities progress from strategy to investment by embedding financial appraisal and options analysis at an early stage.

- Promotes “Whole-System Finance”, combining public and private capital through bundling, blended finance and revenue stacking.
- Provides a Net Zero Finance Options Framework to identify, test and rank delivery models using multi-criteria decision analysis.
- Emphasises that credible pipelines depend on rigorous option appraisal, not on additional scenarios.

Financing Local Net Zero Projects: A Guide for Local Authorities - PwC⁹

This guide explains how to structure and fund local net zero projects through the full project-development life cycle from pathway plans to commercialisation.

- Maps delivery structures (in-house, Special Purpose Vehicles (SPV), joint venture, concession) and their risk-reward balance.
- Details revenue streams, contracting routes, and blended-finance mechanisms.
- Shows how portfolio management and cross-subsidy can turn small-scale projects into a scalable investment platform.

Pipeline development is a crucial but complex process, which is often overlooked in local energy planning. RESP could provide opportunities for local actors to spend more time on pipeline identification and delivery.



Aligning pathways across scales



RESP connects local ambition with regional and national energy planning, providing the framework needed to coordinate infrastructure and investment for net zero.

Energy infrastructure is a fundamental enabler of decarbonisation.

The availability of energy infrastructure is of crucial importance to the deliverability of local net zero ambitions. In recent years, energy network infrastructure has often been cited as a bottleneck to decarbonisation, most prevalently in the generation and storage sectors where lead times for a connection have been known to exceed a decade. Similar issues are emerging for demand connections.

One of the recommended outputs of the Energy Systems Catapult's LAEP methodology is identifying where energy network investment is required. Meanwhile, DNOs engage with local authorities to reflect local ambition in network investment plans.¹⁰

By 2050, NESO's Future Energy Scenarios project an electrical demand increase of around 2.5 times from 2024 levels, as shown in Figure 6.¹¹ The National Infrastructure Commission's (NIC) 2025 review of electricity networks found this will necessitate a 'step change in electricity distribution network investment'.¹²

Achieving net zero will require rapid and co-ordinated grid investment.

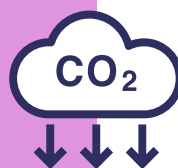
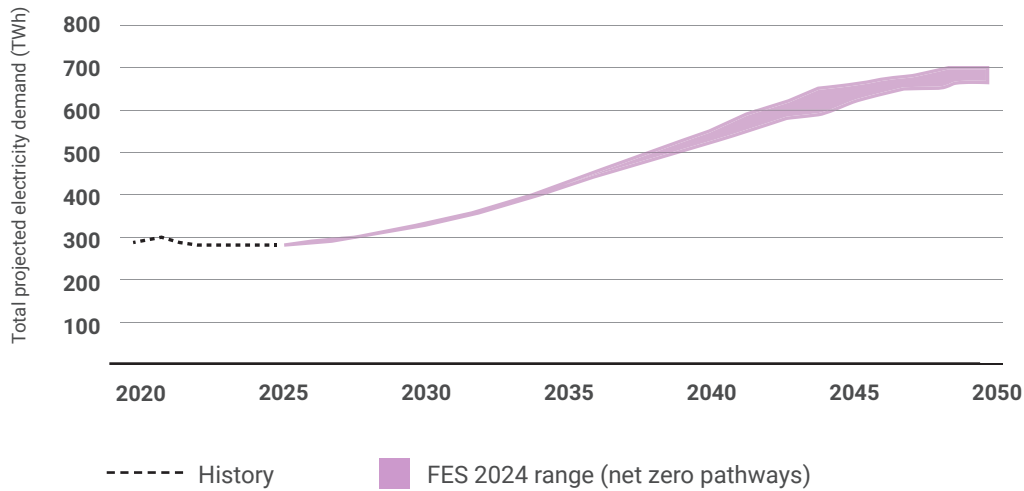
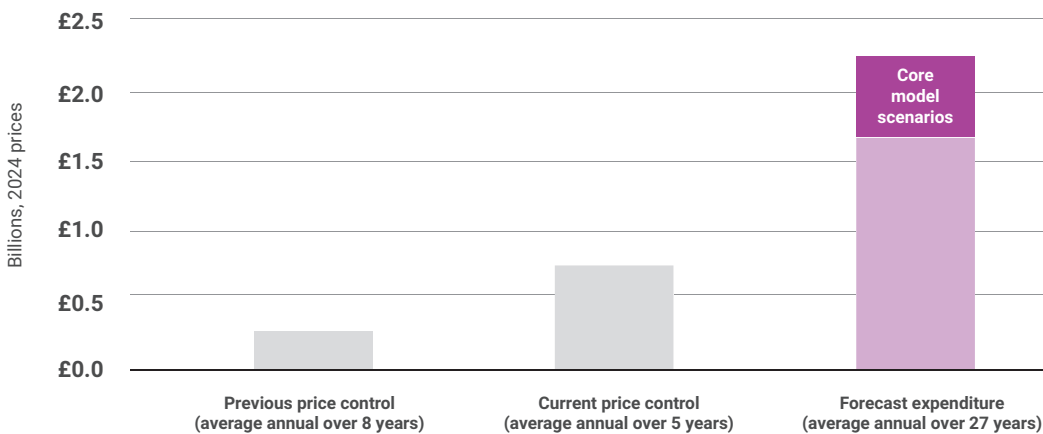


Figure 6: FES 2024 demand trajectories in net zero scenarios¹¹



The NIC estimated an additional £37-50 bn of load-related expenditure (Figure 7) on the distribution system by 2050, at a pace and scale which necessitates a shift to strategic, anticipatory investment.

Figure 7: Average annual load-related expenditure from 2015 to 2050¹²



This means building energy infrastructure ahead of need and ending the bottleneck of the networks – but this requires unprecedented levels of coordination across the different scales and vectors of the energy system, as well as all scales of national and local governance.

The NIC’s findings, endorsed by the government’s response, highlighted that the RESP provides the mechanism to align national pathways with regional and local priorities.^{13,14}

Planning coordinates across scales

Local energy systems are part of a national network, not standalone entities. Electricity and gas infrastructure are designed, financed and operated across regional and national boundaries, so effective local decarbonisation planning must connect directly with this wider system.

Researchers from University College London (UCL) (see box below) showed that most energy-system models operate at a single scale of governance and treat other levels as external, producing results that cannot be readily integrated.¹⁵ Meanwhile, a 2023 Parliamentary briefing on Local Area Energy Planning reached the same conclusion, identifying the need for a 'local-to-national governance framework' and highlighting the potential of the RESP to provide it.¹⁶

The challenge of local, regional and national coordination in energy models

A global review by UCL's Energy Institute found that most energy-system models focus on a single governance scale, limiting integration across national and local policy contexts. Many local studies treat national policies, energy market conditions and infrastructure development as externalities – despite these factors having a material effect on local decarbonisation, and the appropriate course of action for local government.

This creates inconsistent or even conflicting objectives between different levels of government, and makes it impossible to plan a coherent transition. Effective decarbonisation requires integrated models that align national and local targets, assumptions and decisions.

The study concluded that energy planning processes must include explicit multi-level coordination of assumptions, targets and stakeholder engagement.¹⁵

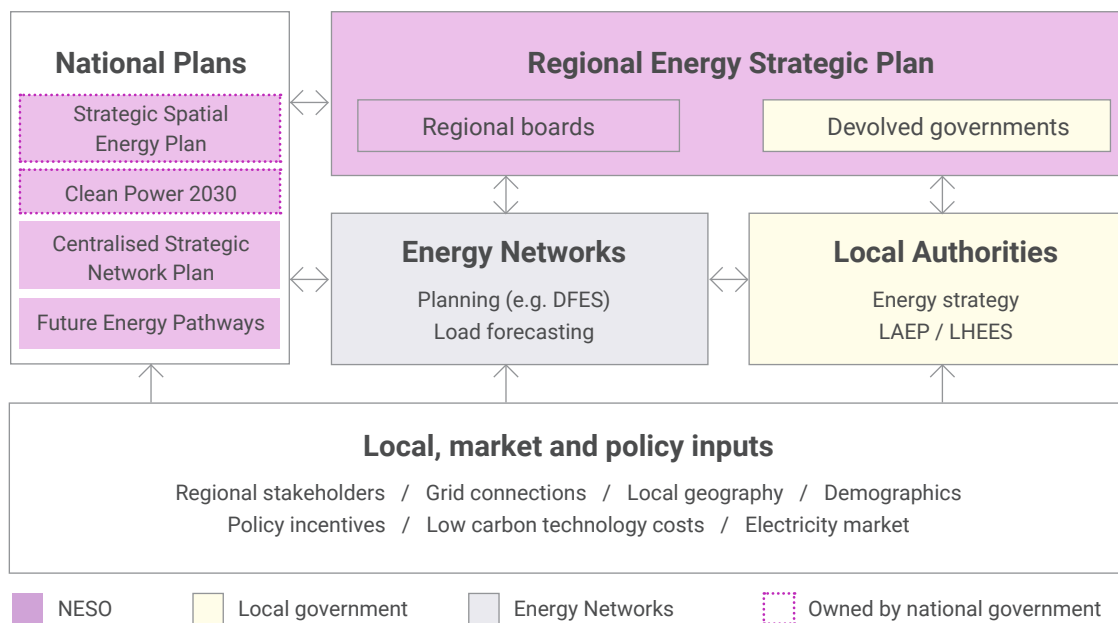
On a technical level, modelling a local area as a self-contained energy system can produce misleading results, recommending technologies or investments that ignore interconnection, balancing and network constraints.

Regen's earlier research on this topic in 2023 found local practitioners were aware of this risk, and some had found outputs were lacking as a result. A workshop concluded that the aim of local energy plans rather than optimise a system for an 'island' should instead be maximising opportunities in pursuit of national targets in a way which suits the place and community.²

As discussed by the NIC, the emerging system of strategic energy planning now offers a way to develop a multi-scale approach that theory and stakeholders alike have called for.

National plans such as the Strategic Spatial Energy Plan (SSEP), Central Strategic Network Plan (CSNP) and Clean Power 2030 (CP30) define the generation capacity and transmission priorities needed to reach the UK's carbon budgets while maintaining security and affordability. The RESP sits beneath these, coordinating local ambition with national targets through 11 regional teams within NESO.

Figure 8: Illustration of strategic energy planning system



The regional teams will develop decarbonisation pathways, identify strategic investment needs and engage with local authorities. Their role is to combine local insight and national priorities within a consistent, evidence-based planning process.

This is intended to rationalise the currently fragmented world of coordination between energy infrastructure planning and local energy strategy. At present, gas and electricity networks incorporate local insight into forecasts and investment plans (through processes such as annual Distribution Future Energy Scenarios (DFES)) – but the process varies and inconsistencies in the quality and outputs of local energy planning projects introduces challenges. RESP will provide the common structure and standards required to integrate these efforts into a single framework – though local areas will need to retain the ability to adapt and diverge from RESP where supported by robust local evidence.

→ Insights – Current approaches to incorporating local data in network planning

Electricity distribution networks produce DFES annually to inform infrastructure investment planning. Methods used vary across the six different networks, including the ways in which local authority data is gathered, validated and embedded in modelling – but DNOs all go to significant lengths to capture and reflect local plans and ambitions.

Several DNOs have adopted digital tools, based on the LAEP+ platform developed by Advanced Infrastructure, while others have developed proprietary methods for gathering data. All undertake stakeholder engagement with the local authorities served by their networks as part of their DFES process.

RESP will introduce a more standardised, whole-system framework for incorporating local data, alongside increased opportunities for local areas to shape the investment planning process via governance boards.

From a local government perspective, it is vital that RESP builds on the valuable work already being done by DNOs, rather than duplicating engagement and producing conflicting results.

RESP will naturally introduce governance challenges: RESP processes will need to balance representation across large and non-coterminous regions, manage competing local and sectoral interests, ensure transparency in decision making, and provide clear mechanisms for resolving conflict or divergence. Participants at our roundtable also noted that serving on RESP regional boards will place significant new responsibilities on local representatives, requiring tailored onboarding and clear expectations about their role and capacity. There will be an important balance to strike between seniority, decision-making authority and the bandwidth required for detailed engagement with RESP.

Governance will be central to RESP’s effectiveness and its integration with local decision making and planning. Engagement through the governance arrangements for the transitional RESP will help NESO design a system that adds value and meets stakeholders’ needs.

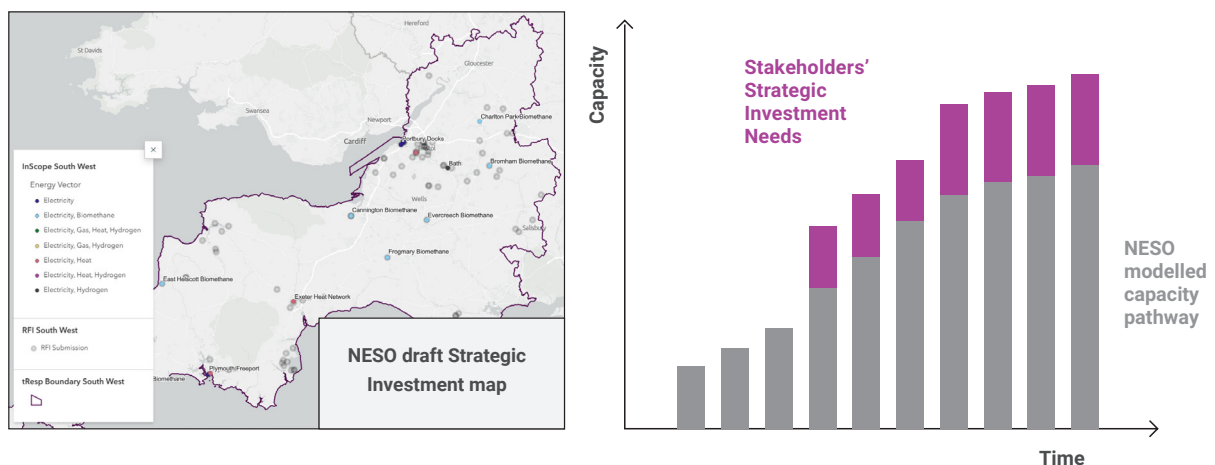
transitional RESP’ (tRESP) insight

The tRESP marks the first practical step toward aligning local authority projects with national network investment planning, encouraging councils to focus on defining and advancing significant, high-certainty projects rather than duplicating system modelling.

NESO has recently been developing the tRESP, due for publication in early 2026. The purpose of this is to make an initial attempt at integrating local and national ambitions to help inform network planning in time for the next regulatory period for electricity network investment, which starts in 2028.

NESO has sought detailed input on ‘Strategic Investment Needs’ from local authorities. These are prospective projects (i.e. not yet formally in development) which may have a large impact on local energy requirements. Figure 9 shows an example of strategic investments mapped by NESO in their recent tRESP consultation, alongside an illustration of the impact on RESP pathways. Strategic Investment Needs, shown in pink on the right of Figure 9, will be incorporated into RESP pathways for network planning if they are deemed to be additional to the modelled pathways, strategically significant and of relatively high certainty.

Figure 9: Map of South West Region Strategic Investment Needs published for tRESP consultation¹⁷ (left), and illustration of the impact of local authority data input (strategic investment needs) on RESP pathways (right)



Although the tRESP is an initial step towards integrated strategic planning (and not the finished product), it is instructive to note that the request for information given to local authorities sought discrete specific project details – not pathway data.

Since RESP's whole system pathways will feed directly into the regulatory process that governs network investment, it therefore makes sense for local authorities to concentrate efforts on the mechanism by which they will most influence RESP: identifying significant opportunities and developing them to a high level of certainty, rather than building scenarios from first principles.

While scenario work can be valuable for helping local areas identify opportunities, it is not always a prerequisite. The tRESP process shows that NESO's investment framework is most responsive to high-certainty, well-defined projects, which can be developed through other planning routes.

In addition, many of the factors influencing project delivery sit outside modelled scenarios and are difficult to address. By providing localised energy system data, NESO enables local areas to redirect resource toward overcoming these barriers, supporting an informed and collaborative development of regional pathways.

Net Zero Living insight: tRESP feedback

Regen hosted a Chatham House rule workshop with senior level (head-of-service) representatives from 11 local and combined authorities, local government organisations, energy planning practitioners, Ofgem and NESO in which the development of the RESP was discussed alongside the tRESP process

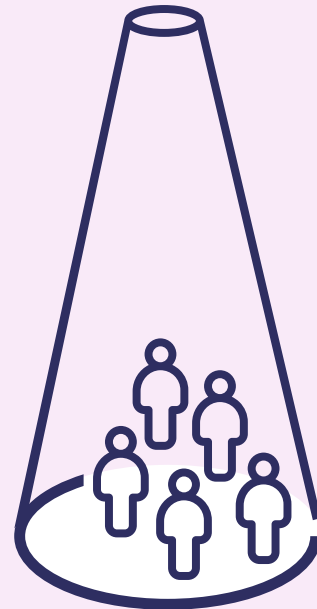
Local authorities expressed strong support for RESP as a way to align regional investment with net zero, but early engagement through the transitional RESP (tRESP) also revealed key challenges. Councils highlighted the need for clearer purpose in data requests, better alignment with existing planning and DNO processes, and stronger senior-level buy-in. They also stressed that transparent governance and a visible feedback loop ("you said, we did") will be essential to maintain trust.

Closer integration between NESO and local authorities would begin to address all of these issues, ensuring that RESP is seen not as another technical exercise, but as a collaborative framework that strengthens both local planning and national system investment.

The session concluded that to work as intended, RESP must feel like a partnership, not a series of data requests.

Using local data effectively means partnering with NESO to add insight where it matters most, not recreating system modelling.

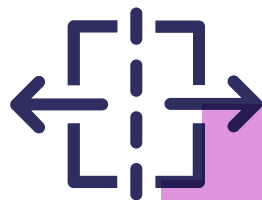
Breaking down silos through shared evidence



Shared evidence and consistent data provided through RESP could help integrate energy planning within councils and align it with wider system planning.

Embedding local energy planning in wider council activities

Local net zero planning often tends to operate as a standalone exercise. Delivery teams, finance officers, planners and climate officers often work to different timelines, budgets and objectives. As a result, plans that identify valuable opportunities can struggle to find internal ownership or alignment with other statutory functions such as housing, transport, growth or Local Plans. Regen's recent research with the Royal Town Planning Institute (RTPI) found a lack of integration between energy planning and spatial plans, with the two processes largely being developed separately from each other.¹⁸



Plans will not be delivered if they are not integrated with other council activities.



Insight: Spatial Approaches to Local Energy Planning – Regen and RTPI¹⁸

Regen's 2025 research with the RTPI found that integrating energy planning with spatial planning is essential if local energy strategies are to drive real-world delivery. The study identified that LAEPs and similar plans often stall because they are developed separately from local plans and statutory planning processes.

Regen and RTPI recommend that councils establish cross-departmental governance linking planners and energy teams, use energy plan evidence to inform local plan policy, and ensure data, training, and community engagement are embedded in procurement. The study concluded that energy planning must be institutionalised within planning practice, with planners equipped to translate net zero ambitions into enforceable, spatially grounded policy.

Delivering projects after developing a plan has been challenging historically because existing net zero plans do not reliably join up ambitious analytical outputs with the realities of delivery and decision making. Despite the insight and value provided by developing local net zero scenarios, the energy transition remains a complex and technical challenge for local authorities and their partners. Many of these challenges are non-technological and rather stem from politics, governance, bureaucracy, financing and capacity. Models underpinning local energy strategies can't accurately reflect all of these issues, with outputs of these models fast becoming distant from reality.¹⁹ Overcoming the barriers for a given project opportunity requires focused engagement with governance structures, financing, internal capacity building, senior leadership engagement, community engagement and so on – which we termed the 'enabling ecosystem' in our earlier paper.¹

In addition, the delivery of net zero often competes with other priorities in local government, many of them statutory, creating uncertainty about how to define local government's role in decarbonising generally, as well as in the development and delivery of individual projects. This contributes to the gap between ambition and delivery highlighted above, as plans may highlight opportunities yet lack alignment with other projects, priorities and plans.

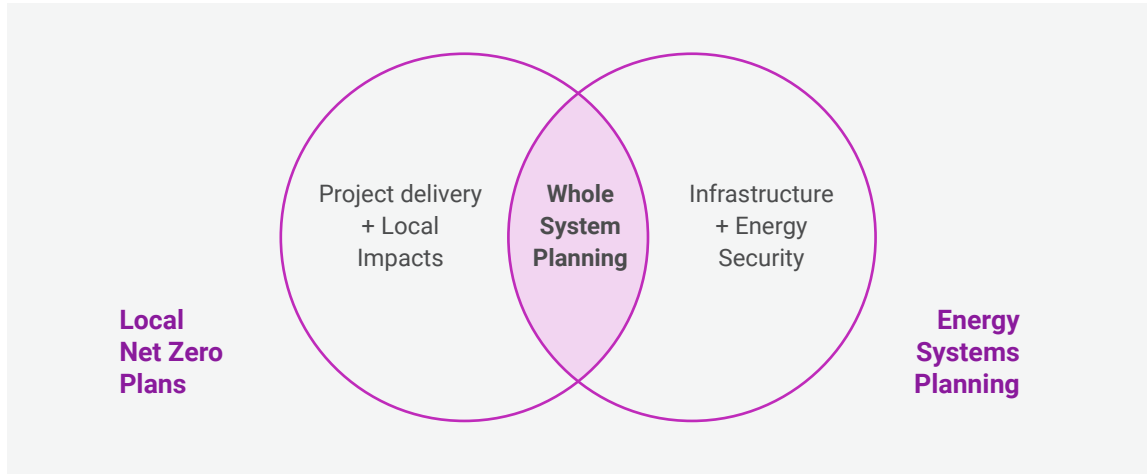
RESP helps address this internal fragmentation by providing a consistent, externally validated evidence base. Because its data and assumptions are common to all authorities, councils can integrate energy considerations into corporate processes more easily, embedding net zero objectives into procurement, estate management and spatial planning.

Furthermore, NESO is a national institution and RESP has direct and significant influence over the development of critical infrastructure – this will have direct ramifications for planners, economic growth and so on, and is likely to foster interest and engagement across local governments. The local actor support, which NESO will provide through their 11 regional teams, will supply local authority stakeholders with expert advice and guidance around developing energy strategies and aligning with other council responsibilities.

Improved alignment with energy system planning

Energy system planning has historically been developed in parallel to local net zero planning, creating two largely separate streams of work. Distribution network operators produce DFES studies; NESO now leads RESP; local authorities develop LAEPs and climate strategies. Each process has different but complementary objectives: energy security and infrastructure on one side, local delivery and community impact on the other, as illustrated in Figure 10. The overlap between them (i.e. the development of whole system energy pathways) has led to duplicated efforts and misaligned outcomes.

Figure 10: The overlap between the energy system and local planning contexts



This has resulted in a fragmented planning landscape where investment planning by network operators and ambitions from councils are not consistently aligned. Despite significant progress having been made on this through DFES in recent years, valuable local insight into project potential and place-specific constraints does not always feed into network planning. This is partly due to differing approaches being taken by different DNOs, as well as the variability of the quality of evidence provided by local energy planning.

RESP is intended to address this gap and standardise approaches. It integrates local data and ambition within a regional, cross-vector framework, ensuring that the evidence used by NESO, Ofgem and network operators reflects local realities. For councils, this alignment means clearer visibility of future infrastructure investment, a stronger evidence base for policy decisions, and more opportunity to shape regional energy strategies.

RESP creates a shared framework that brings local delivery priorities and national energy system planning together, building buy-in across authorities.

Making data and resources go further



Standardised, transparent data reduces duplication and helps local authorities focus resources on delivery rather than analysis.

Scenarios are not the product

Modelling and scenario analysis have been a core feature of local net zero planning to date. Practitioners and local authorities emphasise that this has provided real value through articulating the scale and cost of decarbonisation, and created a shared evidence base to support conversations with stakeholders. High-level modelling outputs help councils and communities grasp the pace of change required and the implications for local infrastructure, providing a platform for engagement and consensus-building. However, councils often enter the process of developing a local net zero plan, such as LAEPs, with the expectation of developing investible infrastructure projects, but this is rarely achieved directly.

As such, limitations in the approaches often taken are becoming clear. Regen hosted a Chatham House roundtable with representatives from three consultancies experienced in delivering local energy plans and scenarios. Participants agreed that excessive focus on highly granular whole-system optimisation exercises adds little to the ultimate identification of local authority actions or projects.

Additionally, participants felt that councils frequently invest significant time and money generating 'optimal' pathways that produce insights broadly aligned with the existing understanding of councils and the expectations of expert consultants, while failing to translate these into investible project opportunities. The aforementioned risks associated with treating a local area as an 'energy island' were also raised, with examples given of outputs with extremely high renewable generation needs and unrealistic changes to land use.

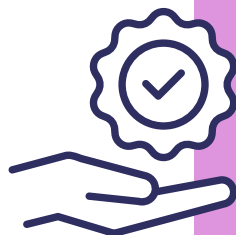
Therefore, modelling should be treated as a supporting tool, not the central product. When used proportionately and iteratively, modelling provides valuable snapshots of scale, direction, and technical feasibility. Beyond that, its role is to inform local conversations, test sensitivities, and guide engagement with energy system planners. To be credible and useful, modelling must be consistent, transparent, and clearly connected to the delivery realities faced by local authorities rather than an expensive exercise in producing 'optimal' pathways that rarely survive contact with implementation.

Compatibility, consistency and communication

Through engagement with practitioners and councils, a recurring issue has been the diversity of analysis, assumptions and outputs produced by existing local net zero plans. This makes it hard to compare 'apples with apples'. A 2023 Parliamentary research briefing on local area energy planning also noted significant variation between LAEPs and identified the benefits that standardised data would bring for aggregation, comparison and review.¹⁶

Our earlier research recommended greater consistency across input datasets, assumptions and archotyping approaches, as well as output units and spatial granularity. The data outputs and CPAs being developed through the RESP provide a useful basis for standardising analysis, since compatibility and aggregation of regional data are central to its mission.^{20,21} Although the CPAs are aimed primarily at DNOs and focused on network impacts, future local authority analysis could consider adopting similar standards (such as consistent 'technology building blocks') to ensure that local insights can be properly incorporated across scales into regional and national planning.

The tRESP focuses, pragmatically, on the largest drivers of demand (principally heat and transport electrification), while future iterations will widen the scope. Beyond RESP, there is widespread recognition of the need for standardisation across the sector. Programmes such as the National Energy and Environmental Data Service (NEEDS), led by the North West Net Zero Hub, are developing recommendations for local authorities on data sources when commissioning analysis.



RESP provides a major opportunity to standardise how data is used and developed.

RESP provides a major opportunity to standardise how data is used and developed. Full transparency on RESP assumptions, methodology and conclusions will be essential for consistency, building confidence and maximising utility to local actors.

NESO's publication of CPAs and the pathways methodology has already improved technical transparency, which will ease their future application and critique. Such transparency should be maintained and extended, but good communication is equally important. Pathways, methodologies and modelling assumptions will need to be conveyed in accessible language to non-technical audiences who need to understand the implications for their area. NESO's draft 'Nations and Regions context reports' provide an excellent initial step towards this inclusive communication – executed well, they could be pivotal for driving consistent understanding and maintaining regional buy-in.⁵

Case study



Three Rivers and St Albans District Councils Thematic Development using Enable, Embed, Enact

Regen worked with Three Rivers District Council and St Albans City & District Council to pilot a pragmatic, delivery-focused approach to local net zero planning. In both cases, analysis began with baseline data and UK Power Networks' DFES, providing a clear view of existing energy use, emissions and projected growth in low-carbon technologies. These system projections were reviewed alongside each council's existing strategies, covering housing, transport, retrofit and climate action. to identify the most relevant themes for local decarbonisation.

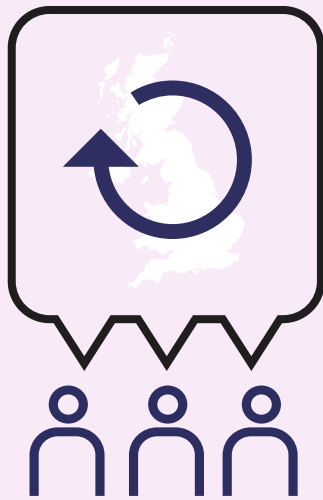
Across two workshops, participants applied the Enable, Embed, Enact framework to interpret the data in the context of local delivery across major decarbonisation themes. The focus was on understanding where the council had direct control, where it could embed net zero within its own policies and services, and where it should act as an enabler for others.

For Three Rivers, DFES data highlighted rooftop solar PV as the most practical renewable opportunity, constrained by green-belt policy and grid limits. The council identified its strongest role as enabling local businesses to adopt rooftop solar. Regen supported the council to compile a database of high energy use firms and develop an engagement plan to stimulate investment. The approach avoided unnecessary modelling effort and created a targeted, evidence-led action plan that could evolve into a district-wide energy strategy.

For St Albans, the same process revealed a more diverse set of roles. The council's main enacting powers lay in retrofitting its own estate and social housing, while embedding retrofit priorities through local planning policy and procurement. It also saw an enabling role in transport decarbonisation and renewable generation by coordinating partners and facilitating community initiatives such as the Solar Together scheme.

Across both districts, combining DFES evidence with the EEE framework demonstrated how local authorities can ground their net zero planning in system data while focusing resources on feasible, role-specific actions, translating national scenarios into locally owned delivery plans.

Next steps



RESP poses an evolving opportunity to align system planning with local delivery and to translate national pathways into action on the ground.

The insights presented in this paper point to several areas where the evolving RESP process could strengthen local net zero planning, and where local authorities might gain additional value from engaging with it. These are suggestions for ongoing collaboration and development between NESO, government and local authorities, not formal recommendations.

1. An integrated methodology for local and regional energy planning

Our research suggests there would be value in establishing a direct methodological link between local and regional processes as strategic energy planning matures. Future RESP iterations could formalise shared modelling approaches and data structures, allowing regional pathways and local analysis to be developed on compatible foundations. This would ensure a consistent, evidence-based process for cross-scale integration. Similarly, local net zero and energy plans could build more explicitly on existing sources such as RESP data and assumptions, embedding a coherent planning logic that connects place-based delivery with regional infrastructure planning, while still allowing for local specificity and decision making. Attendees at the November roundtable supported clearer national guiding principles or standards for efficiency and effectiveness, while cautioning against a mandated unified national approach.

2. Use RESP pathways as the shared starting point for local analysis

RESP data and scenarios offer a credible, standardised foundation for local energy planning. Local authorities could use RESP pathways as their analytical baseline, and focus detailed analysis on interpreting what regional trajectories mean for place-based delivery. Other similar sources, such as DFES, could also be used in a similar fashion. This would help develop project opportunities while avoiding duplication of modelling effort. Over time, this would create a shared evidence ecosystem that underpins both infrastructure planning and local action.

3. Apply the Enable–Embed–Enact framework to local thematic work

The Enable–Embed–Enact framework provides a pragmatic structure for aligning RESP insights with delivery roles. Councils could apply it to interpret RESP outputs and develop implementation actions in the context of their own influence and capacity, focusing on the themes of most importance locally. This approach keeps analysis proportionate and links planning to delivery.

4. Prioritise transparency, usability and communication

As RESP evolves, continued transparency around data, methods and assumptions will be essential for trust and usability. Equally, communication materials that translate technical outputs into accessible language could support wider understanding across local government and communities. Encouraging shared interpretation and learning will strengthen engagement and uptake.

Ongoing collaboration between NESO, the Net Zero Hubs, local authorities and their stakeholders and partners could refine how RESP data and processes are applied in practice. Participants at the roundtable noted that emerging strategic and regional authorities could help drive consistency and support coordination across local areas. Innovative ongoing pilot projects, such as PRIDE (West Midlands Combined Authority), should remain central to RESP's development, ensuring that future iterations reflect practical delivery realities as well as analytical improvements.

References

1. [Enable, Embed, Enact: Maximising the Value of Net Zero Planning](#), Regen, Carbon Trust and Innovate UK, February 2025
2. [Planning for energy decarbonisation at a local level](#), Regen and Innovate UK, 2023
3. [Spatial and Temporal Mapping](#), Energy Systems Catapult, North East and Yorkshire Net Zero Hub, South Yorkshire Mayoral Combined Authority, March 2024
4. [Regional Energy Strategic Planning \(RESP\)](#), National Energy System Operator
5. [tRESP Nations and Regions Contexts reports](#) – drafts for consultation, September 2025
6. [Powers in Place: the handbook of local authority Net Zero Powers](#), UK100, April 2023
7. [Local Net Zero 2.0: The Moment to Deliver](#), UK100, September 2024
8. [Unlocking Climate Capital: A business case framework for local authorities](#), City Science and Bankers without Boundaries for Innovate UK (Net Zero Living), 2025
9. [Financing Local Net Zero Projects: A Guide for Local Authorities](#), PwC and Innovate UK, December 2023
10. [Local Area Energy Plans](#), Energy Systems Catapult
11. [Future Energy Scenarios](#), National Energy System Operator, 2024
12. [Electricity Distribution Networks: Creating Capacity for the Future](#), National Infrastructure Commission, 2025
13. [Electricity Distribution Networks Study: government response](#), Department for Energy Security and Net Zero, 2025
14. [Decision on future of local energy institutions and governance](#), Ofgem, November 2023
15. Hofbauer, L., McDowall, W., & Pye, S. (2022). [“Challenges and opportunities for energy system modelling to foster multi-level governance of energy transitions.”](#) Renewable and Sustainable Energy Reviews 161
16. [Local area energy planning: achieving net zero locally](#), UK Parliament, July 2023
17. [tRESP Strategic Investment Need](#), National Energy System Operator, September 2025
18. [Spatial Approaches to Local Energy Planning](#), Regen for Royal Town Planning Institute, May 2025
19. Trutnevyte, E., Barton, J., O’Grady, A., et al. (2014) [“Linking a storyline with multiple models: A cross-scale study of the UK power system transition”](#), Technological Forecasting and Social Change 89
20. [tRESP Pathways: Methodology and Detailed Design](#), September 2025
21. [tRESP Consistent Planning Assumptions: Methodology and Detailed Design](#), September 2025
22. [Join the Dots: embedding climate action in local authorities](#), Regen, Carbon Trust and Innovate UK, November 2025.



Innovate
UK

The Best Laid Plans

This report was funded by
Innovate UK.

The views and opinions expressed
in this report are those collated
from and curated by Regen
supporting the Net Zero Living
Programme, a collection of 52
local authorities, partners and
communities working to deliver
net zero projects in their local
areas funded by Innovate UK.

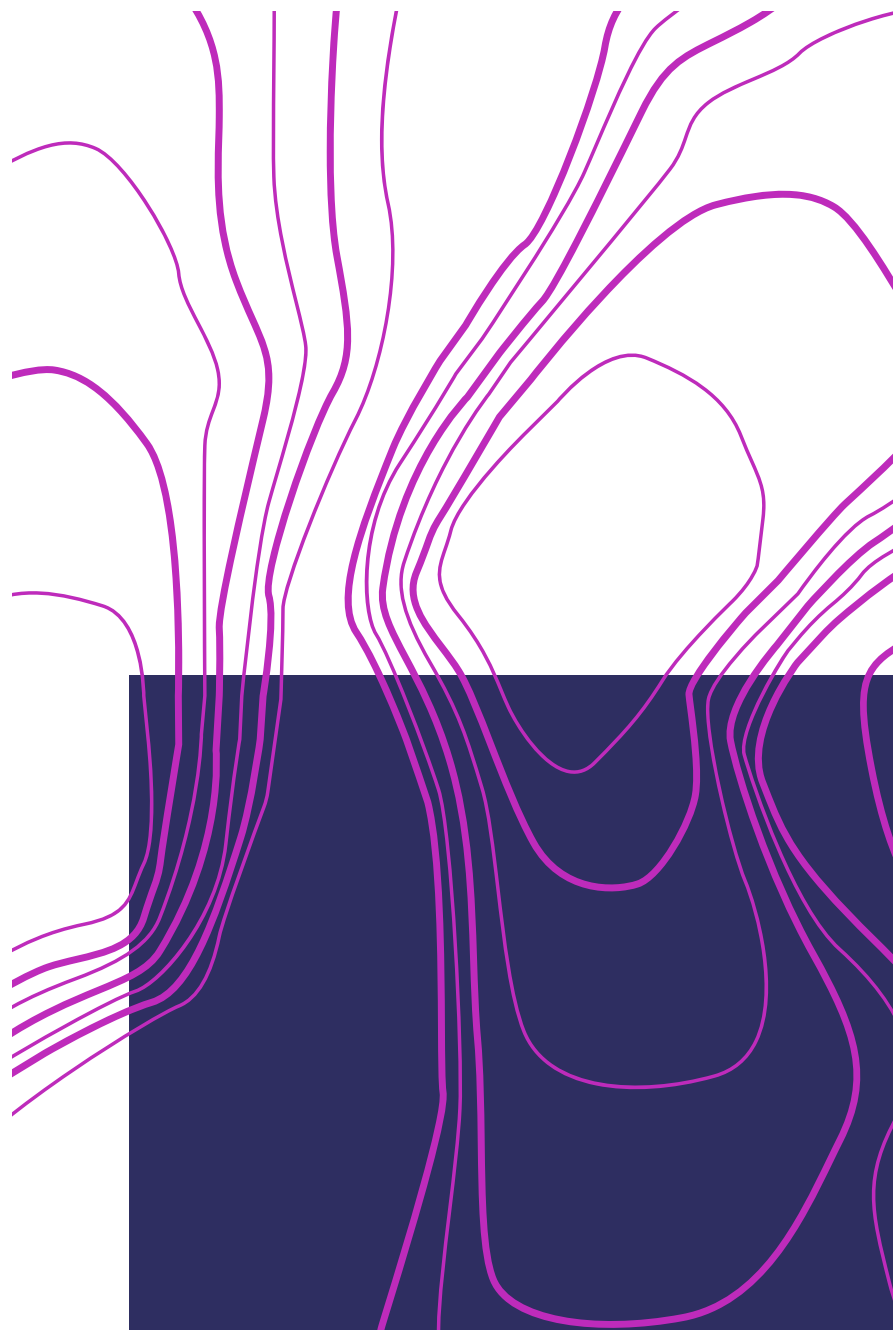
Innovate UK does not endorse
the content of this report and the
document does not reflect the
opinions or views of Innovate UK
or its affiliate organisations.

Issue date:
February 2026

Report by:
Andrew Barry,
Principal Analyst, Regen
abarry@regen.co.uk

Poppy Maltby
Associate Director - Local, Regen
pmaltby@regen.co.uk

Regen
Bradinch Court,
Castle St,
Exeter EX4 3PL



REGEN