Planning Regional Infrastructure in a Digital Environment

SIF Round 2 Beta Annual Report

November 2024 – October 2025 reporting period

Electricity Distribution

nationalgrid

Version Control

Issue	Date
V0.1	16/12/2025
V0.2	9/02/2025
V1.0	11/02/2025

Publication Control

Name	Role
Liza Troshka (NGED), Mollie Atherton (AITL), Marie Dobinson (WMCA), Anna Livesey (NESO)	Authors
Jenny Woodruff (NGED)	Reviewer
Jenny Woodruff (NGED)	Approver

Contact Details

For further information, please contact:

nged.innovation@nationalgrid.co.uk

Postal

Innovation Team
National Grid Electricity Distribution
Pegasus Business Park
Herald Way
Castle Donington
Derbyshire DE74 2TU

Disclaimer

Neither National Grid, nor any person acting on its behalf, makes any warranty, express or implied, with respect to the use of any information, method or process disclosed in this document or that such use may not infringe the rights of any third party or assumes any liabilities with respect to the use of, or for damage resulting in any way from the use of, any information, apparatus, method or process disclosed in the document.

Contents

1. Executive Summary

Planning Regional Infrastructure in a Digital Environment (PRIDE) is a Strategic Innovation Fund (SIF) Beta project led by National Grid Electricity Distribution (NGED) in collaboration with West Midlands Combined Authority (WMCA), Advanced Infrastructure Technology Limited (AITL), Regen and National Energy System Operator (NESO). The project explores how a digital tool (LAEP+ for PRIDE) and supporting governance arrangements can enable more effective, integrated local and regional energy planning, accelerating the decarbonisation of major energy demand. PRIDE is being trialled with 14 Local Authorities (LAs) in the West Midlands Combined Authority (WMCA) and five LAs in South Wales within NGED's licence area.

PRIDE responds to the SIF Innovation Challenge "Accelerating decarbonisation of major energy demands through two complementary objectives:

- the development and trial of a digital solution (LAEP+) to support dynamic and integrated Local Area Energy Planning (LAEP); and
- the design and testing of governance approaches that enable local, regional and network stakeholders to share information and coordinate decision-making, aligned with develpoing Regional Energy Strategic Planning (RESP).

Progress and Key Outputs

During the first year of delivery, PRIDE focused primarily on strengthening the digital capability of the LAEP+ platform. Significant new datasets were introduced, including heat network suitability, heat pump suitability, domestic hydrogen potential, industrial buildings and clusters, and NGED DFES 2024 data with enhanced Network Opportunity Maps. These additions improve the availability, consistency and usability of evidence required for local and regional decarbonisation planning.

New platform functionality enables local authorities to assess heat network opportunities across multiple areas, explore hydrogen suitability, analyse industrial clusters, and aggregate projects more effectively across teams and organisations. Participating LAs were also provided early access to the Master Plan feature within LAEP+, supported by hackathons and onboarding sessions, enabling improved coordination within LAs and earlier engagement with NGED on projects with potential network impacts.

Learning and Knowledge Generation

Learning from local authority engagement has highlighted challenges relating to data availability and quality, organisational capacity, confidence in sharing early-stage plans, and the need for clear roles and expectations between LAs and network operators. These insights have been captured in a structured learning log and are being actively used to refine the tool, training approach and governance design.

Governance and System Integration

While full governance trials are planned for Year 2 and Year 3, PRIDE has built on Alpha-phase governance structures and engaged closely with NESO to align learning with the development of RESP. Early learning emphasises the importance of clear accountability, adequate resourcing (including local “super users”), cross-boundary visibility of projects, and simple outputs that can be readily used by different stakeholders. PRIDE learning is informing RESP considerations around data sharing, stakeholder engagement and regional coordination.

Impacts, Benefits and Value for Money

PRIDE is expected to deliver significant long-term benefits to networks, local authorities, consumers and wider society. Estimated cumulative benefits by the end of ED3 (2033) include more efficient strategic network investment through improved demand forecasting, reduced costs of decarbonisation planning and stakeholder engagement for LAs, accelerated deployment of low-carbon technologies, unlocked finance for local projects, and energy savings for households and communities.

The total cost of PRIDE Beta is £4.22m, with project partners contributing a minimum of 10% of costs (15% for NGED), equating to £486k of partner co-funding. Financial delivery in Year 1 (£1.02m) was closely aligned with forecast, demonstrating effective financial management and strong value for money relative to the scale of anticipated benefits.

Next Steps

Year 2 will focus on the development of the options for governance trial, continued alignment with RESP development, and further refinement of the digital solution. PRIDE is establishing transferable learning on how digital tools and governance arrangements can support more coordinated, cost-effective and locally informed decarbonisation of major energy demand.

2. Project Summary

PRIDE Beta is a Strategic Innovation Fund (SIF) innovation project that explores how a digital tool can support more interactive energy and net zero planning and decision making for Local Authorities (LA), energy networks and regions. The project is led by National Grid Electricity Distribution (NGED) and is being trialled across the14 local authorities that make up the West Midlands Combined Authority (WMCA) region and five local authorities from South Wales that are within NGED licence area. PRIDE Beta digital solution is LAEP+ tool owned by Advanced Infrastructure Technology Limited (AITL). Other project partners include Regen,who provide an independent expert advice on all aspects of sustainable energy delivery, and NESO, who observe the project impacts to inform the design and development of Regional Energy Strategic Planner (RESP) role.

Project PRIDE have set an ambition to address 'Accelerating decarbonisation of major energy demand' SIF Innovation Challenge via two main routes:

- Unlocking dynamic and integrated energy planning; and,
- Developing a governance process for decarbonisation of major energy demand.

The first year of the project delivery (November 2024 – October 2025) was primarily focused on the first aspect, which included enhancing existing, and developing and launching new data layers and functionalities within the LAEP+ digital tool. Specifically, that included the addition of the following data layers:

- Heat network suitability by Lower Layer Super Output Area (LSOA) which also allows LAs to check shared ground loop suitability (sourced from NESTA[1]).
- Ground source and air source heat pump suitability by LSOA (sourced from NESTA[2]) which was added as a comparison to already existing LAEP+ ground and air source heat pump data.
- Domestic hydrogen potential data layer providing an indication of properties suitable for hydrogen heating.
- Industrial buildings and clusters datasets configured based on estimated greenhouse gas emissions for the buildings with an indication of the approximate standard industrial classification codes to show what the building is used for.
- NGED DFES 2024 and enhanced Network Opportunity Maps to allow Local Authorities better understand headroom availability for future connections.

The addition of new data layers has enabled additional functionalities to be deployed, as per below:

- Ability for LAs to assess multiple areas for heat network deployable suitability.

[1] GitHub - nestauk/asf_heat_pump_suitability: Project to identify which small areas in Great Britain are likely to be suitable (or unsuitable) for which types of heating technology.

[2] GitHub - nestauk/asf_heat_pump_suitability: Project to identify which small areas in Great Britain are likely to be suitable (or unsuitable) for which types of heating technology.

- Evaluate where domestic hydrogen might be an option providing a wider infrastructure exists to deliver hydrogen to homes.
- Draw polygons around industrial buildings into clusters to understand most common use among selected buildings and their total potential for PV generation.

There have also been major improvements in the way projects and information generated within LAEP+ is aggregated and shared among key stakeholders (notably different departments within Local Authorities and NGED DSO). PRIDE local authorities were able to get early access to the Master Plan feature in LAEP+, alongside detailed onboarding sessions to explore local planning needs within the context of Master Plan functionality and to feed into further development of this (currently) Beta platform function.

A great effort was put in by the participating LAs in exploring and testing the tool. LAs have been encouraged and provided technical support in creating decarbonisation projects in the form of a LAEP-style plan. The key learning points of these activities are provided in Section 3.

The governance aspect of PRIDE Beta is the focus of the second year in the project delivery programme; however, the project team has been building on governance structures established during Alpha phase and evolving them via ongoing discussions with NESO RESP team to test the aggregation of information requirements for fully integrated plans. It is envisaged that these structures will support local and regional energy planning and will enable regional decarbonisation ambition.

3. Knowledge Creation and Dissemination

Knowledge capture and dissemination is an integral part of innovation projects. The PRIDE team have created a learning log that is used to record progress and learning observations. The learning log is grouped by workstreams, and the key learning details are provided in Table 1 below. The full learning log is available in Appendix 1.

Table 1 Selection of PRIDE Beta learning points over the 1st yeat of delivery.

Workstream	Learning detail
General	Learning for use of LAEP+ in a regional governance structure: • Hackathons are the fastest route to building local interest and momentum in the early days • Top-down commitment from user/sponsor organisations is essential to overcome the micro-frictions involved in learning any new tool, especially one in an area with there is no statutory duty. • The outputs must be simple to generate and immediately useable by users.
General	Learning from producing 'LAEP style plans' using LAEP+: Some local authorities (LAs) expect LAEP+ (or the DNO) not just to receive project submissions but to provide detailed, tailored feedback on them. This highlights an expectation gap around roles and responsibilities, and the level of support LAs anticipate as part of the process.
General	Learning from producing 'LAEP style plans' using LAEP+: Capacity, capability and prioritisation do not always co-exist within LAs. In practice, an authority may have one or two of these elements, but rarely all three at the same time. This constrains consistent engagement and affects how effectively tools and processes can be adopted.
General	Learning from producing 'LAEP style plans' using LAEP+: There is a degree of reluctance to invest time in learning new tools. This is driven by the perceived learning curve and a lack of immediate, obvious benefit to day-to-day responsibilities, particularly where existing tools already fulfil core needs. Without a clear link to current workloads, adoption is harder to justify.
Data	Learning from producing 'LAEP style plans' using LAEP+: Data availability and quality also remain a significant challenge. Data is often distributed across different teams within an LA and is not always consistent, making coordination difficult and increasing the burden of participation.
Data	Learning from engagement with Welsh Local Authorities: With some access to Welsh LAEPs, we can see that most of the data is in Repackages which makes visualisation on LAEP+ very straightforward. Advice for LAs on formats for LAEP data could be useful - particularly on data formats that align with LAEP+
Data	Data & Data Sharing: Data held within LAEP+ does not always correlate with 'on-the-ground' empirical data gained from surveys which can reduce confidence in tool – messaging that LAEP+ needs to guide and not be absolute position.

Digital tools	Digital Tool to Support LAEP Creation: The tool is really helpful in assessing renewable potential, but it doesn't support the flexibility and intraday modelling needed to fully assess battery storage, which is key to number of projects.
Governance	Governance discussion with NESO highlighted PRIDE learnings in Discovery and Alpha phases and was beneficial to find that similar considerations had emerged e.g. things to consider such as: board size, representation by organisation type, representation by individual e.g. political vs. officer or technical ability vs. decision making ability. Other considerations, such as when to update board membership within RESP cycle, and how to manage inevitable employee changes outside of agreed updates. Recommendation to continue dialogue to continue learnings relevant to respective RESP and PRIDE governance development.
Governance	Incorporating the wider West Midlands regional counties mean a greater diversity of political representation, and learning about how to focus key benefits e.g. economic growth, community energy.
Governance	The Masterplan function is currently being tested in an open capacity, but there will be a need to identify a 'super user' in each area to manage and have oversight of all LAEP activity – resourcing of this could be a challenge, and should be considered as part of the developing RESP governance.
Governance	There is currently no way of linking cross-boundary projects in Masterplans or generating a whole West Midlands region view but learning has already contributed to the development of an updated structure to account for parent/child relationships to be rolled out in the coming months.

4. Intellectual Property Rights

The Intellectual Property Rights generated through PRIDE are delivered via direct enhancements and functionality developments in the LAEP+ digital platform that is owned by Advanced Infrastructure Technology Limited.

A full list of the generated IPRs is provided below:

- Industrial clusters and industrial buildings datasets were based on methodology developed in-house at AITL
- Methodology to produce hydrogen-suitability building level datasets was produced by AITL
- Electricity supply area (ESA) mapping techniques were developed by AITL to map geospatial areas used by local authorities (building, postcode, LSOA, MSOA) to geospatial areas used by networks (secondary, primary and bulk supply area substations). The ESA mapping translates the geospatial element of LA energy plans into reflective geospatial plans for networks showing impacts of LA plans on electricity supply areas.

5. Data Access

PRIDE has a dedicated webpage on NGED Innovation portal. Key updates about the project progress are published monthly on the webpage. All publishable deliverables are available on the PRIDE webpage under ‘Documents and Links’ section.

WMCA also has a dedicated webpage for Local Area Energy Planning which includes a section on the PRIDE project.

While PRIDE has used a number of new datasets this year, the IP for these datasets is owned by third parties and can not be published on the PRIDE website.

6. Route to Market, Business as Usual

The PRIDE Beta project has set an ambition to demonstrate the practical, technical and organisational steps to delivering integrated local and regional energy planning between local authorities, energy networks, regional stakeholders and the RESP to ensure network and non-network investments support the decarbonisation of major energy demand in places.

The two main building blocks of PRIDE BETA that would be scalable for business integration are:

1) A Digital solution - LAEP+ tool – that enables digitalisation of LAEP data and allow for the plans to be updated dynamically and for data to be aggregated/ disaggregated dependent on a user needs.
2) A Governance structure that defines an operational model based on local-regional energy information exchange and decision making.

LAEP+ tool

There are three distinct user groups within PRIDE: LAs, electricity network and RESP. Each of those groups has their unique requirements for data availability within the tool and required functionality, and therefore exploration of business-as-usual integration depends on their requirements. Table 2 below summarises main updates to the tool and each partner processes to-date as a result of Year 1 of PRIDE Beta:

Table 2 Update for business practices (per each partner requirements) as a result of PRIDE Beta.

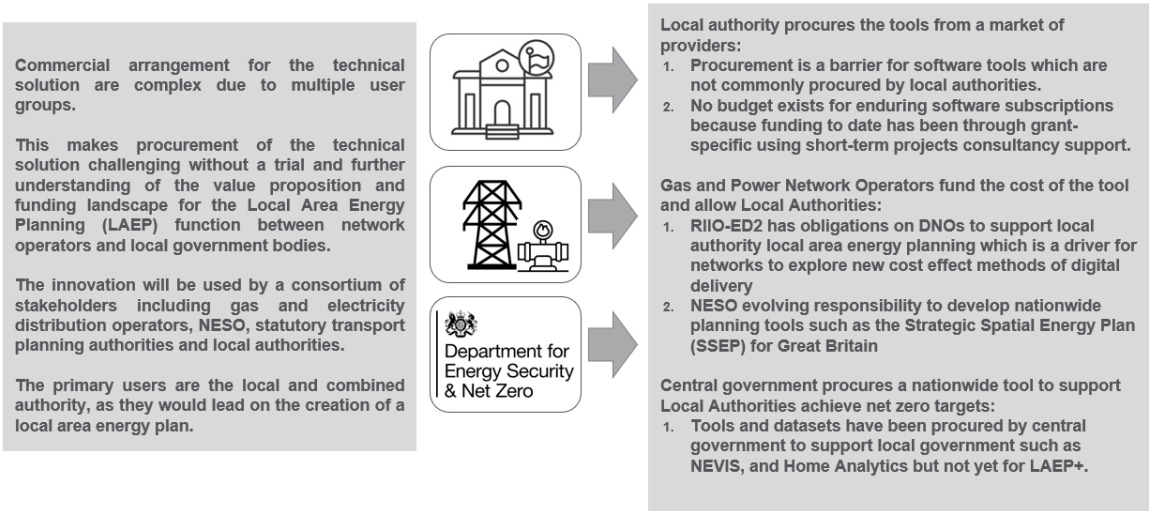
NGED	WMCA	NESO
• Table structure of LAEP+ technology input data is now in line with NGED DFES process which makes integration of projects created by LAs in LAEP+ easy • Push notifications created in LAEP+ for NGED to evaluate and incorporate either new or updated project from LAs into network forecasts • Network Opportunity Maps are visualiased on LAEP+ in the same manner as on NGED website for consistency • NGED reinforcement options are being added to the LAEP+ tool to	• Regular quarterly LAEP Coordination Group meetings and LAEP+ Hackathons are now being scheduled to work closely with LAs and disseminate information and updates on the development of LAEP-style plans and associated learning • Regular 1:2:1 meetings are being undertaken with individual LAs to support identification of projects and use cases for LAEP+ and practical support to input to the tool as needed	• NESO is continuing to develop its RESP methodology following consultation. PRIDE project discussions have been helpful in considerations for consultation e.g. research on existing data platforms, governance process thinking • NESO will continue to seek to understand how PRIDE can answer questions in the first RESP cycle. This should include elements such as what relevant data is already available, the value and criticality to whole

allow LAs to see where network upgrades options are considered. • LAEP+ licenses for the entire NGED area have been included in the Ofgem Digital Re-Opener and will be assessed later in 2026.	• Regular 6 monthly NZIDP meetings to consider strategic energy planning and feed into new RESP governance proposals • Utilising the PRIDE Alpha governance projects to gather regional views to inform RESP consultations e.g. tRESP and RESP methodology • Where possible, consideration and use of LAEP+ is incorporated into all Business Cases and Feasibility assessments to inform any WM projects in the pipeline	energy system plan and the value of sharing local data. • NESO will continue to explore PRIDE learnings on stakeholder engagement relevant to how NESO engage stakeholders on data. • NESO will seek learnings from PRIDE governance mechanisms which deliver/demonstrate a transparent, robust engagement with key stakeholders. Learnings input to what is happening in real-time in RESP.

The integration of the LAEP+ tool within participating LAs and NGED has seen significant progress since the start of the project. Acknowledging there are three main user groups, .

Figure 1 below summarises three main routes to market.

Figure 1 LAEP+ Commercialisation Options



The PRIDE Steering Committee has been set up to provide a strategic direction for PRIDE delivery and most importantly post-Beta thinking. PRIDE Steering Committee tracks and evaluates PRIDE business case as part of the regular quarterly meetings where the learning to date is being reflected upon as part of the Cost Benefit Analysis review (see Section 9).

PRIDE Governance

The governance structure development and the governance trial is the focus of PRIDE Year 2 and Year 3 and therefore will be reported on in subsequent years. It is envisaged that the results of the trial will inform RESP development, specifically formation of the regional and local infrastructure governance bodies and data exchange requirements.

7. Policy, Regulatory and Standard Barriers

The PRIDE team have set-up a Policy, Regulatory and Standard Barriers tracker that is reviewed on a regular basis.

There are currently no direct barriers identified that could impact success of the project plan delivery.

There are however four observations that may impact the project in the future.

- The support for decarbonisation projects is wavering following the local government elections in summer 2025. There is no direct impact to the project from the new political situation at the moment, however it is acknowledged that it can influence the focus LAs can dedicate to supporting PRIDE;
- Strategic energy planning (including LAEP) is not a statutory responsibility for LAs hence it is inherently under-resourced.
- During the first year of the PRIDE project NESO has been in the process of developing the RESP methodology. The RESP methodology is not expected to be signed off until later in 2026. This has meant that RESP information and thinking that PRIDE is interested in discussing has still been in development and cannot always be shared. This will be an ongoing dependency that the PRIDE project will need to manage.
- Local government re-organisation may have an impact - Staffordshire, Warwickshire and Worcestershire counties in the West Midlands region are the focus of Local Government Reorganisation and have indicated uncertainty about future decision making which could impact capacity to engage local area energy planning.

8. User Needs

The primary users of the LAEP+ tool are LAs. The following observations are from AITL as a provider of the LAEP+ onboarding activities and training and LAs directly.

AITL (LAEP+ developer) learning of PRIDE Beta user needs

Trialling beta functions like the Master Plan feature with PRIDE local authorities is valuable as it provides AITL with useful feedback on how to build out the function to better support LAs. Suggestions have included:

- Aggregating Master Plans in combined authority areas to provide an area-wide view.
- Exploring how to better track progress against 'default' or 'custom' targets which could include Committee on Climate Change targets, DESNZ carbon baselines/targets, custom LAEP targets etc.

From a training perspective, it's clear that users need detailed, in-person trainings as done in the hackathons. They have helped to build excitement around the tool that has fed into better engagement with it by LAs. Further user needs should explore how to then get local authorities from using the tool to create their plans, into actually sharing them with the DNO (no matter how early in their development). This confidence to share plans should come through the governance.

Local Authrotities learnings from using LAEP+ tool

From a LA perspective, limited internal capacity for energy planning has constrained engagement with the LAEP+ tool, particularly during the first year of PRIDE Beta. Energy planning often competes with wider sustainability and net zero priorities, reducing time available for learning and using the tool. Greater profile and visibility of PRIDE/LAEP+ across planning, transport and housing teams could help broaden involvement. There is also a clear need for improved onboarding support, such as a concise written user guide, to help time-limited teams navigate key datasets, align outputs with regional strategies, and correctly format local data.

Differences in how LAs and the DNO use the tool have also shaped learning. While the DNO prioritised network-impacting "Projects", LAs tended to focus on developing options and "Data Stories", sometimes using offline data. This mismatch created challenges when sharing early outputs, suggesting a need to rethink terminology such as "Send to DNO" to encourage earlier, draft-stage sharing. Although functions like Portfolio, Scenario and Masterplan functions in LAEP+ offer strong potential, they are not yet fully understood or consistently used. Additional guidance, case studies, and collaborative workshops could help address barriers around logic inputs, scenario testing at scale, and identifying least-regrets options.

Overall, LAEP+ is seen as particularly valuable for assessing renewable energy potential, but it has limitations around flexibility modelling, battery storage, and integration with complementary tools (for example, Thermos for heat networks). There is also a need for clearer expectations around feedback on submitted projects, defined roles between LAs and the DNO, and stronger business continuity processes when staff change.

Governance and resourcing challenges remain, including the need for local “super users” and improved cross-boundary visibility, though recent learning has already informed planned updates to support regional and parent/child project relationships.

9. Impacts and Benefits

The PRIDE consortium outlined a number of expected benefits and associated costs during the application stage that are summarised in the table below.

Table 3 Summary of PRIDE Benefits

N	Primary Beneficiary	Definition	Total estimated benefit/costs (£m) by the end of ED3 (i.e. 2033)
1	Networks	Reducing the number of connection requests made to network operators that would otherwise occur	9.9
2		Local Area Energy Planning Support, i.e., reducing the number of agents required to support customers by replacement with digital tools.	10.9
3		More effective strategic investment due to better demand forecasting, i.e. aligning strategic investment with future demand allows for timely reinforcement of energy networks and efficient deployment of capital	34.5
4	Local Authorities	Reducing the cost of decarbonisation scenarios that would otherwise be incurred by local authorities	5.2
5		Reducing the human resource cost of stakeholder engagement that would otherwise be incurred by local authorities	12.8
6		Unlocking finance for local decarbonisation project by local authorities	43.1
7		Monitoring and reporting support for local authorities	22.8
8		Improving the capability of local authorities to apply for and deliver central government grants for low carbon technologies	43.1
9		Reducing the cost of optioneering and zoning studies that would otherwise be incurred by local authorities	5.5
10		Energy savings resulting from faster deployment of renewable generation on domestic properties by local authorities	7.8
11		Energy savings resulting from faster deployment of home energy efficiency on domestic properties by local authorities	53.7

N	Primary Beneficiary	Definition	Total estimated benefit/costs (£m) by the end of ED3 (i.e. 2033)
12		Revenue generated from EV charging accruing to local authorities from EV charging infrastructure that is deployed at a faster rate than would otherwise have occurred	15.5
13	Wider Society/Customers	Energy savings resulting from faster deployment of home energy storage systems on domestic properties.	15.4
14		Energy savings resulting from faster deployment of heat pumps on domestic properties	
15		Energy savings resulting from faster deployment of heat networks on domestic properties	
16		Policy Recommendations – calculated as a reduction in number of persons required to set policy decisions	
17		Academic Research – calculated as up to 50% of the EPSRC portfolio for energy systems related research and then scaled by the RoI on research value	
1	AITL	Investment and cost for the digital solution (includes both project and implementation costs)	-42.1

The PRIDE consortium has assembled a project governance group - PRIDE Steering Committee - that along with providing overarching strategic oversight to the project, takes an active role in reviewing the benefits to:

- Check they remain relevant over the course of the project
- Ensure there is a business owner for each benefit
- Develop a methodology to monitor delivery of the benefits over time.

The PRIDE Steering Committee meeting held on 30/07/2025 was focused on addressing the first two points. The Committee group reviewed relevance of each original benefit, assigned a business owner and provided an early indication of the level of complexity involved in calculating a specific benefit.

There is ongoing work to review benefits utilising the learnings of the project which will feed into Post-Beta Roadmap and BaU integration.

10. Risks, Issues and Constraints

Project risks, issues and constraints are tracked weekly via a dedicated tracker that was set up at the beginning of the project. The top five risks are listed below. A full risk register is available upon request.

#	Risk Description	Likelihood	Impact	Mitigation
1	Different digital tool functionality/datasets/features would be needed to support different organisational structures	Medium	High	WP4 investigates potential organisational / governance arrangements and will be used to refine and develop additional functionality, specifically through user research and testing.
2	Inability of PRIDE stakeholders to agree on a regional governance trial implementation plan	Low	High	Specific focus on open, iterative stakeholder engagement throughout all project delivery phases to ensure partners are facilitated to directly influence trial design. Emphasis on clear communication to update on the development of key steps in preparation to the trial (WP6, WP7)
3	Delay in adopting PRIDE governance structure and a digital solution into BaU to enhance network investment planning	Low	High	Project PRIDE has a strong support from the NGED DSO business with a DSO managing director acting as a project sponsor. Monthly updates with a project sponsor will ensure PRIDE development remains aligned with NGED DSO vision
4	Delay in obtaining access to Heat Network GIS data layers	High	Medium	AITL to explore all possible options for data access. RESP to support data request and highlight the urgency to DESNZ. Alternative datasets (NESTA) identified and uploaded onto LAEP+ for LAs to evaluate suitability of heat networks until DESNZ data is released

#	Risk Description	Likelihood	Impact	Mitigation
5	Some LA political support is wavering	Medium	High	WMCA is stepping up direct engagement with LAs where political support is weaker

11. Working in the Open

The PRIDE Project team strives for transparency and over the past year has made sure to disseminate learnings of PRIDE via various communication channels and stakeholder engagement events. Some of the key dissemination events where PRIDE was featured are listed below:

- Utility Week Live in the session ‘Coordinating planning and investment to decarbonise regions’ - March 2025
- CIRED Conference – PRIDE poster presentation and LAEP+ demo – June 2025
- WMCA Local Area Energy Planning Coordination Group Day – in-person event demonstrating potential LAEP-style plan use cases – June 2025
- Multiple LAEP+ Hackathons session with WMCA and South Wales LAs to showcase use cases for LAEP+ and demonstrate functionality – July, October 2025
- Energy Capital Conference – PRIDE stand and project engagement session – September 2025

PRIDE Beta was also a finalist in the Utility Week Awards 2025 in the ‘Unlocking Data’ category.

12. Costs and Value for Money

PRIDE Beta supports benefits for consumers by enabling more cost-effective and locally informed planning of the energy system. Once fully developed, Innovation from PRIDE is envisaged to help reduce resource and investment costs for local authorities, networks and NESO, and reduce investment risk for major energy users.

The total project cost for PRIDE Beta is £4,219,406. Each project partner has commited to contribute at least 10% (15% for NGED) of their own funds towards their respective budget allocations (£486,006 in total for the project).

The financial spend during the first year of delivery was largely in line with the original forecast and is shown as a breakdown per each project partner:

Table 4 PRIDE Beta Year 1 Spend Profile

Project Partner	Total Project Cost	Forecast Year 1	Actual Year 1	Variance
NGED	£721,790	£199,108	£198,592	-£516
AITL	£2,011,884	£661,132	£659,199	-£1,934
WMCA	£810,290	£67,379	£67,379	£0
Regen	£584,690	£97,056	£97,056	£0
NESO	£90,752	£0	£0	£0
Totals	**£4,219,406**	**£1,024,676**	**£1,022,226**	**-£2,450**

- Minor variations between the forecast and the actual values are due to resource changes and restructuring of the payment scheduale.
- The vast majority of the tasks WMCA and Regen lead on are the focus of Year 2 and Year 3 and therefore their spend will pick up in 2026 and 2027.
- NESO plays an advisory role on the project and therefore will charge a lump sum at the end of the project

13. Specific Project Conditions

Project Direction for PRIDE Beta specifies 13 Specific Project Conditions (SPCs) for PRIDE. Table 5 provides an overview of all SPCs with further detail on their status over the past year:

Table 5 Update for each PRIDE SPC

	SPC	Update
1	Any spend only after all contracts are signed	All contracts were signed in March 2025. All project related payments were authorised after this date.
2	Financial contributions reported	A finance tracking sheet supplied by UKRI is used to report all spend including each partner financial contribution.
3	UKRI, OFGEM, DESNZ meeting attended as required	There were no specific requests received during the first year of delivery. PRIDE team will work with industry partners as required.
4	Stage gate scoping	The project team have successfully scoped and passed the 1st Stage Gate review in November 2025.
5	Impact monitoring	PRIDE team and PRIDE Steering Committee monitor project impact via regular review and update of the project benefits which is based on the project learnings. Each original benefit has an assigned owner who is responsible for updating the calculation methodology and refining the benefits.
6	SIF Community Forums	PRIDE project team attended SIF Forum in 2025 as required.
7	Policy, regulatory and standards barriers	There is a dedicated tracker for policy, regulatory and standards barriers that is reviewed on a regular basis.
8	Updated 60-second videos	Project team produced a video in 2025 which is published on UKRI dedicated YouTube channel.
9	Post-Beta Phase roadmap	SPC 9 and SCP10 are interlinked as they are interdependent. The initial position for SPC9 and SPC10 was drafted and is kept as an initial thinking because the path for BaU integration is dependent upon the final commercialisation strategy. Steering Committee meeting is used to verify the thinking and update both commercialisation position and BaU roll-out.
10	Commercialisation strategy	
11	Data Best Practice and Digital Strategy and Action Plan Guidance alignment	A document that describes the alignment of LAEP+ with Ofgem's Data Best Practice Guidance, and Digitalisation Strategy and Action Plan was produced in April 2025 and is available upon request.
12	Update on resource intensity and feasibility of manually gathered local data	Each LAEP-style plan has required a level of resource intensity which can vary depending on the identification and scope of a use case, challenges in data gathering and application both inside and outside the tool. WMCA track time by each of their participating Local Authority. Further detail is available upon request.

13	A plan for optimal Governance and ownership structure of the PRIDE tool post Beta	PRIDE governance structure to be trailed is intended to directly inform RESP and therefore will not have an owner as such. LAEP+ tool which is owned by AITL is developing their thinking for commercialisation post-PRIDE using the project learnings and wider Local Area Energy Planning activities.

14. Material Changes

One material changed was submitted by the Project team and approved by Ofgem.

In order for the original scope to be delivered the project costs had to increase by £71,211.10. Project partners (NGED and AITL) covered the shortfall by allocating additional resources from their own funds as per below:

- AITL provided additional budget of £32,757 from their own funds
- NGED provided additional budget of £38,454 from their own funds

The original project scope remains unchanged. The additional costs were met internally by NGED and AITL and therefore additional SIF funding was not sought.

15. Glossary

Abbreviation	Term
AITL	Advanced Infrastructure Technology Limited
BaU	Business as Usual
CCC	Committee on Climate Change
DESNZ	Department of Energy Security and Net Zero
ESA	Electricity Supply Area
LA	Local Authority
LAEP	Local Area Energy Planning
LSAO	Lower Layer Super Output Area
MSOA	Middle Super Output Area
NGED	National Grid Electricity Distribution
RESP	Regional Energy Strategic Planner
WMCA	West Midlands Combined Authority
SIF	Strategic Innovation Fund
SPC	Specific Project Condition

16. Appendices

Appendix 1 - PRIDE Beta Learning Log - Recommended Learning Points

Workstream	Learning Detail (event, effect, trigger, early warning indicators, recommendations)
Data	Reluctance to share commercially confidential info for industrial cluster data. High gas users are of key interest due to their potential impact if they electrify their operations.
Data	A common identifier in all NGED datasets and data layers would be very useful to ensure the ingestion of the NGED data into 3rd party platforms is correct and consistent
General	There appears to be different perceptions of the PRIDE project across NESO and RESP specifically. PRIDE presentation to NESO was useful first step to explain specific PRIDE focus areas. A summary document is to be prepared to explain the target areas of PRIDE (governance + digital solution)
Data	Meeting with Herefordshire Council and others: Strategic planners for housing allocations are starting to recognise that network constraints are much more common than in the past. They are keen to know more about where developments might trigger reinforcement work so that they can factor that in to where they might allocate land for building. But DNOs can't offer that sort of info without specific site details, and LAEP+ can't really either at the moment. The value of LAEP+ is in considering network impact of new developments and projects. Currently, the tool can tell you where a project might exceed network capacity, but not how much it might cost to upgrade or whether that upgrade might then support a greater number of homes. NGED and NESO want info on planned developments, but LA's want info on future capacity and upgrade costs in order to inform their plans.
LAEP data	Hackathons and specific, example case studies from other LA's seem to be the most effective route to encouraging participation and usage of the tool as they show how quick the tool is to use and gain meaningful insights. However, that doesn't mean that users will be progressing on to producing LAEP-style plans or full plans.
LAEP data	12/08/2025 - meeting with Cardiff City Council. They find their LAEP 'plan on a page' hugely useful as it describes headline numbers of technology assets by 2050. Strategically and politically that serves their purpose. They mentioned that they have not done a huge amount with the LAEP data and don't use Data Map Wales much. They could clearly see the benefits of LAEP+ to complement their existing data handling framework.
LAEP data	Local authorities would like to know how their submitted projects data is used by NGED.
Data	Local Authorities whose boundaries are covered by more than one DNO require a single login access to LAEP+ so that the platform can 'decide' and send project information to a relevant DNO when a project is submitted. The process should be automated within the platform with no additional requirements for LAs to check individual DNO data requirements
Data	DFES volume forecasts to be sent to AITL as 'atomic areas' as electricity substation areas used in DFES do not align with local authority areas.

Workstream	Learning Detail (event, effect, trigger, early warning indicators, recommendations)
LAEP data	Local authorities reluctant to share projects with DNO
General	Learning for use of LAEP+ in a regional governance structure: • Hackathons are the fastest route to building local interest and momentum in the early days • Top-down commitment from user/sponsor organisations is essential to overcome the micro-frictions involved in learning any new tool, especially one in an area with there is no statutory duty. i.e. if DNOs are funding use of LAEP+ for LAs in their licence areas, then why not mandate it must be used for DFES submissions? • The outputs must be simple to generate and immediately useable by users.
General	Learning from producing 'LAEP style plans' using LAEP+: Some local authorities (LAs) expect LAEP+ (or the DNO) not just to receive project submissions but to provide detailed, tailored feedback on them. This highlights an expectation gap around roles and responsibilities, and the level of support LAs anticipate as part of the process.
General	Learning from producing 'LAEP style plans' using LAEP+: Capacity, capability and prioritisation do not always co-exist within LAs. In practice, an authority may have one or two of these elements, but rarely all three at the same time. This constrains consistent engagement and affects how effectively tools and processes can be adopted.
Data	Learning from producing 'LAEP style plans' using LAEP+: Data availability and quality also remain a significant challenge. Data is often distributed across different teams within an LA and is not always consistent, making coordination difficult and increasing the burden of participation.
General	Learning from producing 'LAEP style plans' using LAEP+: There is a degree of reluctance to invest time in learning new tools. This is driven by the perceived learning curve and a lack of immediate, obvious benefit to day-to-day responsibilities, particularly where existing tools already fulfil core needs. Without a clear link to current workloads, adoption is harder to justify.
General	Learning from producing 'LAEP style plans' using LAEP+: Transparency was another recurring theme. LAs expressed a desire for clearer insight into how the data they provide to DNOs feeds through into DFES outputs and ultimately influences change. This suggests a need to better close the feedback loop and demonstrate the value of their input.
General	Learning from producing 'LAEP style plans' using LAEP+: Cost pressures further complicate engagement. Justifying expenditure is challenging when responsibility spans multiple departments with separate budgets, making it harder to allocate funding even where the strategic value is recognised.
General	Learning from producing 'LAEP style plans' using LAEP+: There is notable variation in how much LAs spend on energy studies and how much time they dedicate to DFES returns. The core challenge is not the absolute time required, but the variability in engagement. Where some LAs do not respond at all, there is a risk of skewing the modelling.
General	Learning from producing 'LAEP style plans' using LAEP+: In terms of capability, some LAs are reluctant to use tools directly and continue to prefer consultants, citing a lack of in-house expertise. However, most LAs welcomed the idea of outputs being delivered through a common platform that could then be shared with consultants or other stakeholders for further development, balancing internal limitations with consistency of outputs.

Workstream	Learning Detail (event, effect, trigger, early warning indicators, recommendations)
General	There was an expectation that at this point in the project (over-halfway) that local authorities would be using LAEP+ more autonomously that they currently are. A useful lesson to learn is how much hand-holding is needed to bring LAs up to a point of use that is autonomous.
Project Management	Setting success criteria quarterly as a way-of-working has helped clarify deliverables and ensure consistent and coherent communication about project requiremetns. This is particularly important as it is hard to predict quarterly deliverables 18-24 months in advance of the project (as is the case with the Beta application) and the success criteria allows us to tweak the requirements of project deliverables to meet needs of the project that have arisen over the projects duration.
General	While understandable that NESO must adhere to its public consultation processes to develop the RESP methodology, it can sometimes make engagement difficult if the organisation how not fully developed it's thinking on particular ideas for shared data needs. The focus of PRIDE is to demonstrate governance options and digital tools to help inform NESO's thinking on RESP development, but sometimes – due to public consultation processes – NESOs feedback or input to this can be delayed. This is expected but can be frustrating when wanting to share ideas about alignment.
General	Hackathons and in-person trainings are by far the most engaging way of demonstrating and teaching users how the LAEP+ platform works. The benefit of PRIDE is that we are working with smaller groups of local authorities, localised to partciular places (e.g. West Mids, Wales). It would be valuable to prepare early for how we would replicate hackathon style events in larger groups or across bigger areas.
Digital tool	When discussing or exploring new functionality ideas with groups of LAs or project team - it's better to present 2-3 options for functionality rather than invite any thoughts or ideas (which can be done at earlier stages). This is because often functionality requirements need to work within the capabilities of the platform so not every idea is possible. But also functionality requirements often require a technical language to ensure that development needs are met. And there can be a lack of knowledge about that technical language in local authorities. Presenting 2-3 options ensures that the options are possible, but can also be communited with clarity both to users of the tool but also to developers working on the tool.
Digital tool	Many processes we developed in PRIDE year-1 were iterative and in some cases were defined by miscommunications, oversights or bugs that we identified along the way (e.g. DFES ingestion). This - while being frustrating at the time - has ensured that these ongoing processes should be done more effectively in future. As DFES is an annual process, we are now more confident in the data needs from NGED, as well as their visualisation needs.
LAEP data	On Wales LAs - the fact Welsh LAs have existing LAEPs does seem to put them in stead to be more cohesive in the direction they are taking with regards to energy planning. LAEPs on their own don't have all the answers, but by directing focus they help rule out different options/technologies to give LAs focus on what they should be doing.
Laep data	With some access to Welsh LAEPs, we can see that most of the data is in Geopakcages which makes visualisation on LAEP+ very straightforward. Advice for LAs on formats for LAEP data could be useful - particularly on data formats that align with LAEP+
Digital tool	LAs use different metrics to track progress - West Mids uses Tyndall Progression, some use DESNZ benchmarking, some CCC targets and scenarios

Workstream	Learning Detail (event, effect, trigger, early warning indicators, recommendations)
	etc. Making a way to make master plans track against exisiting targets could help track progress of plans agianst goals.
Governance	Local authority engagement challenges and opportunities, reflected back to RESP Local actor support workstream. Challenges discussed in WMCA conversations were similar to those being reflected in RESP discussions. Useful to validate concerns arising and areas to tackle - recommendation to feed through any similar learnings.
Digital tool	NESO thinking on RESP digital and data, available digital tools, wider NESO role in digital and data and RESP role within this is emerging. Beneficial discussions have taken place to understand the PRIDE tool capabilities and what is PRIDE specifically testing as an innovation relative to other projects. Demos of the masterplan tool and attending hackathons has also been helpful to grow understanding. Recommendation to continue dialogue to continue learnings relevant to RESP methodology development.
Governance	Governance discussion with NESO highlighted PRIDE learnings in discovery and alpha phase and was beneficial to discover that similar considerations had emerged e.g. things to consider such as: board size, representation by organisation type, representation by individual e.g. political vs officer or technical ability vs decision making ability. Other considerations such as when to update board membership within RESP cycle and how to manage inevitable employee changes outside of agreed updates. Recommendation to continue dialogue to continue learnings relevant to respective RESP and PRIDE govenernance development
General	General Observation: Local Authority reps have limited internal resource to support energy planning, which is often at capacity supporting broader sustainability and net zero priorities. This may have impacted dedicated time for inputting and learning the tool. Profile and visibility of PRIDE/LAEP+ could be improved to draw on more involvement from LA Planners, Transport and Housing officers.
General	General Observation: The LAEP+ Hackathons became a very popular way to provide in person learning for LA reps, with the PRIDE team on hand to support. These sessions generated a lot of test projects and improved confidence of LAs to inform future use cases. Recommendation to share learnings from the initial 10 LSPs at the next one.
General	General Observation: Despite support on offer, some LAs initially delayed creating projects because of perceived complexities, or lack of time to follow up. This was significantly improved through a WMCA LAEP technical development lead to support with data gathering and inputting to the tool. The learning is probably that LAs will probably continue to require hands on practical support. New LAEP Delivery Manager due to start 2nd Feb, and WMCA and PRIDE team needs to support significant period of handover and knowledge transfer/upskilling
WMCA/LA LAEP-style plan learning	General Observation: There is a wealth of resources available within the LAEP+ Knowledge Base and 1-2-1 support, however LAs who are time limited may benefit from a basic written user guide to support onboarding new team members and reduce any 'trial and error' approach taken.
WMCA/LA LAEP-style plan learning	General Observation: There have potentially been more projects explored on LAEP+ by LAs or consultants, but not always shared or saved – messaging on this is improving but could be included in key comms/guidance for new users

Workstream	Learning Detail (event, effect, trigger, early warning indicators, recommendations)
WMCA/LA LAEP-style plan learning	Data & Data Sharing: The Submit to DNO button can be a barrier where projects remain in development – what about 'Share with DNO' or 'Allow DNO Visibility' or similar?
WMCA/LA LAEP-style plan learning	Data & Data Sharing: The Masterplan function can 'lock down' and create another step to edit or share a project with other LAEP+ users or the DNO. May need a different approach for projects which remain in development but need to be part of a Masterplan - similarities to RESP's "In development register"?
WMCA/LA LAEP-style plan learning	Data & Data Sharing: Data held within LAEP+ does not always correlate with 'on-the-ground' empirical data gained from surveys which can reduce confidence in tool – messaging that LAEP+ needs to guide and not be absolute position.
WMCA/LA LAEP-style plan learning	Data & Data Sharing: Local data uploaded in some cases has limited information about source or purpose and few sets have contributed to a LAEP-style plan. There is need for WMCA and LAs to agree a simple and consistent archiving and local data cataloguing process to ensure LAEP-style plans are not based on old data with no clear way to update.
WMCA/LA LAEP-style plan learning	Data & Data Sharing: Uploading local data is sometimes problematic; ie, ensuring the format is absolutely spot-on - which adds to time demands. This could be included in guidance issued to all new users.
WMCA/LA LAEP-style plan learning	Digital Tool to Support LAEP Creation: When delivering the first 10 LAEP-style plans, the DNO was more interested in "Projects" which show impact on the network. LAs were more focused on using the tool to gather options and developing "Data Stories" which may also utilise other offline data – They are both very useful functions, but added to difficulty for the first 10 projects sent to DNO.
WMCA/LA LAEP-style plan learning	Digital Tool to Support LAEP Creation: The Portfolio function offers good opportunities to analyse large scale projects, but there is often a barrier understanding the required logic input to create the output needed. Recommendation to share further guidance and case studies on these to support LA understanding.
WMCA/LA LAEP-style plan learning	Digital Tool to Support LAEP Creation: The Scenario function has not yet been fully explored with local authorities, and it is unclear if it is able to process large numbers of scenarios needed for a full LAEP to establish the least regrets option – but this would be useful focus for a workshop or hackathon.
WMCA/LA LAEP-style plan learning	Digital Tool to Support LAEP Creation: The tool is really helpful in assessing renewable potential, but it doesn't support the flexibility and intraday modelling needed to fully assess battery storage, which is key to number of projects.
WMCA/LA LAEP-style plan learning	Digital Tool to Support LAEP Creation: While there has been some interest in using the tool to identify potential areas for Heat Networks (eg NESTA heat zoning data and heat demand), there is a need to understand how to link this with other tools such as Thermos which can further support Heat Network design.
WMCA/LA LAEP-style plan learning	Governance: Some LAs expected LAEP+ (or the DNO) to provide detailed feedback on projects submitted, as part of a 'feedback loop' - there is a need for clarity around roles and responsibilities and links to other processes eg DFES
WMCA/LA LAEP-style plan learning	Governance: Insufficient handover of projects when officers leave an authority or go on holiday has led to delays accessing/editing some projects, updating ownership and ensuring knowledge transfer. Need to consider business continuity process

Workstream	Learning Detail (event, effect, trigger, early warning indicators, recommendations)
WMCA/LA LAEP-style plan learning	Governance: The Masterplan function is currently being tested in an open capacity, but there will be a need to identify a 'super user' in each area to manage and have oversight of all LAEP activity – resourcing of this could be a challenge, and should be considered as part of the developing RESP governance
WMCA/LA LAEP-style plan learning	Governance: There is currently no way of linking cross-boundary projects in Masterplans or generating a whole West Midlands region view but learning has already contributed to the development of an updated structure to account for parent/child relationships to be rolled out in the coming months.
WMCA/LA LAEP-style plan learning	Incorporating the wider west midlands regional counties means a greater diversity of political representation, and learning about how to focus key benefits eg economic growth, community energy
Data	Data: Domestic hydrogen potential - there are challenges with how the hydrogen data layer is presented in the context of not aligning with the WM Regional Strategy. It is recommended that this could be included in new user guidance being developed