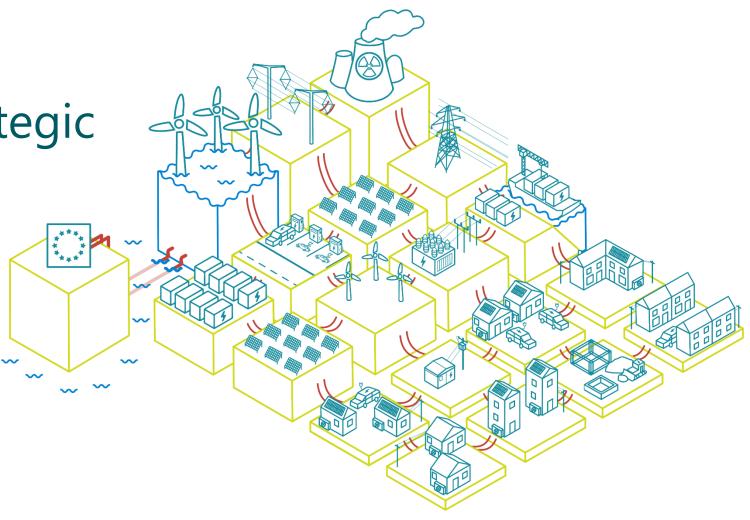
Planning Regional Infrastructure in a Digital Environment

Regional Energy Strategic Planner insights





PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations









Contents

Overview	3
Setting the context: PRIDE and the Regional Energy Strategic Planner	5
1. Local authority interviews Results from discussions with individual local authorities	10
2. Local area energy plan coordination group Results from engaging with local authorities as a group	15
3. Net zero infrastructure delivery panel Results from engaging with industry and network providers in the region	25
Insights and recommendations	29



Home

Return to the beginning of the document.





Arrows

Click forward and backwards through the document.

Sections

Click on the titles in the margin to navigate to different sections in the report.

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Planning Regional Infrastructure in a Digital Environment

Planning Regional Infrastructure in a Digital Environment (PRIDE) is a Strategic Innovation Fund (SIF) project that is currently at the end of the Alpha phase of the SIF process.

The project aims to improve how local planning and network investment decisions are made, to fast-track the delivery of net zero infrastructure and low-carbon technology at a regional level.

To this end, PRIDE focused on three key elements:

LAEP+ tool

Deploying and testing the functionality of a digital tool to help local authorities plan net zero and share that planning information with energy networks in a consistent way.

Governance structure

Testing how the LAEP+ tool works within a governance structure convened by the West Midlands Combined Authority of local authorities, energy networks and regional infrastructure providers to inform decision-making and provide democratic accountability for net zero planning at a local and regional level.

Regional Energy Strategic Planner Investigating how learnings from the tool and governance structure could support the activities of the future Regional Energy Strategic Planner (RESP).

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Planning Regional Infrastructure in a Digital Environment

PRIDE is being delivered by a consortium of partners, including:



- Energy Capital/West Midlands Combined Authority
- Advanced Infrastructure
- Regen
- National Grid ESO

The PRIDE Alpha stage ran from October 2023 to March 2024.

Regen's work package specifically focused on the RESP learnings from PRIDE. This report details our findings and insights over the course of the Alpha phase of the project that relate to the Regional Energy Strategic Planner.















PRIDE and the Regional Energy Strategic Planner











PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







PRIDE and the Regional Energy Strategic Planner

In November 2023, Ofgem published the <u>decision on the future</u> <u>of local energy institutions and governance</u>, confirming the introduction of **Regional Energy Strategic Planners (RESPs).** The main purpose of RESPs will be to support the decentralisation and decarbonisation of generation and demand by:

- Ensuring there is appropriate accountability and effective coordination for strategic energy planning at a sub-national level,
- Ensuring that investment is made when and where it is needed and in a cost-effective manner, and
- Coordinating regional energy planning in a way that is cross-vector, considers local priorities, and is coherent with national targets and pathways.

Key functions of RESPs will include:

- Cross-vector strategic planning (e.g. planning across energy, transport, heat, industry, etc)
- Technical coordination activities (e.g. energy demand modelling, whole system optioneering, conflict resolution)
- Place-based engagement and coordination
- Support to local actors

Function	Potential activities
Strategic planning	 Aggregate top-down national targets and scenarios with local insights and data and cross-vector data to develop regional pathway(s).
	Develop a regional whole system strategic plan to give an informed picture of where current energy demand is, how it may change over time and set out a common regional objective.
	Provide supporting information to guide when and where capacity is needed to form the basis for detailed network planning.
Technical coordination	 Technical coordination and analysis of plans to ensure cross-vector integration and maximise opportunities for system optimisation. Ensure consensus driven decision-making with a clear conflict resolution route.
Place-based engagement and coordination	 Establish transparent processes for local actors to participate in energy planning. Act as an accountable owner to bring network companies and local actors together to work towards a common objective. Facilitate engagement with stakeholders to understand their priorities.
Support to local actors	Provide proportionate resources to LAs, where needed, through technical advice, data, and tools to enable them to turn local targets into credible plans.

RESP functions and activities taken from Ofgem Regional Energy Strategic Planner minded-to decision.

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Initial workshop about PRIDE and RESPs

In November 2023, Regen held a workshop to explore how PRIDE could help inform the development of Regional Energy Strategic Planners. The purpose of this workshop was to work with key stakeholders to establish focus areas for further engagement and analysis.

To support the discussion, Regen developed a draft RESP structure (right). This was not designed as an exact model for RESPs but used as a model to visualise possible information flows between various stakeholders – and where PRIDE may be able to support these.

Local stakeholders feed-in their own project plans predominantly via local authorities, with some input into Strategic Plan.

Local stakeholders

Local authority

Network investment plans take usual **Regional Energy** channels, possibly with Future Energy Scenarios, **Strategic Planner** RESP/Board sign-off to CSNP, Strategic Spatial**.** ensure alignment to (ESO/FSO) Plan Strategic Plan. Regional Governance Strategic Plan based on baseline Regional Energy of DFES/Regional FES data, shaped by Regional Board, local plans etc. Strategic Plan Network Investment Plans DFES Networks conduct Network(s) connections pipeline etc (j.e. DFES) functions to inform own investment and LA's use tool to model Detail on LA projects help guide local plans. and plan local net zero and ambitions passed Reflected in LAEP+ tool. projects, input data on directly to network e.g. housing stock, decarbonisation plans . Local authority Local stakeholders Iterative, ongoing engagement Local authority between networks and local authorities Local stakeholders

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Initial workshop about PRIDE and RESPs

This workshop included participants from National Grid ESO, Ofgem and Innovate UK. Within the workshop, participants were invited to identify their key areas and questions of interest for RESPs for the PRIDE project. These were:

ESO

- **1. Whole system governance.** How would a whole system regional energy plan impact and be impacted by different stakeholders within a regional governance structure?
- **2. Understanding systems and data.** What inputs and outputs are required to deliver value for different local and regional stakeholders?

Ofgem

- 1. Can the PRIDE governance model provide a framework for successful operation of the RESP?
- 2. What evidence is required at a local-level to inform major energy infrastructure decisions?
- 3. What principles are required in information or data gathering to help guide regional governance and support local authority decision making?

Innovate UK

- **1. Data and consistency.** What can we learn (from PRIDE) about how data can be generated or provided and how easy is this to achieve?
- 2. How can consistent data impact the overall development, deliverability and investability of different local decarbonisation projects? Including where stakeholders use different planning approaches.

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Initial workshop about PRIDE and RESPs

Insights from this workshop were collated into a set of objectives to further investigation. These objectives were:

Information aggregation

Identify lessons for RESP functionality and information aggregation process based on learnings from the LAEP+ tool.

Regional energy strategic plans

Explore how the RESP could support local authorities to deliver decarbonisation through strategic plans or RESP processes.

Regional governance

Understand how lessons from the PRIDE governance structure could be leveraged to support the development of regional governance within the RESP framework.

We agreed to explore these objectives with different stakeholders and groups in the PRIDE governance structure, including:

- Individual local authorities in the West Midlands Combined Authority, and the Combined Authority
- The Local Area Energy Planning Coordination Group (PRIDE governance structure group)
- Net Zero Infrastructure Delivery Panel (PRIDE governance structure group)
- Community energy stakeholders (via Energy Capital collaboration day)

Local authority interviews

Activity and evidence base following engagement with PRIDE local authority stakeholders











PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations









Local authority interviews

Interviews were held with four different local authorities involved in the PRIDE project, as well as the West Midlands Combined Authority (WMCA).

These interviews focused on gathering insights from local authorities about their use of the LAEP+ tool as part of the PRIDE project, and WMCA's role within that process.

The aim of these interviews were to gather learnings about how such a tool is helping local authorities plan for net zero, and the different functionalities that the tool has that local authorities do or would find useful.

We also discussed the role of the Local Area Energy Planning Coordination Group, which is a forum for local authorities in the PRIDE governance structure to share knowledge and best practise in local area energy planning, and how this group can support members with their net zero journeys. Questions and topics covered in the local authority interviews:

- 1. What functionality of the LAEP+ tool have you engaged with and what uses can you see for this?
- 2. Could LAEP+ play a role in supporting or influencing decision makers within your authority?
- 3. How might the LAEP+ tool help with engaging with external stakeholders like energy networks or the future RESP?
- 4. What role do you see the Local Area Energy Planning Coordination Group having in supporting you with your net zero goals?

Aligning internal plans with the tool's insights could enhance coordination between various stakeholders, making the planning process more synchronised and efficient. The visual aspect of the tool can serve as a common ground and improve understanding and collaboration among different entities. It's about bringing more cohesion to the local planning landscape. Local authority interview response

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations









Local authority interviews: LAEP+ tool feedback

Through these interviews, local authorities identified five key areas that the tool could support with:

1. Planning new net zero projects

Local authorities highlighted that the geospatial mapping and project functions of the tool will be useful in identifying potential projects and areas for development. Examples of such projects or development areas included:

- Net zero neighbourhoods
- Assessing housing and socioeconomic factors as part of project criteria
- Identifying locations for renewable projects on Councilowned land
- Analysis for solar PV projects

Stakeholders also mentioned that LAEP+ can create dataled rationales for projects to support funding applications.

2. Engaging with internal decision makers

Local authorities also noted that the tool will help officers and managers engage with senior leaders and decisionmakers within councils by sharing key data and information in a visual way. It was noted that:

- There are different levels of understanding and interest among decision-makers and councillors. Simple, visual reports can help them engage in subject matters.
- Mapping and sharing functions within the tool can enhance understanding and transparency in decisionmaking processes.
- Timing of engagement with decision-makers in local authorities is crucial, especially when there is a specific decision to be made.

"It can play a role in our political processes, aiding in sharing the rationale with key stakeholders, directors, and political figures. This is crucial for navigating through Cabinet or other governance procedures needed to support a project." Local authority interview response

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Local authority interviews: LAEP+ tool feedback

3. Understanding grid capacity challenges

Grid capacity is a primary concern for local authorities in net zero planning. In the interviews it was noted that the tool can provide detailed information about available grid capacity in project areas.

Local authorities noted that the tool could also help facilitate a two-way conversation with the DNO about capacity constraints to prompt earlier discussions and support more informed decision-making.

4. Integration with other data and planning processes

In the interviews we discussed how the LAEP+ tool might support wider planning processes like the statutory Local Plans undertaken by local authorities.

Stakeholders acknowledged that the tool had a lot of potential to support things like local plans and spatial planning processes, but because there isn't a statutory energy function in local authorities, the energy implications of new developments often get overlooked at the local plan stage. There was a sense that tools like LAEP+ can help bring an energy lens to spatial planning processes in future.

One local authority also mentioned that it would be useful to integrate tools like LAEP+ with datasets like Parity (a housing condition assessment baseline) for a comprehensive approach, to aid in addressing issues like fuel poverty and deprivation.

5. Heat network development areas

Local authorities also highlighted that the LAEP+ tool could play a role in supporting the development of heat network areas.

As heat network zoning becomes a function of local authorities, it was flagged that the tool could support this by enabling local authority officers to view key data on where certain areas may be more or less suitable for heat networks.

One authority highlighted that additional datasets to those already in the tool, such as future energy demand projections, would support the heat network development process.

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Local authority interviews: challenges with LAEP+

For its value, local authorities also mentioned some challenges with the LAEP+ tool. Some were more on the technical side of the tool itself. To address these, local authorities were communicating with Advanced Infrastructure to fix bugs or solve specific issues.

In many instances, however, local authorities said that while they see a lot of potential for the LAEP+ tool, they are struggling to find the time to use it and explore its full functionality. This is often the case with new platforms and tools. Local authorities need time and support to understand where LAEP+ can be embedded into business-as-usual activities and processes.

Several local authorities highlighted the upcoming Net Zero Neighbourhood projects as being a useful testing ground for the tool. PRIDE project partners are currently exploring how the Beta stage of the project could help embed the tool into local authority business-as-usual activities. "We haven't used the tool as much as we would like. Time constraints have been a significant factor, preventing us from fully exploring the tool's potential. While we recognize its benefits, we haven't had sufficient time to integrate it into our workflow effectively." Local authority interview response

"It's been a process for us since being onboarded to the LAEP+ tool. There was a bug that needed fixing, but given that it's a work in progress, we've successfully addressed the issue. As part of the process, we've uploaded the Council's land holdings onto the tool. The primary goal is to assess the feasibility of implementing Council-owned renewable energy projects on Council-owned land. Additionally, we've collaborated with the housing team and we've shared the tool with their team to explore potential renewable energy projects in the Brockmoor area." Local authority interview response

"Our primary challenge is resource allocation and finding time to explore its functionalities. This is likely to be a recurring theme. We are exploring using it for our net zero neighbourhood initiative, as a way to become familiar with it. But really we've only been dipping our toes in I think is probably fair to say." Local authority interview response

Local Area Energy Planning Coordination Group

Activity and evidence base following engagement with the Local Authority Energy Planning Coordination Group









PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations









Local area energy planning coordination group

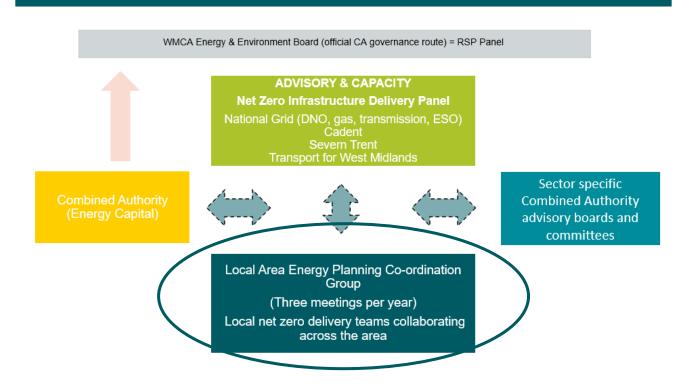
Local authority interviews were held in the weeks before the February 2024 meeting of the Local Area Energy Planning Coordination Group (LAEP-CG). These interviews shaped the content to cover in the online workshop arranged with local authorities.

These included:

- 1. Outcomes and priorities of local area energy planning (LAEP)
- 2. LAEP+ tool use and functionality
- 3. Regional Energy Strategic Planner information flows
- 4. Regional Energy Strategic Planner role in supporting local challenges

What is the LAEP-CG?

- LAEP-CG was set up for the PRIDE Project. It brings together local authorities that are using the LAEP+ tool and their local net zero delivery teams. It is shown in the PRIDE governance structure below.
- Its members include representatives from all local authorities in the West Midlands Combined Authority area.
- Because energy isn't a statutory local authority function, most representatives in this group sit
 within different directorates within the local authorities, including economy and infrastructure,
 regeneration and growth, place prosperity and sustainability, and the environment.



PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations









Local area energy planning coordination group: outcomes and priorities of LAEP

In the Discovery phase of PRIDE, we held a workshop with local authorities in the WMCA area to discuss local area energy planning (LAEP). In the session, we discussed six outcomes of local area energy planning. Participants were asked to rank the outcomes in order of importance. The chart on the right shows the results from that engagement.

Throughout interviews and in the February 2024 workshop with the LAEP-CG, we revisited these outcomes to discuss if local authority views had changed as a result of their experience with the LAEP+ tool and wider PRIDE projects.

Now that the local authorities are more engaged with LAEP processes, they flagged that rather than priorities to be ranked, the six outcomes could read more like a process flow – where one outcome could not happen without the others.

This process flow discussed is on the following page.



Results from local authority workshop held in June 2023 when asked to rank the priorities of local area energy planning by order of importance.

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations

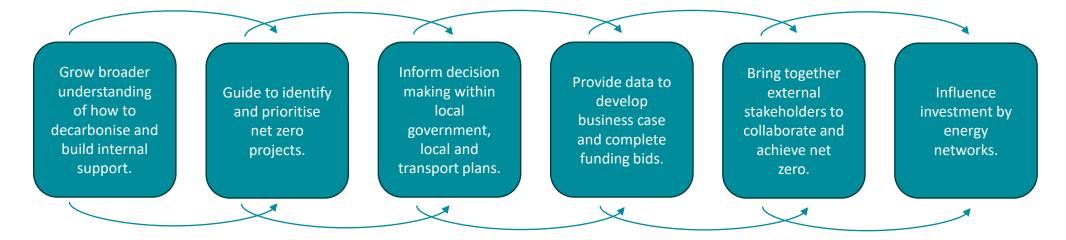






Local area energy planning coordination group: outcomes and priorities of LAEP

The process flow – developed from the outcomes of LAEP ranking discussion – is as follows:



In the workshop, the discussion focused on the placement of 'influence investment by energy networks', and whether this came at the end of the process or whether it needed to be integrated more centrally along the way.

Local authorities flagged that there are other actors in an area that can influence where energy networks invest – for example, developers looking to build new projects. This market-led activity could trigger investment that may not fit or may compete with local authority plans.

It was also highlighted that the above is not a linear process that happens once but is ongoing and iterative. Stakeholders noted that flexibility is important to enable engagement with networks at various points within a LAEP process. It was also key to understand how big an impact local area energy plans will have, or need to have, on the energy network to engage meaningfully and help inform investment decisions.

Local authorities noted that influencing energy network investment might sit separately, but parallel, to this process, to ensure that it is ongoing, iterative and meaningful rather than a single point at the end of a process.

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Local area energy planning coordination group: LAEPs and DFES

A key point of this discussion was how LAEPs and the outcomes of LAEPs are factored into distribution future energy scenarios (DFES). Distribution future energy scenarios forecast projected load growth on the distribution network, which is then used to support network investment decision-making.

"My question is, where do the distribution future energy scenarios fit into this process? While a significant amount of planning can be done at the local authority-levels, there is already an understanding within the network, particularly by the DNOs, regarding what needs to be done to transition to net zero.

Delaying consideration of when to engage with networks about local planning until the last minute could make the difference between successfully delivering a project or not. Therefore, we need to address how we can align with the strategic ambitions of the DNO. The key is ensuring alignment at both local and broader network levels." LAEP-CG member

Stakeholders outlined that understanding of the DFES process and how it translates into connection capacity on the ground is currently lacking. It was highlighted that greater transparency in this process, and improved understanding among local authorities, can help align local and network planning processes. The challenge then lies in mapping the DFES scenarios and business plans to local context.

The DFES may outline certain assumptions within its projections, but local authority ambitions for growth or alternative initiatives in particular areas might be inside or outside those assumptions. Bridging the gap between DFES projections, business planning 'best views' and local objectives is difficult but essential. The LAEP+ tool could potentially aid in achieving transparency, facilitating open conversations and information-sharing to reconcile differences.

It was agreed that the tool could help facilitate conversations about any disparities between network plans and local aspirations. This could then support parties to work towards a consensus on assumptions used to build plans or identify the need for further evidence of activity in a location.

This information would also be crucial for the Regional Energy Strategic Planner by helping it understand, navigate and ultimately bridge the delta between local place-based assumptions and the DFES scenario envelopes.

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Local area energy planning coordination group: Views on LAEP+ tool use and functionality

In the workshop, local authority participants were asked to score different functionalities of the LAEP+ tool, based on how useful they found them (chart shown right).

The highest scoring functionalities were the **geospatial mapping and project building function**. As the core functions of the LAEP+ tool, this can help local authorities to build and visualise net zero plans and projects.

Uploading local data and sharing data were also flagged as being very useful functions. Uploading local data is useful because it enables local authorities to build more granular views of the regions. The sharing function then allows stakeholders to use the tool as a platform to engage about net zero plans and projects.

Engagement tools were rated slightly lower than the other functionalities, although still scored highly. Local authorities highlighted that this was mostly because they had not engaged strongly with this function yet.

Local authority responses when asked to score LAEP+ tool functionalities based on usefulness.

Geospatial mapping tool with data analysis capabilities - to visualise local net zero development opportunities and data insights.

The ability to upload local data into the tool, and export datasets out of the tool.

Projects - to map out potential projects and model the impact of different low carbon technologies.

Sharing data and the ability to share proposed projects with the network - using the form to add information about whether the project has funding

8.3

Scenarios - to model potential decarbonisation routes at a large scale.

Stakeholder engagement tools, including Data Stories (build out narratives to share publicly) and Consultations (send questionnaires to stakeholders)

"I feel like teams within the Council were all looking at separate data... But now we've just got this one tool that we're looking at and it's giving us that evidence base. It's definitely speeding things up and we're all looking at the same data, which is good.

We identified about 400 houses in Chelmsley Wood. But [LEAP + tool showed] there's higher areas of fuel poverty... which we could be going for a couple of streets with not a lot of EPC data. Maybe we want to target those. So I definitely think we'll be using it later on to change our focus of the houses." LAEP-CG member

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Local area energy planning coordination group: LAEP+ tool use and electricity network functions

Understanding/tailoring projects to network geographies.

The tool has helped local authorities better understand the network topology for programmes like Net Zero Neighbourhoods.

The mapping function has shown that seemingly suitable areas for Net Zero Neighbourhoods (based on demographics or energy efficiency criteria), can actually be quite complicated when it comes to network topology. For example, a five-or-six street area could be fed by multiple secondary sub-stations which local authorities may not be aware of. This can complicate the project because it may need network upgrades at several substations rather than just one, adding significant project costs.

The LAEP+ tool aids local authority understanding about the network supply area in a place. The ability to understand the physical geography and infrastructure in an area can impact how place-based solutions are planned and delivered.

Would like a stronger link for LAEP+ to network data and processes.

Local authorities noted there was currently a disconnect between the data and 'creating a project' function in LAEP+, which can lead to the tool not flagging whether securing connections in particular areas are viable or not. Local authorities needed to use a separate connections estimation tool owned by the DNO, making it difficult to test solutions for different network implications or other options or innovative solutions. Switching between the two platforms is inefficient.

One attendee noted that in their conversations they felt the DNO was 'not really receptive' to other solutions such as flexibility or installing batteries when it came to conversations about securing connections agreements.

In the discussion, ESO representatives felt that this was an area where RESP could have a role in consistency and transparency in network planning assumptions and risk appetite or when appropriate to pursue DSO/alternative solutions.

"What I found within the Net Zero Neighbourhoods is that even though it was seemed like a pretty uniform area, there was four separate secondary substation supply areas that fed all of those properties. So, when we're talking about that opportunity around community or neighbourhood level microgrids is that's a really complex situation to try and deal with." LAEP-CG member

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations









Uses across local authority

During the workshop, local authorities discussed the various use cases for the LAEP+ tool and how they see it having an impact in different functions across their organisations.

Attendees felt that the more people in a local authority that had access to the tool, the better it would be. A number had organised onboarding sessions for different teams.

Other areas and functions noted in the conversation included:

Local authority function	Notes from conversation
Regeneration projects	"Energy isn't even part of the [planning'] picture". There would be an opportunity to really see the energy impact of developments and mitigations to reduce costs – making better decisions around energy infrastructure in planning.
Housing allocation	This is a priority for local authorities. The tool helps immediately to look at the capacity of different networks and ask the right questions when talking to developers. The tool would raise awareness in thinking about wider issues which they don't usually consider.
Local planning	Need a stronger local planning requirement that encourages people to think about energy from the word go rather than hindsight.
Health and wider determinants of health	There could be links to health outcomes and may be benefits if you could overlay social democratic information and link to uptake of retrofit and pilot different initiatives in different areas
Climate risk and adaptation	Noted one local authority was developing a climate risk assessment which would be a geospatial map. Would be helpful to overlay this information also into the tool.
Transport	Transport and electrification could be very significant. The function have own mapping tools and it would be challenging to bring all into one tool. But would be important to make sure the tools are interoperable and can import and export between them.
Heat network zoning	Would be helpful with the role for local authorities as coordinators and believe that this tool should be an all-inclusive energy planning tool rather than just electricity and gas.

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations









Local area energy planning coordination group: RESP information flows

In the LAEP-CG workshop, stakeholders discussed the information flows that could facilitate information sharing with the future RESP. In particular, about how information from local stakeholders such as businesses or developers might flow through to the RESP – and if local authorities had a role in this.

"If we could look to aggregate some of the industrial demand in a in a geographic place, then we would be in a good position to say, actually all of these businesses are looking at some sort of energy generation or strategies for decarbonisation that would result in a much higher energy demand.

This information could enable a more constructive conversation but how do you aggregate that information? Who is the right body to aggregate it? It's quite hard when there are commercial sensitivities attached because businesses might not want to share their plans with other businesses in the area."

LAEP-CG member

One authority flagged its Strategic Energy Partnership could gather and aggregate information from local businesses. It was also highlighted that local authority investment teams have a critical role here because they are most likely in contact with businesses looking to develop in the area.

However, there are complexities when businesses and developers are exploring different sites across a region, which could put local authorities in competition with each other for development opportunities. Navigating this could become complex.

DSOs also collect information from local stakeholders as part of network planning processes. As such, there is a need to clarify how best to gather local information to feed into regional plans, without duplicating processes which already exist.

"You can envisage [local authority] inward investment teams playing a really key role here because they've been contacted by all sorts of potential input locating businesses... There's some elements about competitiveness that might exist between companies that are trying to do things and there might be an element of competition between the authorities themselves because they're trying to attract inward investment within their areas. There's some sensitivities there to how we deal with that and that's going to be quite an interesting challenge." LAEP-CG member

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Local area energy planning coordination group: RESP information flows

Local authorities identified a role for the RESP in ensuring that information flows, plans for infrastructure development and relevant messages are aligned to better support informed discussions with local authorities. For instance, it was highlighted that National Grid distribution and transmission are not always aligned.

"Something we've found is that within National Grid itself, it's kind of like a lot of them don't talk to each other. So for example, the energy distribution and the transmission side, they're not always aligned and sometimes you get different messages from each.

They've said that as National Grid they will sort that issue out and we'll start talking to each other but it might be good to have another body that helps manages that and just makes sure that that's all being aligned." LAEP-CG member Comments and considerations from the ESO representatives following the conversation about information flows included:

- As National Grid ESO transitions to the National Energy System Operator (NESO), a public body, the communication and coordination will change.
- Balancing commercially sensitive data with transparency about planning will be critical.
- It will be important to define what the appropriate level of regional planning is, to ensure that plans are meaningful and actionable when considering that delivery will be at different levels (e.g. communities, towns, industrial areas etc).
- There will need to be a balancing of risks: between developers who currently take on financial risks as part of connection requests, and consumers if networks are required to deliver more anticipatory investment.
- Consistency between transmission and distribution planning is paramount – NESO will have a Strategic Energy Planning directorate which will have transmission planning and regional planning teams within it.

Net Zero Infrastructure Delivery Panel

Activity and evidence base following engagement with the infrastructure providers and network stakeholders in the PRIDE project











PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations









Net Zero Infrastructure Delivery Panel

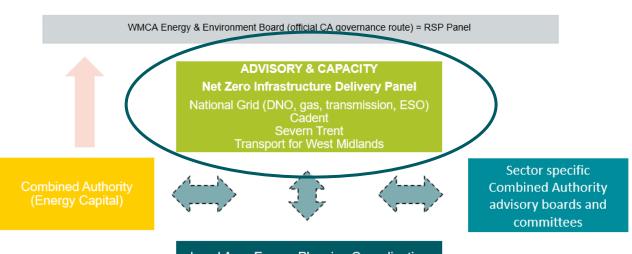
In February 2024, the PRIDE project team met with the Net Zero Infrastructure Delivery Panel (NZIDP).

The purpose of the meeting was to:

- 1. Understand how the NZIDP see its role in the current PRIDE governance structure and what its potential role in a RESP structure could be.
- 2. Discuss the information flows that would be necessary for the group to fulfill its perceived role in the PRIDE or RESP governance structures.
- 3. Understand how the NZIDP might operate as a group to better enable whole systems collaboration beyond individual network priorities.

What is the NZIDP

- The Net Zero Infrastructure Delivery Panel (NZIDP) is convened by Energy Capital
 and brings together infrastructure investors in the region, with the aim of enabling
 whole systems collaboration and place-based investment. It is shown in the below
 PRIDE governance structure.
- Its members include: National Grid Electricity Distribution, Cadent, National Grid Transmission, National Grid ESO, Transport for the West Midlands, Severn Trent Water, Black Country Industrial Hub, West Midlands Combined Authority and Energy Capital, Ofgem and an Independent Distribution Network Operator representative.



Local Area Energy Planning Co-ordination
Group
(Three meetings per year)

Local net zero delivery teams collaborating across the area

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Role of the NZIDP

Members of the NZIDP group were asked how they saw their role in both the current PRIDE governance structure and in a future RESP structure, and whether this role was more advisory focused, or delivery focused.

Members noted that they were currently acting individually, representing their industry and reporting back on various projects and programmes from West Midlands Combined Authority, but that there was limited capacity in their organisations for this engagement.

The consensus from the group was that their ambition as a group was to focus collectively on the delivery of net zero projects, but this may take time to realise. To achieve this, the group needs to gain confidence in working together and thinking in a more "whole-system" way to effectively coordinate the delivery of net zero plans. Ultimately, the group should have both advisory and delivery functions.

An advisory function of the NZIDP could:

- Provide a safe space for optioneering of plans in key development and industrial areas. Currently this is difficult because information about industry and development areas can be commercially sensitive. The NZIDP could therefore provide a place to have high-level discussions where exact commercial plans are not shared but plans can be discussed and different options considered.
- Act as an advisory board or body to the RESP on multivector planning e.g. in key development areas like UK Central in Coventry, the NZIDP could work with local authorities to undertake deep dives in regions to explore whole-system options.

A delivery function of the NZIDP could:

- Coordinate the delivery of a regional energy strategic plan by collaborating and sharing network investment plans to understand what actions are needed in key development areas and how networks can work together to effectively deliver those.
- The NZIDP could help coordinate works in that areas to minimise disruption and effectively deliver different network upgrades together.
- The NZIDP are unlikely to be able to do this as a group at a neighbourhood-level but could have a useful function in key development and industrial areas across a region.

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- 1. Local authority interviews
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Insights and recommendations







Role of the NZIDP

In the February workshop, members of the NZIDP discussed the following roles as actions that they as a group could deliver:

- Collate useful information to support delivery of net zero plans e.g. sharing investment plans and coordinating where works are happening in the same locations.
- Provide a safe space to optioneer "whole system" plans at a high level in important development areas e.g. industrial areas where future planning information may be commercially sensitive.
- Act as an advisory body to the RESP on multi-vector optioneering e.g. in key development areas like UK Central. The NZIDP could work with local authorities on deep dives into key development areas as part of RESP information gathering and aggregation.
- Support the coordinated delivery of a Regional Energy Strategic Plan e.g. with the knowledge within the group, the NZIDP could help coordinate the plans that the RESP develops effectively. A key question is then whether the RESP views this as a useful function.

Further points raised by the group were:

- The NZIDP identified LAEP+ tool as a mechanism to access information and update future energy use in an area and an opportunity to collaborate. To do this there needed to be wider access to the tool.
- The capacity of the NZIDP is limited. Acting at a regional level with deeper dives into key development or industrial areas would be the best use of this group's resources.

Areas of exploration for Beta

- Onboarding more NZIDP members to the LAEP+ tool to explore its functionality for data exchange between several infrastructure investors.
- Exploring the ability of the NZIDP to support the coordinated development and delivery of a regional energy strategic plan.

Insights, recommendations and next steps

Conclusions and insights following engagement activity with PRIDE and RESP stakeholders











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- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
- 3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Insights, recommendations and next steps

In March 2024, the PRIDE team reconvened initial workshop stakeholders to share the findings of these engagement activities. Stakeholders including Ofgem and National Grid ESO joined local authority stakeholders and the PRIDE project team to discuss these findings and implications for the Beta phase.

As per the November workshop, the March workshop explored:

Information aggregation

Identify lessons for RESP functionality and information aggregation process based on learnings from the LAEP+ tool.

Regional energy strategic plans

Explore how the RESP could support local authorities to deliver decarbonisation through strategic plans or RESP processes.

Regional governance

Understand how lessons from the PRIDE governance structure could be leveraged to support the development of regional governance within the RESP framework.

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning Coordination Group
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Insights and recommendations







Information aggregation insights

Local authorities see clear value in the LAEP+ tool in improving processes for net zero planning, internal governance and external engagement, but are struggling to find the time to use it so need to embed it across BAU and new planning functions.



High granularity geospatial mapping and project creation are found to be the most useful functions of the LAEP+ tool. The gathering of geospatial planning data that can be shared externally is a useful by-product of local authorities using the tool, rather than a primary function of the tool.

A LAEP+ model for the RESP information gathering process should look to offer value to local authorities in a similar way and collect relevant data from local authorities as a by-product of its use rather than being a solely data inputting exercise for local authorities.



LAEP+ can help local authorities more quickly access information about network topology by combining data in one place.

By enabling local authorities to consider network and infrastructure factors quickly, LAEP+ can enable efficient and cost-effective placebased project development.

Using a single platform makes data aggregation and disaggregation easier across a region, which supports cross-boundary projects and approaches.



Local authorities can see the value in LAEP+ but are struggling to find the time to use the tool.

West Midlands' Net Zero Neighbourhoods project will be an important testing bed for the tool.

Embedding the tool into BAU across local authorities would further enhance the value. These could include:

- Heat network zoning
- Regeneration projects
- Local plans
- Transport planning
- Housing allocation



The direct value of the tool for DNOs and network planning remains theoretical.

It is important to develop the processes and feedback loops for how local authority data contributes to network processes (e.g. DFES) and regional planning. For example, what data contributes to the process (e.g. local plan/LAEP) and how is that information gathered and shared (LAEP+).



There are wider use cases for LAEP+ tool and its visual elements such as internal governance and supporting council decision makers, communicating net zero to wider communities and engaging networks about capacity challenges.

In theory, LAEP+ could help identify challenging areas and facilitate conversations about differences between local authority and network approaches in certain areas.

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

2. Local Area Energy Planning Coordination Group

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Insights and recommendations









Information aggregation insights

Additional value from the tool

Workshop discussions reflected earlier insights about the LAEP+ tool from local authorities. Key points were largely theoretical because local authorities had only had access to explore the tool for three months. A Beta phase could help explore the following points in more depth:

- How the tool can help promote and communicate activity to the public (e.g. Net Zero Neighbourhoods).
- Where the tool can better integrated and enable heat network zoning and project delivery.
- How LAEP+ can support iterative conversations with the energy networks once plans and data have been submitted.
- Sharing the tool with partners beyond local authorities e.g. with new strategic energy partner (Coventry).
- How the tool could support Local Plans and local planners –
 particularly for internal conversations about justifying policies in
 Local Plans e.g. net zero and energy policies that impact building
 regulations.
- It was noted that the information provided by local authorities had value for networks and RESPs as a by-product of its value for local authorities. Therefore, it was important to have a use case for users on their terms.

Who owns the tool?

The discussion also touched on an important question about who owns the LAEP+ tool and who benefits from it, particular in a RESP framework.

- The group recognised that there is some value in the DNO owning the tool – given it currently can be shared into DNO processes – but DNOs are only one vector, while the tool is aiming for a more whole system approach.
- WMCA could own the tool but noted that energy networks were an important user and so would want a clear or legal agreement about how that data is used and then fed back.
- The most important aspect is the faith and confidence

 in the tool and then in the use of the information submitted.
- For local or regional owners, there is a question about creating a business case for the tool and its network planning aspects. This might be easier to justify from a network perspective.

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
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Insights and recommendations









Regional energy strategic plans and sensitive information

There are limits to the role of the local authority in collecting consistent and comprehensive local information for the RESP.

Managing commercial sensitivity will be a complex challenge. Local authorities agreed in the LAEP-CG working group session that there is a role for the RESP to help balance commercially sensitive data with transparency about planning. Highlighting both that:

- Local authorities are well-placed to collate and aggregate information from businesses and developers in the region about their plans for decarbonisation.
- However, businesses may not want to share their plans with other businesses, so this must be a process that can remain commercially sensitive.
- Businesses may also be optioneering across different local authority areas to determine where to invest/develop, which puts local authorities into competition with each other.

Local authorities also felt that it is not in the commercial interest of individual networks to consider whole-system or multi-vector plans and so RESPs need to cut across these to serve the best interests of regions.

Managing information flows into Regional Energy Strategic Plans is a complex challenge. The RESP will need to ensure they are multi-vector alongside a process to manage potential commercially sensitive information.

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- 1. Local authority interviews
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Insights and recommendations









Regional energy strategic plans and local/national policy tensions

There could be a tension in the RESP planning process where there is local and national policy misalignment e.g. building regulations.

The LAEP-CG highlighted that it is missing robust building regulation policies that help local authorities implement and drive decarbonisation. A recent ministerial statement has 'pushed back energy related conditions within building regs' (right).

Without being able to set robust local planning policies, and without the necessary national policy to support this, local authorities cannot create the planning conditions to decarbonise.

Local authorities would support a role for RESPs in advocating for policy changes such as building regulations, that can ensure the delivery of regional energy strategic plans and accelerate regional decarbonisation.

"A recent announcement from the Minister basically said they won't accept any planning policy that moves beyond existing building regs. The statement letter in December last year was not particularly helpful and doesn't give the right messages back to planners. I think there are very practical requirements around:

- Understanding what the energy needs are.
- What the future development proposals are for an area.
- Where the tensions lie.
- Where we need to be improving capacity within our area.
- How that might well compete with demands from neighbouring authorities.
- How we balance that within local authority resource.

We need that conversation between the different planning authorities in mapping that out and coming to kind of a conclusion with what a plan should look like at a local level that then fits in within the region." LAEP-CG member

"There's a big underlying issue around the central government policy because they're still wedded to the idea of just building as many houses as possible and meeting housing targets, and that does filter down into the planning teams. So even if you had an authority that wanted to build houses to a different [decarbonised] standard, I think they would find themselves quite quickly in a tricky situation legally if they were rejecting planning applications. Definitely needs to be change in central policy, I can't see it changing in the short term." LAEP-CG member

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
- 2. Local Area Energy Planning **Coordination Group**
- 3. Net Zero Infrastructure **Delivery Panel**

Insights and recommendations







Regional governance

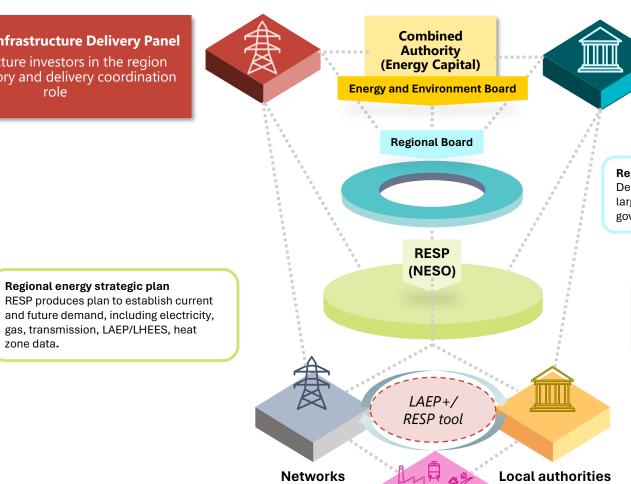
Net Zero Infrastructure Delivery Panel

Infrastructure investors in the region with advisory and delivery coordination role

Regional energy strategic plan

zone data.

gas, transmission, LAEP/LHEES, heat



Local Area Energy Planning Coordination Group

Local net zero delivery teams collaborating across the area

Regional board

Democratically accountable board largely supported by regional governance structure

RESP policy advocation and support

Where RESP identifies policy blockers to can support local authorities and actors

delivery of a regional energy strategic plan it navigate policy change.

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
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Insights and recommendations







Regional governance: reflections on the role of the NZIDP

In addition to the insights gathered in the NZIDP workshop, the role of the NZIDP was discussed further in the March RESP workshop. The following key points were noted:

- The group and wider stakeholders want to explore how individual networks within the NZIDP can work better together and understand the barriers to what might prevent collaboration.
- One stakeholder outlined that regulation can incentivise individual behaviour currently – so could regulation aim to incentivise more collaborative behaviour, and who would introduce and own that regulation if different infrastructure providers are regulated by different departments?

RESP and the NZIDP

Stakeholders also raised questions about how the RESP, individual networks and the NZIDP might interact and how to facilitate those interactions, such as:

- Would there be a functionality gap between NESO's ability to take a whole system view if all information is provided from individual vectors?
- Could the RESP have a role in bringing together individual networks to the NZIDP (or similar group in another RESP region) and help build confidence within the group to act as a delivery partner for a regional energy strategic plan?
- Would the NZIDP have the authority to challenge a regional energy strategic plan?

Governance structure (previous page)

The structure on the previous page is an updated representation of how a RESP governance structure and supporting structures and information flows could interact.

The lower half highlights the RESP function – specifically in gathering information from various regional stakeholders. It highlights that a LAEP+ tool could enable the collation of regional data in a streamlined way.

The upper half shows how the PRIDE governance structure could support a regional board and democratic actors that need to provide input into RESP decisions. The board may sit as a separate structure to the RESP, with the primary goal to advance regional objectives.

In the case of PRIDE, the Combined Authority essentially serves the Regional Board function. In other regions this role could sit with a different regional organisation.

PRIDE and the Regional Energy Strategic Planner

1. Local authority interviews

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3. Net Zero Infrastructure Delivery Panel

Insights and recommendations







Regional governance: reflections on the role of the LAEP-CG

Interviews discussed the benefits of the Local Area Energy Planning Coordination Group (LAEP-CG), and what roles and functions the group could take on in future to support both regional and local net zero planning.

Key **benefits** highlighted were:

- Providing a space to share information and progress with net zero planning.
- Supporting individual local authorities and providing a place to share views and convene around policy ideas. For example, local authorities found the support from the WMCA and LAEP-CG helped them respond to the heat network consultation despite resource constraints.

"The fact that WMCA has taken on the responsibility of crafting responses and compiling information for local authorities in the area is excellent. While some with more capacity have developed their own responses, we wouldn't have been able to do so. It's great that there's collaborative support to handle this workload, allowing us to contribute meaningfully despite our capacity constraints. Overall, it has been really helpful in this regard." Local authority interviewee

Future roles and functions for the LAEP-CG that local authorities mentioned were:

- Sharing best practice about how individual authorities are using the LAEP+ tool.
- A place to discuss cross-boundary projects and initiatives and opportunities for collaboration.
- Learning from peers in local authorities that may be more advanced in progressing net zero plans and delivery.
- Provide support for Energy and Environment Board members at West Midlands Combined Authority to ensure that democratic leaders have the knowledge they need to make informed decisions.

"Having a regional approach via this group would be incredibly beneficial. Understanding how other local authorities are using the tool and sharing their experiences could provide valuable insights.

Although neighbouring authorities often work within their boundaries, it would be useful to highlight the cross-boundary impacts and associated costs. Ensuring that these considerations remain on everyone's agenda within the group is essential for its continued effectiveness." LAEP-CG member

PRIDE and the Regional Energy Strategic Planner

- 1. Local authority interviews
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Insights and recommendations







Regional governance insights

Supporting governance structures around the RESP (like PRIDE governance) are likely to be critical to input into the RESP and democratic leaders but should be owned by regional actors.



Local authorities have a lack of knowledge on energy infrastructure but willingness and ability to learn.

The actors within local authorities supporting the PRIDE project have quickly grasped knowledge and developed skills in energy planning.

Local authorities have benefitted from the LAEP-CG, highlighting that the group has value outside of a RESP structure as well as in supporting a RESP structure.

Local authority stakeholders valued knowledge-sharing and networking in the project – suggesting a regional energy structure could provide additional local value in facilitating this on an ongoing basis.



Operational-level engagement was easier than board-level with democratically accountable leaders.

The Environment and Energy Board as part of the West Midlands Combined Authority structure meet quarterly. The project presented to the March meeting. The members were comfortable they had been effectively briefed and agreed to help the regional prepare for RESP.

Democratic boards are only as strong as the governance structures around them. Tools and processes like LAEP+ can support communication and governance within local authorities, but the PRIDE governance structure can enable democratically accountable leaders to make informed decisions by ensuring consensus, knowledge-sharing and building the confidence to act as a region.



PRIDE governance bodies have interests of the region at heart.

Organisations noted that they would be acting on behalf of and championing their local area and region – and may wish to do so beyond the energy system.

This suggests that responsibility for their set up, structure and operation of governance structures should sit with local and regional stakeholders themselves, with principles and some core responsibilities for these functions set out by the RESP.

Combined authority areas would find this much easier due to existing governance structures. RESP and Ofgem could provide guiding principles to support the developing of these supporting structures in other areas.



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