

Electric dreams: how the planning system can help deliver the UK's low-carbon energy

Final report and
recommendations



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Executive Summary

The UK government has set out a mission to achieve a fully decarbonised power system by 2030, with a commitment to double onshore wind, triple solar power and quadruple offshore wind capacity.¹ Decarbonising our energy system requires new renewable energy and grid infrastructure to power businesses and homes affordably while significantly reducing impact on the climate, increasing energy security and protecting our economy, wellbeing and natural environment.

New energy infrastructure must receive planning consent. Challenges with the planning system are widely acknowledged, particularly the time it takes for a decision to be made, which contributes to delays, investment and supply chain risks. For a Nationally Significant Infrastructure Project (NSIP), the average time from pre-application to the point of decision increased from 2.6 years in 2012 to 4.2 years in 2021.² In the case of transmission grid infrastructure, projects take almost seven years to progress through the planning system.³

Bold collaboration across a range of sectors and disciplines will be crucial to deliver the infrastructure needed for a decarbonised power system by 2030, with its wider benefits including new high-quality jobs, productivity and energy security. In this spirit, the Aldersgate Group, RenewableUK and CPRE, the countryside charity, together investigated how the terrestrial planning system for renewable energy and grid infrastructure can be improved. A planning system that works well for energy developers, the environment and local communities can act as an enabler to support the achievement of the government's ambitions to decarbonise the electricity system by 2030, protect nature and landscapes, and strengthen public support for new energy infrastructure and the net zero transition more generally.

We took a user journey approach to better understand what works and does not work for the environment, energy and grid developers and local communities. Our shared understanding of these challenges is presented in detail in the [interim findings](#).

We found that the NSIP process can work well. The government should focus on increasing efficiency and addressing system challenges, including:

- Lack of strategic planning, joined-up policy or public engagement, contributing to cascading challenges and delays.
- Insufficient resources across the system, especially within statutory consultees such as Natural England, the Environment Agency and local authorities, contributing to uncertainty in timescales introducing risk for developers.
- Barriers to data sharing and accessibility of data.
- Lack of clarity and complexity in balancing trade-offs between the need for new infrastructure and impacts on local communities and environments, including limited incentives to integrate solutions.
- Uncertainty in project specifics and timelines that can be challenging to communicate well, undermining trust between developers, local communities and other stakeholders.

Through interviews, two interactive workshops and a literature review, we explored potential solutions and how they could be implemented to help resolve these challenges. This report presents the evidence gathered as to how the planning system could be improved and sets out recommendations for government.

Recommendations for government

The NSIP regime is designed to deliver results on a project-by-project basis and can work well. By addressing gaps in the wider policy framework, particularly strategic planning and communications, and resolving resourcing challenges, the government can ensure that the NSIP regime works more effectively and efficiently to enable the deployment of renewable energy and grid infrastructure.

If left unaddressed, systemic challenges affecting the NSIP process increase risks of growing public opposition, a continued slow pace of renewable energy and grid infrastructure roll-out, or worse outcomes for the environment and local communities.

This report highlights key recommendations for government to ensure the NSIP regime can act as an enabler, integrating decarbonisation and environmental improvement objectives and strengthening the public mandate for net zero action. Considerations for successful implementation of the recommendations are described in further detail later in the report.

Theme 1: Strategic planning and policy are needed to resolve cascading challenges upfront



1. Set out comprehensive decarbonisation plans for the power system to provide clarity to the public and businesses on the 2030 clean power and 2050 net zero targets: The government is due to set out its plan to deliver the 2030 clean power mission, as well as update the Net Zero Strategy. The government must use these documents to provide policy clarity and comprehensive plans, including how meeting the 2030 target links to the delivery of the 2050 net zero target and other policies, such as the balance of energy supply and demand, spatial planning, and environmental improvement. Policy clarity and a strong evidence base will be an essential basis on which government and other stakeholders can engage the public.



2. Deliver a public campaign to make the case for new renewable energy and grid infrastructure, laying the foundations for positive community engagement: As part of the 2030 clean energy superpower mission, the government should lead a coalition of organisations to deliver a public engagement campaign around the 2030 and 2050 energy targets, making the case for new renewable energy and grid infrastructure, setting out benefits and trade-offs, and raising awareness of mechanisms through which the public can participate in the planning system.



3. Develop the Strategic Spatial Energy Plan to reduce cascading challenges in the planning system and front-load consideration of the natural environment: The government and National Energy System Operator must urgently deliver the SSEP, Centralised Strategic Network Plan and Regional Energy Strategic Plan, setting out both interim measures and a longer-term plan which ensures the incorporation of strategic planning into decision-making and alignment with other spatial planning, including the Land Use Framework, marine plans and local plans. Particular challenges to resolve include the lack of coordination and, in some cases, avoidable clustering of projects in one area, which contribute to cumulative impacts. The Strategic Environmental Assessment for the SSEP must genuinely inform decision-making to front-load the consideration of nature and landscapes. Alongside strategic spatial planning, the government should act on the Energy System Commissioner's recommendation and formulate the Electricity Transmission Design Principles, with engagement of key stakeholders.



- 4. Improve join-up between environment and energy policy to harness opportunities and incentivise integrated solutions for decarbonisation and nature-positive energy infrastructure:** The Department for Energy Security & Net Zero (DESNZ) and the Department for Environment, Food & Rural Affairs (Defra) should better synthesise environment and energy policy, by setting out shared priorities and identifying opportunities for nature recovery and landscape enhancement from new energy infrastructure.



- 5. Increase the quality of community engagement across the planning system:** Ensuring good practice is applied more consistently and increasing high-quality participation in strategic policy-making and early engagement on renewable energy and grid infrastructure projects would unlock opportunities to co-develop solutions and deliver better outcomes for all stakeholders. The government, local authorities and the energy sector should work together to increase capacity, expertise and sharing of good practice for public engagement around renewable and grid energy infrastructure at both a strategic policy making level and project level.

Theme 2: Efficiency improvements can help restore certainty in NSIP timelines and reduce delays



- 1. Efficiently resource statutory consultees and local authorities:** The government should ensure that statutory consultees and local authorities are appropriately and efficiently resourced, with access to centralised or regional hubs and relevant expertise to help reduce uncertainty around timescales for applications and improve community engagement.



- 2. Enable the use of technology and innovation to increase efficiency in environmental impact assessment:** The government should launch a research and development fund to support the demonstration of novel technologies that can increase efficiency in environmental impact assessments and improve mitigation of negative impacts on the environment where appropriate.



- 3. Digitalise the planning system to increase efficiency and accessibility:** The government should support the Planning Inspectorate, statutory consultees and other key stakeholders to increase digitalisation of the planning system. Improved and timely access to data and information, accompanied with digestible outputs for local communities, will be essential to improve efficiency in the system.



1. Introduction

The climate is changing, and we need to act quickly to protect our economy, energy security, wellbeing, and natural environment. New infrastructure, including wind turbines, solar panels and networks, is needed to generate green electricity and bring it to our homes and businesses. National Grid projections suggest the UK needs to build over five times as many new high-voltage transmission lines by 2030 as have been delivered over the last 30 years.⁴ Delivering a decarbonised energy system requires collaboration across a range of sectors and disciplines and will be crucial to unlocking economic growth while improving productivity and energy security.

In the spirit of bold collaboration, the Aldersgate Group, RenewableUK and CPRE, the countryside charity, investigated how the terrestrial planning system for renewable energy and grid infrastructure can be improved. By bringing together different perspectives, we explored how a better planning system could enable the construction of renewable energy and grid infrastructure at pace to decarbonise, whilst protecting nature and landscapes and enhancing communities' right to input.

The [interim findings](#), reported in July 2024, set out a shared understanding of what works well and challenges with the current planning system, focusing on onshore Nationally Significant Infrastructure Projects (NSIP). We found that the NSIP process can work well, and that the government should focus on resolving practical challenges to increase efficiency and reduce uncertainty. Based on extensive research and stakeholder engagement, this final report sets out recommendations for the government to improve the planning system, alongside considerations for implementation.

This project does not consider wider energy system decarbonisation challenges, such as investment, supply chain and skills challenges, which will also be essential to overcome.

2. The policy context

The UK's successes so far in decarbonisation and renewables deployment will be difficult to repeat without a new strategic approach. The first decade of renewable energy deployment in the UK was driven by the need to meet the UK's 2020 renewable energy target and a clear external legislative push under EU rules. The international context has also changed, with increasing international competition, industrial policy interventions, soaring global demand and anticipated supply chain shortages.

In July 2024, the new government committed to decarbonising the electricity system by 2030, five years earlier than the previous target.^{5,6} The government also published a policy statement lifting the 'de facto ban' on onshore wind, and launched the Onshore Wind Industry Taskforce.^{7,8} The Solar Taskforce is also meeting to drive forward actions for the 2030 target.⁹ The Climate Change Committee's 2024 Progress in reducing UK emissions Report to Parliament highlighted that the deployment of renewable energy generation needs to significantly accelerate.¹⁰

New energy infrastructure must go through the planning system to gain approval for construction. There are two primary planning regimes in force in England: the Town and Country Planning Act (TCPA) regime and the NSIP regime.^{11,12} The technology and power output of a project determines which regime applies. Under the current National Planning Policy Framework (NPPF), proposed renewable energy infrastructure that generates less than 50MW is considered through the TCPA system. For renewable energy infrastructure generating more than 50MW, except onshore wind and electricity storage such as batteries, proposals go through the NSIP regime. The NSIP and TCPA planning regimes are in force in England and in some cases in Wales, with a different system in Scotland.^{13,14} The government consulted on proposed changes to the NPPF in September 2024, including changes to the threshold at which projects enter the TCPA or NSIP regime and the reintroduction of onshore wind to the NSIP regime.¹⁵ Under these proposals, onshore wind and solar projects will be considered under the NSIP regime if they generate more than 100MW and 150MW, respectively.

The NSIP regime is the focus of this project. It was established by the 2008 Planning Act to provide more certainty for nationally significant projects (including, but not limited to energy).

The government sets out the national need for different types of infrastructure through National Policy Statements (NPS). The Planning Inspectorate (PINS) acts under the delegation of the relevant Secretary of State (for Energy Security and Net Zero for energy projects) and is inquisitorial, weighing up the balance of project impacts based on policy guidance from Government.¹⁶ PINS makes recommendations and final decision-making rests with the Secretary of State.

The planning system for energy infrastructure is evolving.¹⁷ The Electricity Networks Commissioner, Nick Winser, made recommendations to accelerate electricity transmission network development in August 2023.¹⁸ The UK government responded in November 2023 with the Transmission Acceleration Action Plan (TAAP) and the announcement of plans to reform the NSIP process.¹⁹ The government also published revised Energy NPSs in January 2024, including an overarching statement and specific statements for renewable generation and electricity networks, setting out policy and guidance on the need for nationally significant infrastructure and defining low carbon infrastructure as a critical national priority.^{20,21,22} The Labour Party committed to set out new Energy NPSs that would help facilitate NSIPs ahead of the July 2024 General Election.^{23,24}

The role of public sector organisations is also evolving. Ofgem now has a net zero mandate alongside consumer protection and the National Energy System Operator (NESO) officially launched in October 2024.^{25,26} NESO and Ofgem are due to produce a Strategic Spatial Energy Plan (SSEP) which will provide a blueprint for the optimal mix and location of clean generation, hydrogen and storage infrastructure required to meet forecasted demand, energy security needs and the 2050 climate targets.²⁷ NESO is also providing advice to DESNZ for the 2030 clean power mission.^{28,29} The SSEP will inform the development of a Centralised Strategic Network Plan (CSNP) by NESO.³⁰ The SSEP and CNSP are expected to be published in 2026 and 2027, respectively. NESO and Ofgem are also set to implement Regional Energy System Plans (RESPs), responsible for strategic planning for energy distribution systems.^{i,31}

Meanwhile the 2021 Environment Act sets a number of targets, including halting the decline in species population by 2030 and increasing tree and woodland cover to 16.5% of total land area in England by 2050 to meet net zero and nature recovery ambitions. The Environmental Improvement Plan (EIP) for England was published in 2023.³² In July 2024, the UK government announced a review of the EIP, which is due to be completed by the end of 2024 and an output published in early 2025.³³

i Distribution systems are lower voltage lines that transfer electricity from transmission sub-stations to the end user. Distribution systems are distinct from transmission systems that transfer electricity over long distances in high voltage lines.

The government is also expected to publish a Land Use Framework (LUF) to better balance different uses and pressures on land. How the LUF will work alongside other spatial planning policy such as the SSEP is currently unclear. Biodiversity net gain (BNG) targets for developers were introduced under the Environment Act in 2024 and are expected to become mandatory for NSIP projects in 2025.³⁴ Environmental NGOs have raised concerns about the implementation and effectiveness of BNG as it is currently applied to developments.³⁵

The previous government had set out its intention to replace Strategic Environmental Assessments (SEA), NPS appraisals of sustainability, and Environmental Impact Assessments (EIA) with Environmental Outcomes Reports (EOR). However, the new government has not so far committed to introducing EORs.³⁶

Policy which aims to manage the impact of energy infrastructure deployment on local people is also under rapid review. NPS EN-1 mandates that all NSIPs should mitigate the adverse impacts on local communities and draws attention to the opportunity for energy development to deliver benefits to communities that are relevant to the local area. It provides a framework on balancing the cost of energy to the end consumer, the disruptive impacts on local communities and the possible benefits.³⁷ In 2023 the UK government proposed to mandate what the government terms 'community benefits' for transmission infrastructure, develop a community benefits register and provide clear guidance on the benefits.³⁸ The new government has not made further announcements on community benefits at the time of writing.

3. The approach

We took a user journey approach. User journeys are a tool to map interaction points and engagement between stakeholders or users of a system to better understand what works, what the challenges are, and unintended or cascading consequences. In the first phase of this project, we focused on three users and their journeys through the NSIP regime and at its boundaries:

- Renewable energy and grid developers submit an application into the system to receive consent to build energy and grid infrastructure projects.
- The environment is considered as a ‘user’ of the system, with requirements for environmental assessment and participation of relevant statutory consultees, as well as engagement of environmental NGOs and experts with the aim of protecting nature and landscape, and mitigating development impacts.
- Local communities are the people who live near new developments.

The user journeys were compiled based on a review of the literature, alongside interviews with representatives from environmental NGOs, energy developers, local government, local community groups and academia. The user journeys and findings are detailed in the [interim report](#).³⁹

The second phase of the project then focused on exploring the systems challenges identified and identifying potential solutions. The perspectives of other users were considered as part of the second phase, including public sector organisations such as Ofgem and NESO, wider system stakeholders such as national heritage organisations and the end users of energy such as industry and household consumers.

To better understand key challenges and potential solutions, we organised two workshops bringing together a range of perspectives and experiences from across academia, environmental NGOs, local government, the public sector and industry. The workshops explored:

- Strategic planning and how it can help address existing challenges in the system: a number of challenges in the NSIP process stem from the lack of strategic planning and holistic consideration of energy, environment and local community

needs from the onset. This deep dive examined upcoming policies and identified gaps and suggestions for implementation, including interim measures.

- Early engagement: this is viewed across all stakeholders as good practice, a critical moment for wider input shaping a project and improving outcomes. The deep dive examined what works well in early engagement, barriers to delivering good early engagement and possible solutions at both the national and local level, as well as additional elements to maximise opportunities during early engagement.

Other considerations included resourcing, the needs and roles of different stakeholders, including new stakeholders such as NESO and political stakeholders, how the local and national political process interacts with this system, potential for process efficiency improvements, mechanisms for engaging stakeholders and opportunities for the environment and local communities. The workshop summaries are presented in annexes to this report from page 41 onwards.

Potential solutions were also identified through desk-based research and interviews with representatives from environmental NGOs, energy developers, local government, local community groups and academia. Additional testing was carried out for the development of this report's recommendations with the collaboration partners and other relevant stakeholders.

This project focused on the NSIP regime for onshore developments in England. Offshore NSIPs were not in scope, although a vast amount of onshore infrastructure is associated with offshore NSIPs, such as onshore cable routes, substations and battery storage; this emphasises the imperative for a strategic and holistic approach to energy system planning. This project has not explored the TCPA regime for energy projects in detail, noting that a grid infrastructure project may include elements subject to the TCPA regime (e.g. substations) and others subject to the NSIP regime (e.g. major overhead lines). The recommendations and findings presented in this report may provide valuable and relevant findings to apply to the TCPA regime and planning more widely, including for offshore energy development and other types of infrastructure such as transport and housing.

The NSIP process is only one part of the overall process of building new renewable energy and grid infrastructure. Before entering the NSIP process, renewable energy developers have to go through a separate procedure to receive a connection to the grid, a process which currently includes a number of challenges, can be

time-consuming and involves significant uncertainty.⁴⁰ A parallel regulatory approval and funding approval framework is in place for transmission infrastructure.

Granting a development consent order (DCO), which provides consent to begin construction, is a major milestone towards new renewable energy and grid developments becoming operational. However, construction itself takes time and may encounter challenges, including supply chain disruptions or skills shortages.⁴¹ Significant time can also be taken to discharge DCO conditions and developers may still need to apply for further consent through the TCPA regime, such as applications for access or pre-construction drainage installation works.

4. Exploring solutions to improve the planning system for energy infrastructure

4.1 How strategic planning and policy can help resolve cascading challenges upfront



Recommendation 1:

Set out comprehensive decarbonisation plans for the power system to provide clarity to the public and businesses on the 2030 clean power and 2050 net zero targets.

The government is due to set out its plan to deliver the 2030 clean power mission, as well as update the Net Zero Strategy. The government must use these documents to provide policy clarity and comprehensive plans, including how meeting the 2030 target links to the delivery of the 2050 net zero target and other policies, such as the balance of energy supply and demand, spatial planning, and environmental improvement. Policy clarity and a strong evidence base will be an essential basis on which government and other stakeholders can engage the public.

The challenge

The NSIP regime is designed to deliver on a project-by-project basis. However, the decarbonisation of the UK's electricity system requires a programme of change, encompassing supply, demand and wider electricity requirements from the decarbonisation of other sectors such as industry and heat.

Developers currently report that they need to make the case for decarbonisation and net zero with local communities, taking up valuable time that could be spent engaging communities on project specifics.⁴² Developers would benefit from being able to point to national level strategic policy to answer 'why now and why here?' for local communities, especially as to why certain new infrastructure is needed alongside demand reduction or energy efficiency measures. Without a clear, publicly conveyed decarbonisation strategy, local communities can view projects described as beneficial for the nation, but impacting locally, as being prioritised over measures viewed as having lower or less concentrated impact.

The solution

The UK government is legally required to update the Net Zero Strategy and is also expected to outline plans to meet the 2030 target to decarbonise electricity. We welcome the steps the government is taking to develop these plans, including requesting advice from NESO for the delivery of the 2030 target.

From the perspective of resolving challenges in the planning system, it will be essential to ensure that the government's plans:

- Bring together the evidence base for government action and policies for the decarbonisation of the energy system. A strong evidence base will be essential to support communication and engagement with the public.
- Provide clarity on the different policies and timelines for decision-making that will contribute to the delivery of the 2030 electricity decarbonisation and how they link to the 2050 net zero target and spatial planning.
- Help answer 'why now and why here?' for the public, setting out what new low-carbon energy generation is needed as well as demand-side measures. Plans should also provide reassurance to the public that design, planning and community engagement processes for renewable and grid infrastructure are inclusive and of high quality.

Public engagement on the need for new energy infrastructure requires clarity on energy decarbonisation policies, timelines for action, deployment of renewable energy technologies, and the balance of supply and demand, including anticipated future demand and demand reduction measures such as energy efficiency. This evidence base is essential to form the basis for public engagement and help inform discussions and balancing of trade-offs at the project level. A public campaign must be based on strong evidence, answer frequently asked questions by local communities and address challenges around misinformation (see Recommendation 2).⁴³

The Net Zero Strategy should also set out the policy framework for a new strategic, more holistic approach to delivering infrastructure, reducing cascading negative consequences where possible. For example, it will be important to clarify how different policies will work together, such as the SSEP, incentives for co-location of infrastructure and land use for nature-based solutions for decarbonisation. The choice of location for renewable energy infrastructure is currently driven by specific factors including the location and availability of grid connections (or generation and

demand for energy in the case of grid infrastructure), leading to cascading challenges throughout the system from the lack of coordinated approach or co-location of new energy infrastructure. These cascading challenges can further exacerbate pressure on nature and local communities. The SSEP and Energy NPSs will have a key role to play in resolving these challenges (see Recommendation 3).



Recommendation 2:

Deliver a public campaign to make the case for new renewable energy and grid infrastructure, laying the foundations for positive community engagement.

As part of the 2030 clean energy superpower mission, the government should lead a coalition of organisations to deliver a public engagement campaign around the 2030 and 2050 energy targets, making the case for new renewable energy and grid infrastructure, setting out benefits and trade-offs, and raising awareness of mechanisms through which the public can participate in the planning system.

The challenge

Climate Outreach research has found that very few people feel that central or local government have given them clear, relevant information, or consulted them on the policies and technologies being deployed to transition away from fossil fuels.⁴⁴ For new renewable or grid infrastructure projects, the onus is currently falling on developers to discuss the need for new energy infrastructure and decarbonisation, and to explain policy choices and their implications for the local community. This takes time away from discussing project specifics and can introduce challenges, as developers are not perceived as neutral due to their commercial interest. Lack of transparency and effective communication of policy decision-making can further contribute to the erosion of trust.

How the transition to net zero and new energy infrastructure are delivered and how the public and local communities are engaged are important to maintain and strengthen support. An ongoing public mandate is needed at a national level and buy-in is required at the project level. This public mandate is especially crucial and potentially at risk with the pace of delivery and scale of new infrastructure needed.

Public support for net zero is high.⁴⁵ However, support varies for new energy infrastructure. Public First polling found that 57% of rural voters would support an onshore wind farm three miles from their home, while just 17% oppose it.⁴⁶ 30% of rural voters were supportive of new grid infrastructure being built near them and 30% opposed.⁴⁷

More granular awareness and understanding of the potential benefits and impacts vary across the country and communities. At the project level, this can contribute to lack of engagement or the spread of misinformation if there is an information vacuum. Opposition to projects can also be strong and well-organised, from the outset or increasing over time, introducing risks to the wider net zero transition if public views shift towards greater opposition. Strong community opposition can lead to wider opposition to energy infrastructure development and net zero policy more generally. Such opposition can create significant pressure on politicians, lead to delays in planning decisions and policy changes.⁴⁸

With the lack of a clear, publicly conveyed decarbonisation strategy, local communities can view projects described as beneficial for the nation, but impacting locally, as prioritised over measures viewed as having lower or less concentrated local impact. For example, energy efficiency and other energy demand reduction measures can be perceived as having less negative impact or a fairer distribution of impact than a new energy generation development. The lack of visible government policy on these more distributed measures can lead the public to perceive them as being de-prioritised.

The solution

Mission Control within DESNZ should coordinate a coalition of organisations across the public, private and NGO sectors to develop and deliver a public engagement campaign around the 2030 target, making the case for new renewable energy and grid infrastructure. A public campaign is urgently needed to:

- Make the evidence-based case for new renewable energy and grid infrastructure and increase trust in the process.
- Raise awareness of national and local benefits and how trade-offs are considered in decision-making.
- Increase participation of the public in the planning system, including at a strategic level and at project level, with a particular focus on early engagement. The campaign would highlight opportunities and mechanisms available to input and influence decision-making.

This campaign should include links to public consultation on upcoming policies, including those related to the better balancing of trade-offs and strategic spatial planning. The campaign could also function alongside or as the starting point for a national conversation, drawing on the example of EirGrid.⁴⁹

The campaign should be designed to reach the maximum number of people. A successful campaign would contribute to supporting better engagement with local communities, reducing the burden on individual projects to make the case for decarbonisation, freeing up time to discuss local and project specifics. Collateral material such as explainers and fact sheets, would also be widely available to developers, local authorities and the public, supporting discussions and co-creation of new mechanisms and solutions balancing trade-offs and impacts of individual projects.

Considerations for the success of a public campaignⁱⁱ

A coalition approach with leadership from government will be the most effective way to reach a broad range of people. The 2030 clean power mission provides a hook for the campaign. Mission Control should draw on the experience and expertise of experts to design the campaign, including civil servants working on public engagement, Sciencewise, external experts and the private sector, as well as learning from and coordinating with National Grid's Great Grid Upgrade campaign and the Energy Networks Association.⁵⁰

The campaign will be most effective if it runs alongside or can point to opportunities for the public to enter a two-way dialogue and input into decisions. One of the primary aims of the campaign must be to increase participation of the public in strategic policy and early engagement at the project level and when change is still possible and better outcomes can be co-created. It will be important to ensure that the public feel they are listened to for meaningful engagement. The campaign itself could be broadened into a two-way dialogue or national conversation. Public engagement and consultation around the SSEP or other strategic policy decision would provide another opportunity for public input.

The visibility of government leadership and Members of Parliament in the campaign is important. The Behavioural Insights Team found high public support for government action, with appetite for increased transparency and communication on green infrastructure and planning.⁵¹ Public support was tightly correlated to policy options they felt were feasible, effective and fair. In Germany, government ministers have attended town halls to engage local communities directly on the need for new infrastructure. As much as possible, the government should seek

ii More detail included in Annex C.

to build cross-party support and include voices from across the political spectrum in the campaign to strengthen the message with consensus around the national need for clean energy infrastructure.

A coalition-based approach to the campaign will also help broaden its appeal. The campaign should bring together different perspectives to strengthen the message with voices from across industry, environmental NGOs, public sector bodies, consumer rights organisations and others. For example, environmental NGOs are highly trusted by the public and often include local groups who can provide a more environmental and local perspective in a campaign.⁵² Energy developers are a crucial voice as those who will build new infrastructure and engage local communities on project proposals. Other organisations that may be valuable to include in such a coalition include public sector bodies such as Ofgem and NESO, universities and academics, consumer rights organisations and charities. Policy and strategy clarity, as set out under Recommendation 1, will be essential to build develop messaging and build a coalition.

We encourage the government to be ambitious when bringing together this coalition. Throughout this project, we found consensus on the importance of addressing climate change and the need for new energy infrastructure, providing a baseline to build up from for shared messaging in a public campaign.

People must be able to relate messages to their day-to-day lives and feel their concerns are listened to. The campaign will need to tackle complex discussions around value for money and trade-offs, for example balancing the impacts of new infrastructure on nature, landscapes and communities with costs and feasibility. Project specifics will differ and a national campaign can contribute to raising awareness of trade-offs, options available to balance them or potential for integrated solutions. This will help to reduce the spread of misinformation, which can be challenging for developers to counteract.

The campaign should run alongside or clearly point to opportunities for the public to enter a two-way dialogue and influence decisions. The campaign itself could be broadened into a two-way dialogue or national conversation. At a minimum, the campaign can clearly sign-post to public engagement and consultation around strategic policy, such as the Energy NPS or SSEP and must clearly articulate how local communities can participate in early engagement at the project level. Early engagement was identified as a key opportunity in the planning process, when changes can still be made and solutions can be co-developed. Collateral from the campaign

should also be made available to local authorities or other relevant public sector local organisations to share when proposals for new developments are due to be introduced in the local area.

How receptive members of the public are to different messages will vary hugely depending on demographic, locational, economic and socio-cultural factors. Messaging that is people-focused and relatable tends to be more effective. Public First has asserted the need for more public opinion research to test effective messages for a campaign of this nature.⁵³ For example, the campaign will need to consider the format of campaign materials, outputs and approaches to connect with as many people as possible. Younger people are more likely to strongly support renewable energy, but are less engaged on infrastructure development, planning and campaigns.⁵⁴ A wide range of expertise should be involved, including experts in illustration, storytelling and public engagement, as well as lessons from other successful campaigns and innovative approaches.

Whilst the energy transition is a national endeavour, many impacts and benefits are local. Incorporating local examples in the campaign will be important for success, leveraging local contexts and stories and sharing them with communities who can recognise themselves. Local actors such as local authorities, mayors, parish councils, local organisations and local media all have a role to play.

Understanding and embedding the public and environmental stakeholders' views on how to best balance trade-offs, perceptions of fairness and how stakeholders want to be engaged in the planning system can help improve the system overall and deliver better outcomes. EirGrid's engagement is a good example to learn from. 'Our Energy Future' was a joint project with EirGrid, Friends of the Earth and the Renewables Grid Initiative.⁵⁵ To date, over 60,000 people have been reached through various mechanisms, including an online platform, campaigning, and bilateral meetings and group-meetings with local residents.^{56,57} Another example is the French Commission nationale du debat public which works to facilitate procedures for citizens to share views on projects and public policies with high socio-economic and environmental impact so that decision makers can consider public ideas.⁵⁸ The nuclear industry in France also offer site visits to the public as part of wider public engagement to build support for nuclear energy.

A successful campaign will help increase public awareness at the national level, understanding and trust in the policy, programme and delivery strategy. In turn this should increase support for the development of individual projects by building strong vocal

support and providing the contextual information to support early engagement on type, design and location of energy infrastructure. High quality community engagement and community benefits are also important for local public support (see Recommendation 5).



Recommendation 3:

Develop the Strategic Spatial Energy Plan to reduce cascading challenges in the planning system and front-load consideration of the natural environment.

The government and NESO must urgently deliver the SSEP, setting out both interim measures and a longer-term plan which ensures the incorporation of strategic planning into decision-making and alignment with other spatial planning, including the Land Use Framework, marine plans and local plans. Particular challenges to resolve include the lack of coordination and, in some cases, avoidable clustering of projects in one area, which contribute to cumulative impacts. The Strategic Environmental Assessment for the SSEP must genuinely inform decision-making to front-load the consideration of nature and landscapes.

The challenge

The choice of location of new energy infrastructure is not currently based on a holistic assessment of developer requirements, environmental or local community considerations, or wider system requirements such as location of energy users and overall affordability.⁵⁹ Rather, the location of proposed renewable energy infrastructure is often driven by the availability of grid connections, and similarly the location of grid infrastructure is being driven by the location of offshore windfarms and energy consumers. Environmental or local specificities come to the fore or at the very least are perceived to come to the fore later in the planning process, resulting in cascading challenges and contributing to opposition and delays. Some applications also enter the system despite being unfeasible on environmental grounds; they will not be granted consent but contribute to additional strain on the already limited resources in the planning system and undermine the trust of local communities in developers and government to deliver high quality infrastructure.

As a project-based process and with a lack of strategic planning, the NSIP system is not well equipped to account for cumulative impact of multiple projects on local communities in one area. Despite examples of coordination between projects, effective mechanisms are lacking to support coordination between projects at the proposal stage and during construction. Depending on

the availability of grid connections or demands for new grid infrastructure, some communities are affected by multiple proposals, at the same time or in sequence. In some areas, clustering of projects may not be avoidable or be a better approach from an environmental perspective.

With competing pressures on the use of land, from new housing developments to agriculture, energy infrastructure and nature recovery, lack of clarity remains with regards to how decision-making can incentivise integrated solutions and better balance trade-offs and how to identify integrated solutions. Integration would support the balancing of impacts on land, for example ecological impacts of new developments, landscape impacts and other impacts on local communities.

The solution

A strategic spatial planning approach would provide a more integrated and holistic approach than currently exists and ensure the government or regional and local bodies can step in to coordinate the development of infrastructure where it makes sense. A number of spatial planning policies are in development, such as the SSEP, Regional Energy Strategic Plans (RESPs), Centralised Strategic Network Plan (CSNP), and Land Use Framework (LUF).

The SSEP is expected, as its primary purpose, to set out the UK's current and forecast generation capabilities and energy demand in different areas, to help define infrastructure needs. The SSEP can help resolve challenges in the planning system by:

- Reducing unintended cascading consequences by providing a more holistic and overview of the required infrastructure development, helping balance trade-offs and supporting decision-making. This includes frontloading consideration of nature and landscapes and joining up land and marine planning, with the Strategic Environmental Assessment (SEA) informing the SSEP, and support coordination where needed.
- Contributing to the evidence base to answer questions on the need for new energy infrastructure and their location.
- Support early engagement with local communities and other key stakeholders at a stage when decisions can still be influenced (e.g. before final corridors for grid infrastructure are decided).

One of the objectives of the SSEP, CSNP and RESPs should be to address the challenges currently emerging from lack of coordination between different infrastructure developments. The SSEP is an opportunity to plan ahead, identifying opportunities for efficiency and coordination. The SSEP should be accompanied by other complementary policies that reduce the regulatory blockers to co-location of renewable energy and energy storage developments, support anticipatory investment to minimise disruption ('doing things once and well') and help coordination across different types of infrastructure development, such as housing and telecommunications.

The SSEP also provides a mechanism to frontload the consideration of nature and landscapes in decision-making. The SEA developed for the SSEP must inform decision-making and alignment between the SSEP, LUF and other spatial planning policies – including at the local level with Local Nature Recovery Strategies (LNRS) and local plans – should be clarified. Additional clarity is needed on the scope of the LUF, but it provides an opportunity alongside the SSEP to integrate decarbonisation and nature recovery, setting out the role of nature-based solutions for decarbonisation and opportunities for nature recovery with new energy infrastructure. The SSEP should follow the Holford rules and the Mitigation Hierarchy, reducing the risk of selecting sites that are not suitable for environmental reasons as much as reasonably possible. This can help reduce challenges that currently emerge later as projects progress through the NSIP regime. The SEA should be developed in line with existing policies and consideration should be given to how the SEA and project EIAs can work together for increased efficiency.

The previous government, in the TAAP, endorsed the creation of new Electricity Transmission Design Principles (ETDP), acknowledging that the Holford and Horlock rules were 'not comprehensive and had not been updated for some time'.⁶⁰ The ETDP aims to improve infrastructure design and help frame the choices of hosting communities. This work needs to be undertaken urgently, with appropriate consultation of stakeholders. Full and early stakeholder participation in the ETDP is a vital first step in the public engagement needed to deliver the 2030 grid decarbonisation target. The creation of new ETDP also provides the opportunity to integrate nature protection, nature positive design and technical innovation. For example, the new T-pylons installed in Somerset are an example of a different approach, with the new design intended to be more aesthetically appealing, in comparison to the traditional lattice pylon. Design codes and decisions, as well as approaches to co-develop solutions provide an opportunity to resolve some of these challenges.

The development of the SSEP and CSNP also creates an opportunity for a national conversation and public engagement on the decarbonisation of the energy system, linked to the call for a national campaign (Recommendation 2). EirGrid's 'Shaping Our Electricity Future' consultation was highlighted as a key example of good practice, embedding continuous engagement with the public, industry and academia into the development and iteration of roadmaps for a future sustainable Irish grid.

The Energy NPSs should be updated to enshrine the SSEP and the CSNP and set out how they will inform decision-making. Alignment and inter-operation between the SSEP and other spatial planning initiatives, such as local plans, the RESPs and the LUF, should be clarified to ensure a holistic approach and set out decision-making approaches in the event of conflict between plans.

Considerations for delivering the SSEPⁱⁱⁱ

Strategic spatial planning will be relevant to many stakeholders and challenges to deliver the SSEP are widely recognised. A better understanding of the different needs of stakeholders can help inform how the SSEP is developed and engagement with stakeholders to ensure it can work well in practice. Key stakeholders include planning experts, local authorities and combined authorities, communities, environmental groups and infrastructure developers from sectors including energy, housing, transport and energy-intensive industries.

How the SSEP will be used and inform government decision making should be clearly set out and communicated. Ahead of its publication, it will be important to familiarise communities who may be affected by new infrastructure development and the wider public with the SSEP. Transparency will be important to build confidence in the process and product, as well as decision-making. NESO is not currently a well-known body or recognised by the public. Without good public engagement, the publication of the SSEP risks generating a knee-jerk reaction, perceived lack of fairness and opposition from communities before any projects are proposed. Taking a consultative approach similar to EirGrid would support confidence in the process used to develop the SSEP.

Whilst the SSEP is expected to be delivered at a strategic and relatively high level, consideration needs to be given to how it will be iterated and operate with regional, local and marine plans. Where possible, the SSEP should draw on the work that has been undertaken at a local level and may provide an opportunity to set up mechanisms and feedback loops between central, regional

iii More detail included in Annex B.

and local planning, in particular data sharing. This also includes consideration of nature and landscape, to ensure joined-up policy and reduce the risk of selecting inappropriate sites for new infrastructure (see Recommendation 4).

Regional plans could provide a valuable level of detail that is unlikely to be achievable at the national level. This could include clear links to local plans, including local nature recovery strategies, and economic development as well as regional context. In this scenario, the SSEP would act as a national vision and mandate, with regional plans setting out delivery of the vision at the local level. Such national-regional-local coordination would require effective governance mechanisms, standardisation of planning processes and data sharing, as well as appropriate resourcing. Green Growth Boards are a potential model to explore to support coordination across a region.⁶¹

The SSEP also provides a mechanism to highlight how renewable energy infrastructure will link to industrial strategy and local economic benefits, such as jobs, as well as environmental considerations such as biodiversity and landscape value. A feedback loop with the public engagement campaign will be important to socialise these links (see Recommendation 2).

The SSEP was viewed as a valuable tool to inform decision-making. However, stakeholders from industry and organisations representing the environment and local communities did not support the use of the SSEP to identify ‘turnkey sites’^{iv} or acceleration zones for infrastructure development. Described in more detail in Annex B, caution regarding risks and unintended consequences was raised by both from environmental and market perspectives, such as additional strain on resources in the planning system that could be concentrated on processing applications and watering down of environmental protection requirements. ‘Turnkey sites’ may be better suited for certain technologies, types of project or areas of low ecological and agricultural importance, for example pumped hydropower due to specific site requirements, community energy projects, or linear infrastructure projects to support better coordination across the different local areas affected.

Interim measures

Developing the SSEP will take time. However, continuing with business-as-usual in the meantime carries significant risks. A key concern is that public opposition to new energy infrastructure may grow with lack of coordination, slowing or halting the pace of deployment and resulting in missed opportunities for UK

iv ‘Turnkey sites’ are sites made available to developers ready for construction to being, for example with existing planning approval and community consent.

competitiveness and nature recovery. The government will also be moving forward with plans to meet the 2030 clean power target, which may provide an opportunity to incorporate an iterative and incremental approach to the development of the SSEP.

The government should identify opportunities to better deliver new infrastructure now, with interim measures introduced whilst the SSEP is developed or an SSEP delivered in stages. This includes improving the efficiency and resources in the planning system for timely processing of applications and improving the quality of public engagement across the planning system, as recommended in this report. Additional potential solutions include the acceleration of the delivery of community energy, implementation of measures to increase efficiency in the planning system, such as better guidance for developers and standardisation.

The Energy NPSs are expected to be updated by the new government, with EN-1 (overarching), EN-3 (renewables) and EN-5 (network infrastructure) particularly key here. The NPPF update is also underway. These provide other opportunities to clarify policy where possible and set out a pathway to resolving challenges emerging from the lack of strategic planning in the interim.



Recommendation 4:

Improve join-up between environment and energy policy to harness opportunities and incentivise integrated solutions for decarbonisation and nature-positive energy infrastructure.

DESNZ and Defra should better synthesise environment and energy policy, by setting out shared priorities and identifying opportunities for nature recovery and landscape enhancement from new energy infrastructure.

The challenge

Energy and the environment are not currently well joined up in policy, creating a perception that nature and landscapes are secondary considerations. Solar and onshore wind developments have the potential to deliver significant nature benefits, however this is not being driven by the policy frameworks currently in place.⁶² This contributes to a lack of trust in the integration of energy and environmental objectives in the Energy NPSs and at the Development Consent Order stage for renewable energy and grid projects. Site selection for new infrastructure is perceived to consider nature and landscapes as a lower priority concern, and in some cases introduces challenges for projects depending on the specific characteristics of the local area.

The UK government has both nature recovery and decarbonisation targets. However, the strategy to meet nature recovery targets and how this will work alongside decarbonisation is currently unclear. For example, the government has not set out clear policy on nature-based solutions for decarbonisation or how new energy developments can contribute towards nature recovery, such as the target to protect 30% of land and sea for nature by 2030.

Other relevant upcoming policy changes include the introduction of biodiversity net gain (BNG) obligations for NSIP projects from 2025. BNG became mandatory for some developments in February 2024. Concerns have been raised by environmental NGOs with regards to the policy's effectiveness in its current form to deliver positive outcomes; these need to be addressed before they apply to energy NSIPs.⁶³ LNRS are also due to be in place by 2025 across the whole of England.

Nature and landscape are both topics of concern for local communities. Environmental NGOs view climate change as the primary threat to nature, recognising the need for new energy infrastructure; some forms of new energy infrastructure can be an opportunity for nature recovery if done well. Integration can be complex and highly specific to the local area, with cost and impacts on nature of alternative solutions, such as offshoring and undergrounding, varying depending on the area. We found goodwill with renewable energy developers and environmental stakeholders to identify nature-positive solutions and opportunities.

Good developers also want to follow due process. The risk of judicial review incentivises developers to produce planning applications that have assessed environmental impacts and mitigations thoroughly. However, increasing number of High Court challenges are introducing investment risk and perverse outcomes, with examples of environmental impact assessment documents that are increasingly long and difficult to understand by the public or other interested stakeholders.

The solution

The Government has an opportunity to resolve more systematic challenges currently emerging at the project level, by clearly articulating and integrating plans for nature recovery, nature-based solutions for decarbonisation and how new renewable and grid infrastructure will support nature recovery. DESNZ and Defra should set out shared priorities and objectives to deliver against. Creative thinking and collaboration between government, environmental NGOs and industry will be important to identify opportunities for integrated solutions.

The upcoming LUF and SSEP, review of the EIP and LNRS should be leveraged to join up energy and nature policy, both at the strategic and local level. For example, strategic planning offers the opportunity to use of a strategic environmental assessment for site selection, reducing the risk of selecting sites that are not suitable and for which mitigation of impacts would be significant or not possible (see Recommendation 3).^{64,65} Exploring strategic approaches to mitigation of development impacts could be support development and deliver more for nature without weakening nature protections. The Crown Estate’s whole seabed approach and research carried out for environmental NGOs may provide valuable lessons and good practice to draw from.^{66,67}

The government should bring forward the consultation to mandate BNG for NSIPs and resolve current issues to ensure BNG is effective. The government should also consider how to incentivise better practice and nature positive design. Building on the advice from the Natural Capital Committee and lessons from the roll-out of BNG, the government should set out a roadmap to develop ‘environmental net gain’^v and its integration into renewable energy and grid infrastructure projects.

Addressing local communities’ concerns and appetite for environmental benefits from new infrastructure would provide an additional mechanism to build support for new developments, for example with support for nature or climate-positive community benefits (see Recommendation 5).

Policy clarity can help support and inform discussions with the public on their concerns, including on the balancing of trade-offs between the need for new energy infrastructure, nature recovery and landscapes, as well as costs and other impacts (see Recommendation 2).



Recommendation 5:

Improve the quality of public engagement in the planning system.

Ensuring good practice is applied more consistently and increasing high-quality participation in strategic policy-making and early engagement on renewable energy and grid infrastructure projects would unlock opportunities to co-develop solutions and deliver better outcomes for all stakeholders. Good practice exists and should become the norm. The government, local authorities and the energy sector should work together to increase capacity, expertise and sharing of good practice for public engagement around renewable and grid energy infrastructure at both a strategic policy making level and project level.

^v In the [25-Year Environment Plan](#), the government set out the intention to expand net gain to include biodiversity “and wider natural capital benefits, such as flood protection, recreation and improved water and air quality”.

The challenge

Public engagement is a statutory requirement for the NSIP planning regime and early engagement is considered as a crucial moment to influence projects when there is still scope for change and co-development of solutions. Local community engagement can take different forms, including information sharing and consultation. Engagement on community benefits is undertaken separately from the planning process. At the strategic policy making level, the energy NPSs are subject to public consultations.

Barriers to local community engagement can be lack of awareness or interest, lack of time, social pressures and poorly designed engagement. Strategic policy and the NSIP process itself are complex to engage with, hearings can feel daunting and formal, and the technical information and jargon further increase barriers to engagement. As a result, a minority of people can dominate discussions with the developer or local communities can report negative experiences from engagement, contributing to loss of trust and increasing opposition to current or future developments.

Improving community engagement at both the strategic and project level to improve project outcomes is vitally important. Negative impacts, misinformation and negative local views can lead to substantial local opposition and campaigning during the NSIP process and sequent construction, creating risk of delays and possible judicial review. Local opposition to a project can develop into larger scale opposition to energy infrastructure development and substantial pressure being placed on MPs and local councillors.

Examples of good engagement around new energy development exist, but they need to be more widespread. A contributing factor to poor or limited public engagement is lack of experience, expertise and capacity across developers, local authorities, and community members themselves. Good public engagement requires a particular skillset and can be resource-intensive to reach across whole communities.

The solution

The Government and energy sector should support increased capacity and expertise for public engagement around renewable energy and grid infrastructure, to support good practice and increase engagement across the local community. This includes:

- Developing and sharing good practice guidance and standards for public engagement for the NSIP regime including developers and local authorities. Models such as Suffolk's Centre of Excellence or regional Net Zero Hubs could provide mechanisms to share expertise and good practice across the country.
- Supporting capacity at local authorities and parish councils to play a more active role in local community engagement and representation in the NSIP process. Making wider use of the Planning Advisory Service to act on behalf of local communities is another potential solution to explore.

The public campaign recommended by this project (see Recommendation 2) would contribute to higher quality engagement by increasing public awareness and understanding of mechanisms to engage and by providing accessible collateral materials to support discussion. Availability of evidence-based information will help reduce the spread of misinformation and can support higher quality engagement from the outset.

Trust is crucial to improving engagement between communities and developers. Whether the primary objective of early engagement should be to build trust was discussed extensively in the workshop; how engagement and the NSIP process can better support the building and maintaining of trust are important questions to address.^{vi} With the anticipated volume of new energy and grid developments, there is also an opportunity to consider how communities would like to be engaged and what good engagement would look like from their perspective. Further research and development of better practice would be valuable. Examples from other sectors may be interesting to explore; for example, water developments have made use of community boards, set up for the duration of the project to provide a mechanism for community input and influence into the project.⁶⁸

Effective and meaningful engagement on energy infrastructure is vital to build trust and support, establishing a good ongoing relationship between the developer and the host community. When done well, it can save delays and costs down the line, as well as improve projects by incorporating local knowledge.⁶⁹ Early engagement is a critical moment for public input to shape a project

vi More detail included in Annex C.

and improve outcomes as it takes place at a point in the project when changes can be made, with scope for change increasingly limited as the project progresses through the planning application process. Similarly, engagement on strategic policy, such as the SSEP, or routing of linear infrastructure, is an opportune moment for the public and other stakeholders such as NGOs to influence policy when options are still available.

Several good practices can improve early engagement.^{vii} Good visuals to show the potential results of the infrastructure, before coming to plan them in practice, can help reduce uncertainty and fears about the planned project. It can also be beneficial for host communities to meet with communities who have already gone through the planning process, to hear about their experiences and outcomes. Consideration should be given to better engage hard-to-reach groups and reduce the risk of engagement being dominated by a vocal minority, as well as ensuring inclusive, transparent and equitable processes. People are motivated to engage with infrastructure projects if they feel affected and have agency in the process. Communicating uncertainty can be challenging but transparency is a key factor in building trust.

A key barrier to inclusive and productive public engagement is capacity and skills for local government to enable public engagement. Communities are not homogenous and lack resources to engage as well, sometimes leading to under-representation or over-representation of certain groups. Local authorities, town and parish councils could play a role as 'honest brokers' or gather evidence on local community views and concerns to support the engagement process; however this would require adequate resourcing (see Recommendation 6).

Developers already play a key role engaging communities and efforts should continue to share good practice across the energy sector. A case study to learn from is the implementation of a Comprehensive Green-Area-Concept in Germany.⁷⁰ Other good practice identified through this project includes:

- Recognition that good engagement requires skills and capacity, as well as time to gather information about the local contexts and build an understanding of the local community to tailor engagement accordingly.
- Identifying trusted messengers and representatives within communities can help engage the community more widely. For example, housing officers and community organisers can be trusted messengers or hold valuable knowledge about the community.

vii More detail included in Annex C.

High quality engagement to support the co-development of 'community benefits'

High quality engagement between developers and local communities is important to deliver better outcomes through the planning system. 'Community benefits' are considered separately from the planning consent process or issues of impact mitigation, due to the need in legal terms to avoid questions of planning permission being bought or sold. Improving the quality of engagement around 'community benefits' is also important to ensure new renewable energy and grid infrastructure contribute to better outcomes for host communities.

For renewable energy infrastructure, guidance for 'community benefits' can be unclear and practice can vary across the UK and in different renewable energy industries. Good practice is available, alongside recommended guidelines (e.g. for the £ amount per megawatt per annum), noting that these vary across industries. The level and quality of community benefits varies hugely depending on the developer and the extent to which the community can advocate for themselves. Some host communities may receive no community benefits at all.

For transmission infrastructure, the Electricity Networks Commissioner has made recommendations for community benefits, including lump sum payments to households close to new lines and a community fund established and distributed in the locality of new lines.

Examples of benefits co-developed by the developer and local community include incorporation of a new public footpath, visitor learning centres and engagement with local schools, creation of funds to invest in improvements for the local community such as support for energy efficiency improvements. The Hornsey 3 Community Benefit Fund has awarded grants to local groups, including village hall renovation and sustainability projects, marine and wildlife rescue.

Research shows that support for development could be increased with well-delivered community benefits. Politicians are also more likely to support developments where the benefits to the local areas are clear. However, poor experiences of engagement on community benefits with energy and grid developers can negatively impact community views on new infrastructure developments, as well as the positive and negative impacts and perceived distributional and procedural fairness. Views on community benefits also vary across communities, with some perceiving payments off bills as bribes or inadequate. „

We support the recommendation from the Independent Review of Net Zero to use community benefits as a vehicle to deliver local net zero and environmental projects. With higher quality engagement, supported through good practice and guidance for developers and accessible advice for local communities on nature and climate positive options, funds could provide benefits to host communities aligned with energy efficiency, decarbonisation and environmental improvement.

The government should also review terminology around 'community benefits' and consider whether more distinct language may be helpful to avoid confusion. For example, 'direct community energy support' could be an alternative.

4.2 How the NSIP process can be efficiently improved



Recommendation 6:

Efficiently resource statutory consultees and local authorities.

The government should ensure that statutory consultees and local authorities are appropriately and efficiently resourced, with access to centralised or regional hubs and relevant expertise to help reduce uncertainty around timescales for applications and improve community engagement.

The challenge

Resourcing challenges across the planning system are well-documented and widely recognised, in particular skills and capacity shortages affecting statutory consultees and local authorities. They contribute to delays and uncertainty on timescales to progress applications, undermining confidence for the private sector to invest. A freedom of information request to Natural England by Wildlife and Countryside Link highlighted that between 2022–2023, Natural England failed to meet deadlines for 17.1% of NSIP applications, due to under-resourcing and workload issues in over a fifth of cases. Lack of resources at statutory consultees also contributes to reduced or limited participation during early engagement, which can lead to unexpected requests for additional time and information during the formal application process, further increasing uncertainty for developers. Productive conversations at early engagement help develop more thorough and high-quality applications upfront and reduce the back and forth in the formal process.

Ecology and planning skills were highlighted as particular areas of concern across interviews with energy developers, local authorities and environmental NGOs. Demand and competition for ecologists continues to increase with the introduction of biodiversity net gain. With regards to planners, remuneration is declining in real terms and up to a quarter of planners are estimated to have left the public sector since 2013.⁷¹

Lack of resources also limits the ability of local authorities to conduct engagement across the local community. Engaging the whole community can be challenging, especially time-poor people, those who feel indifferent, where domestic or social pressures limit their engagement in the process. The NSIP system itself is complex and applications include significant technical information. Local authorities interviewed as part of this project highlighted the time and resource required to develop the expertise and ability to navigate the NSIP system amidst other competing pressures.

As part of this project, we explored the role local authorities and parish councils and potential opportunities to support better community engagement.^{viii} Local authorities and parish councils have local knowledge and can help tailor engagement to the local community. They are also structures with existing statutory functions and governance, which could be used to support engagement with communities more widely in an ‘honest broker’ role or by helping identify trusted individuals in the community. Adequate resources, public engagement skills and expertise would be essential to ensure this role can be fulfilled and may not currently be widely available within local organisations and local authorities.

Local authorities are also currently developing Local Nature Recovery Strategies and help to produce Neighbourhood Plans, both potential sources of local information, nature and socio-economic priorities that can inform or include a feedback loop with national or regional spatial planning. An effective governance mechanism would need to be developed across local, regional and national levels, alongside shared data, planning processes and adoption of digital tools. Local plans are not currently aligned, and concerns were raised around the time and cost needed to bring together an already complex landscape.

The solution

Potential solutions that may provide more immediate relief and efficient use of public funding to address skills and capacity challenges at local authorities include:

- A public sector body similar to Active Travel England might have a role to play to support coordination and delivery of regional plans, providing specialist support to local authorities.
- The Net Zero Hubs, regional publicly funded bodies who supported organisations on matters related to net zero, could provide expertise and support with planning, ecology, public engagement and the NSIP system.
- Local authorities who have experienced the NSIP system could be supported to share more widely lessons and experience with others, building on the example of Suffolk’s NSIP Centre of Excellence.

Efficiency improvements across the NSIP system would also alleviate the pressure on resources at local authorities and statutory bodies (see Recommendations 8 and 9).

viii More detail included in Annex C.



Recommendation 7:

Enable the use of technology and innovation to increase efficiency in environmental impact assessment.

The government should launch a research and development (R&D) fund to support the demonstration of novel technologies that can increase efficiency in environmental impact assessments and improve mitigation of negative impacts on the environment where appropriate.

The challenge

Inefficiencies affect the environmental impact assessment process for new renewable energy and grid infrastructure projects. The environmental impact assessment can start years before a formal application is submitted to allow time for surveys, with potential challenges or additional resources required if location is initially uncertain. The lack of data available at the site selection stage can create additional work and may introduce practical challenges. For example, diverse land ownership at project sites may mean developers have to engage several different landowners and come to different agreements with each one for access to land and other practicalities that will allow surveys to proceed. Some surveys can only take place at certain times of the year (e.g. the growing season). In addition, there is uncertainty inherent in assessing impacts on the environment. This uncertainty may mean more time is required for surveys and other assessments, precaution to impact estimates result in disproportionate mitigation, or that conclusions need to be changed as new data emerges.

The deployment of renewable energy technologies is also relatively recent and increasing in scale. Data and evidence gaps for environmental impact and mitigation currently exist, with increasing deployment providing an opportunity to decrease gaps. Environmental NGOs interviewed as part of this project highlighted missed opportunities with monitoring and evaluation to ensure lessons are learnt to enable better outcomes in future developments. Data sharing is limited and post-development monitoring and data sharing is not currently enforced, in part due to the lack of resources at local authorities. Monitoring and evaluation would help increase understanding, reduce uncertainty and resolve evidence gaps in the environmental impact and effective mitigation for renewable energy technologies. A good example of data sharing to learn from is the Crown Estate's Marine Data Exchange.⁷²

The solution

Innovative technologies provide an opportunity to resolve this challenge. For example, radars and automated analysis can be used to identify birds approaching a wind farm and reduce the risk of collisions.⁷³ This would also increase evidence available on collision risk to increase accuracy and certainty in collision risk models currently based on significant assumptions due to lack of data. A study from Texas State University found that ultrasonic acoustics can help reduce bat fatalities by reducing collisions with wind turbines.⁷⁴ With the pace of development in artificial intelligence and sensors, technology may provide solutions to increase the efficiency of environmental surveys and improve mitigation of environmental impacts of renewable energy and grid technologies.

R&D programmes bringing together innovators, environmental experts, regulators and energy developers would provide support to develop these technologies, whilst ensuring they are robust and meet regulatory requirements. The involvement of the relevant regulators will be essential to ensure that novel technologies are developed to meet necessary standards and robustness for regulatory approval, and to support a pathway to commercialisation and deployment. The involvement of this cross-section of stakeholders is crucial to ensure trust and provide confidence to energy developers to deploy new technology solutions. Data from publicly funded programmes should be made publicly available and presented in an accessible format.

It is important to emphasise that technology will not offer solutions for all aspects of environmental impact assessment and should only be used where appropriate. The Office for Environmental Protection has carried out significant work on potential solutions to improve environmental assessments and made recommendations that the government should implement.⁷⁵



Recommendation 8:

Digitalise the planning system to increase efficiency and accessibility.

The government should support the Planning Inspectorate, statutory consultees and other key stakeholders to increase digitalisation of the planning system. Improved and timely access to data and information, accompanied with digestible outputs for local communities, will be essential to improve efficiency in the system.

The challenge

Accessibility and availability of data is one of the system challenges affecting all stakeholders in the NSIP regime. The NSIP process requires significant data, evidence gathering and sharing, critical to decision-making. Inefficiencies such as the lack of data sharing and duplication of efforts, in particular for environmental impact assessments, introduces additional time to the process and strain on resources.

Similarly, without standardised processes and publicly available data, collating data is challenging and stakeholders are dependent on developers releasing data. Sharing data early in the process could enable better engagement and input from environment and community stakeholders on options available.

The technical nature of information included in NSIP applications, as well as quantity and complexity of applications, further adds barriers to engagement for all relevant stakeholders (see Recommendation 8).

The solution

Accelerating efforts to digitalise the planning system would support efficiency and accessibility improvements. Whilst this project did not explore potential solutions in detail, others are conducting valuable work in this space, including:

- Defra's MAGIC map⁷⁶
- The Digital EIA project⁷⁷
- The Linear Infrastructure Planning Panel⁷⁸
- Proposals for an Environmental Data Observatory⁷⁹
- Digital Permitting Solutions⁸⁰
- Recommendations from the Office for Environmental Protection⁸¹

5. Conclusion and final reflections

The planning system has a crucial role to play in enabling the UK's transition to a modernised low-carbon energy system, whilst protecting nature, landscapes and communities' right to input. Significant opportunities lie ahead to increase energy security, support the growth of low carbon industries and strengthen the wider economy, productivity and jobs. The delivery of the energy transition must continue to strengthen the public mandate to address climate change and mitigate its impacts, not jeopardise future climate action.

This report sets out recommendations which, as a package, provide next steps to resolve challenges and improve the planning system to act as an enabler for desirable outcomes. These recommendations are by no means exhaustive, and the report and annexes highlight the breadth of potential solutions and ideas that were identified.

Annex A – Acronyms

BNG	Biodiversity Net Gain
CNSP	Centralised Strategic Network Plan
DCO	Development Consent Order
Defra	Department for Environment, Food & Rural Affairs
DESNZ	Department for Energy Security & Net Zero
ETDP	Electricity Transmission Design Principles
EIA	Environmental Impact Assessment
EIP	Environmental Improvement Plan
EOR	Environmental Outcomes Report
LNRS	Local Nature Recovery Strategy
LUF	Land Use Framework
NESO	National Energy System Operator
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
PINS	Planning Inspectorate
RESP	Regional Energy System Plan
SEA	Strategic Environmental Assessment
SSEP	Strategic Spatial Energy Plan
TAAP	Transmission Acceleration Action Plan
TCPA	Town and Country Planning Act

Annex B – Workshop summary: exploring strategic spatial planning

Summary of key points

- Strategic spatial planning was explored as a potential solution to address challenges in the planning system, which emerge from current lack of strategic planning, joined-up policy and communication. New spatial policy is in development, including the Strategic Spatial Energy Plan, Land Use Framework and Local Nature Recovery Strategies. The workshop aimed to identify what good would look like for spatial planning and how the policies in development could help resolve challenges in practice.
- Strategic spatial planning was viewed to present opportunities for a more holistic approach to infrastructure deployment, increased efficiency and certainty, as well as embedding climate and nature from the outset. Key challenges included alignment across policies and geographic tiers, resources and time needed to deliver, and other key questions to clarify.
- The workshop identified the range of stakeholders with an interest in strategic spatial planning and their needs, followed by the exploration of different options or scenarios to identify considerations for policy implementation.

Introduction

The Aldersgate Group, RenewableUK and CPRE, the countryside charity, explored how to improve the ‘onshore’ planning system for renewable energy and grid infrastructure, whilst protecting nature, and enabling community and expert input. The scope of the project was focused on the planning system for Nationally Significant Infrastructure Projects (NSIPs) delivered on land.

In the first phase of the project, we mapped user journeys through the NSIP planning system to better understand how different ‘users’ or stakeholders engage with the planning system, and what does and doesn’t work. We focused on three ‘users’: energy and

grid developers, the environment, local communities. Overall, we found that the NSIP process generally works well but faces systemic challenges that, if resolved, would increase efficiency and reduce uncertainty. Challenges identified include lack of strategic planning and joined up policy, resources across the system, data, managing uncertainty, and trade-offs.

A particular challenge and the focus of this workshop is lack of strategic planning and joined-up policy. This results in cascading consequences through the system with environmental or local specificities coming to the fore later in the planning process.

For example, the choice of location for new energy generation infrastructure can be driven by the availability and location of grid connections. This can also result in clustering of proposals in one location and cumulative impact on local communities. The lack of government-led public engagement and communication of decarbonisation and environmental policy also introduces barriers to effective engagement between stakeholders during the process. With a lack of a clear, publicly conveyed decarbonisation strategy, local communities can view projects described as beneficial for the nation, but impacting locally, as being prioritised over measures viewed as having lower or less concentrated impact. Environmental stakeholders raise concerns that the environment is considered secondary with regards to siting. Depending on the characteristics of the local area, additional need for environmental impact assessments and mitigation can be introduced if not considered from the outset, with added complexity and time required for proposals to progress through the planning system. Stakeholders interviewed also noted remaining lack of clarity with regards to managing trade-offs.

Upcoming policy may help address this gap, but information at this stage is limited with policy in development. The government has commissioned the National Energy System Operator (NESO) and Ofgem to develop the Strategic Spatial Energy Plan (SSEP). Local Authorities are developing Local Nature Recovery Plans (LNRPs), Regional Spatial Energy Plans (RSEPs), and a Centralised Strategic Network Plan (CSNP) and Land Use Framework are also expected. The SSEP in particular is expected to provide a strategic view of what infrastructure is needed, with consideration of the economy, the environment and communities.

The workshop took place in June 2024 and explored what is needed at the strategic level for the planning system to function better. Strategic spatial planning would help set out what new energy infrastructure is needed and considerations for location. This

workshop is focused on planning for energy, acknowledging other demands for land use such as nature recovery, housing and food production. The aims of the workshop were to:

- Understand the opportunities and challenges for strategic spatial planning;
- Understand what good looks like and the needs of different stakeholders for strategic spatial planning;
- Identify and test possible solutions.

The workshop brought together participants with diverse experiences and expertise, including from the private sector, NGOs, local authorities, research organisations, and think tanks.

Opportunities and challenges for strategic spatial planning to improve the planning system for renewable energy and grid infrastructure

Workshop participants were invited to share their views on the main opportunities and challenges for strategic planning to improve the planning system for onshore renewable energy and grid infrastructure. This activity also set out the intended outcomes of an improved planning system: to enable the delivery of decarbonisation targets, ensure the environment is protected, and ensure communities are able to input.

Opportunities for strategic spatial planning

- Strategic spatial planning was seen as an opportunity for a more holistic approach to planning, reducing conflict by planning nature and climate from the outset, engaging early with communities, and coordinating across the tiers with a broader conversation on the need for grid upgrades and renewables rollout. It would provide a mechanism to plan hubs where demand is, enable distribution of rural generation, and make best use of existing networks and new routes. It could also act as an enabler for community energy.
- Increased efficiency was another potential benefit: using environmental data that is already available and collating it to improve coordination to ensure optimise routes, reducing some of the delays and uncertainty around individual projects. With a strategic plan, AI could be used to accelerate route planning or develop better consultation tools.
- Strategic spatial planning would also help embed climate adaptation and nature recovery into the development and deployment of the future renewable energy system.
- Certainty of the long-term development pipeline could be shared with both communities and industry.
- Lessons can be learnt from The Crown Estate's whole of seabed approach and route map for offshore planning.

Challenges for strategic spatial planning

- With no clear national plan for growth and energy, participants identified a range of challenges to producing a strategic spatial plan. Onshore and offshore planning are not currently integrated, nor are national and local plans for sectors from energy to housing. Regulation and policy must be aligned and there is an acute shortage of strategic planners. Energy planning is also devolved, with risk of misalignment between the nations.
- A strategic spatial plan will need to be supported with additional and aligned policy levers, including addressing the current lack of policy levers to enable co-location of renewable energy technologies. There is also currently limited or no coordination between developers to lessen impact on communities.
- The timescales, given the 2030 target, will be challenging to meet. Flexibility is also necessary to enable technological advancements to be leveraged.
- Different technologies have different environmental impacts.

- Minimising costs to consumers and reducing landscape impacts were two other important challenges to resolve.
- How communities will be brought along and engaged as part of strategic planning is currently unclear.



Figure 1. What are the opportunities and challenges for strategic spatial planning to improve the planning system for renewable energy and grid infrastructure?

Participants identified a number of upcoming policies relevant to strategic planning, and set out in Figure 2.

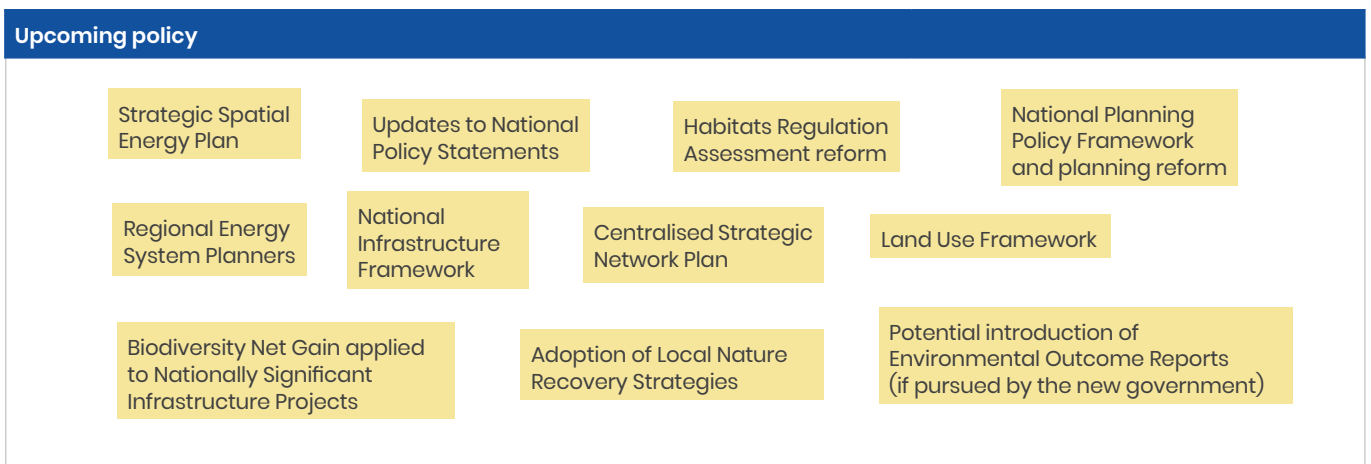


Figure 2. Upcoming policies identified by workshop participants

Key stakeholders for strategic spatial planning and their needs

Strategic spatial planning will be relevant to many different stakeholders. In this activity, workshop participants were asked to identify key stakeholders (Figure 3) and what their needs are from strategic spatial planning (Figure 4). A better understanding of the different needs of stakeholders can help inform both policy objectives, design and engagement to ensure policies can work in practice.

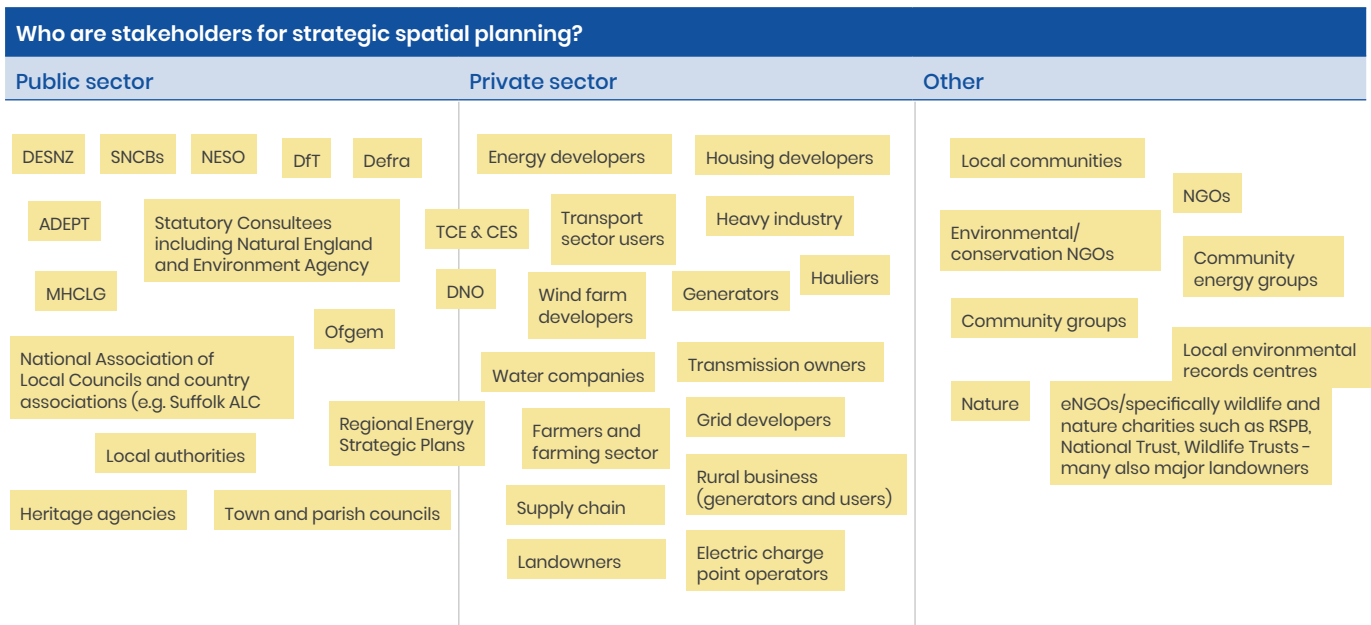


Figure 3. Key stakeholders identified by workshop participants

As a...	I need...	In order to...
<p>Energy or network developer</p>	<p>Certainty A clear process to follow Net Zero remit Clear long-term policy</p> <p>Long-term pipeline Flexibility Coordination between Defra, MHCLG, DESNZ</p> <p>Accelerated planning process</p> <p>Clear standards and codes of practice for community involvement in planning and for benefits - consistency</p> <p>Greater resourcing across all aspects of planning system</p> <p>Alignment between local and national policy</p> <p>A robust needs case for the infrastructure, endorsed in the NPS and NPPF</p> <p>Onshore wind unbanned</p> <p>CNP infrastructure to be prioritised in practice</p> <p>Connection Queue Reform!</p> <p>Somewhere to connect!</p>	<p>Make the business case/ leverage investment</p> <p>Get investment</p> <p>Provide power to the UK</p> <p>Translate plans into deliverable and consentable projects at the pace required</p> <p>Have meaningful engagement with communities on the decisions they can influence</p>
<p>Nature NGOs</p>	<p>Have nature recovery seriously prioritised</p> <p>Greater coordination between government depts</p> <p>Abandon EOR</p> <p>Ofgem and NESO to have nature recovery remits</p> <p>Involved in process</p> <p>Connection to LNRS</p> <p>Early engagement from developers</p> <p>Need nature embedded in planning</p> <p>Properly resourced LPAs and statutory consultees, including Natural England</p> <p>Better implemented environmental assessment, e.g. mandatory scoping</p> <p>Adherence to stat targets and principles</p> <p>Resource</p> <p>A seat at the table, early in the process</p> <p>Environmental data - national environmental data observatory</p> <p>Environmental data to be shared with us and vice versa</p> <p>Robust strategic planning governance, scrutiny and testing</p> <p>Research funding into impacts and the effectiveness of mitigation measures</p>	<p>Secure renewable energy without harm to nature</p> <p>Get concrete understanding of the value of mitigation measures</p> <p>Have the confidence in the system to support energy development</p> <p>Have better quality and more accessible environmental assessment (EOR not needed and could be regressive)</p>
<p>Climate NGOs</p>	<p>Need to meet carbon budget pathways/ targets being set out</p> <p>Strategic spatial mapping</p> <p>Bottlenecks to be identified in the grid</p> <p>Suitable areas to be mapped</p> <p>Resource</p> <p>Maintaining environmental protections (including SEA and EIA)</p> <p>More joined up thinking - although NESO doing this</p>	<p>Ensure understanding from the public of the need for grid upgrades</p> <p>Show a wider plan and show communities this is needed nationally and why their area has/hasn't been chosen</p> <p>To ensure competing interests are heard</p> <p>Ensure renewables (especially wind) can still be delivered under current policy constraints (hopefully not)</p> <p>To ensure targets can be met quicker and ensure renewable energy not being wasted</p> <p>To ensure robust protections for nature designations and communities</p>

Figure 4. Stakeholder needs from strategic spatial planning identified by workshop participants

As a...	I need...	In order to...
End user and household consumers	Secure affordable electricity Good service Timely connection	Live Remain competitive as a business
Landowner and rural business	Certainty of access to grid – generation and supply How to influence scheme development How land will be impacted by other schemes	Plan for management of land Mitigate impacts Plan future business
Central government	Coherent spatial definition of need, benefits and impacts Clear priorities and overarching goals between departments Resource Ability to communicate long-term plan to communities Confidence to make decisions despite disagreement and scientific uncertainty	Make timely decisions
Town and parish councils	Better capacity and capability to represent community interests in planning process Support on making the strategic case for renewables Proportionate EIA Resource Think strategically - plan for "what if"... community benefits. Help parishes think this way	To engage effectively with the process understanding their role and responsibilities
Local communities	To understand the benefits of infrastructure on doorstep Engagement and opportunity to inform plans Ability to engage and see how feedback has been taken into consideration in project design Transparency and trust in the strategic spatial planning process and resulting decision process	Understand why here Involved in the approach
An affected species - stakeholders without a voice!	Strategic planning that delivers energy whilst permitting me a home	Survival and an arresting of ecosystem decline
Department for Transport	Understand energy infrastructure Freight design and demand	Support decision-making about future energy demand Electric vehicle strategy
Local authority	Opportunity for LA to allocate sites for energy Use current model for housing site assignment as a model	More joined up development and speed up process
The public	Understand the big picture Involved in strategy and approach (including rationale, and what alternatives might be)	Build public mandate Understand different merits for doing things

Figure 4 (continued). Stakeholder needs from strategic spatial planning identified by workshop participants

Testing solutions and considerations for policy implementation

Participants were presented with ‘provocation statements’ to test solutions further and draw out practical points for policy implementation. The provocations were purposefully simple and slightly crude to prompt reactions and tease out particular concerns, risks or better approaches to achieve desired policy outcomes. The provocations and corresponding discussion are detailed below.

Provocation 1: the Government produces a Strategic Environmental Assessment to inform the Strategic Spatial Energy Plan.

This provocation intended to prompt discussion on how energy and environmental policy could be better aligned at a strategic level, and explore what a useful strategic environmental impact assessment would look like and its feasibility.

Frontloading nature in the planning system

- A strategic environmental impact assessment was viewed as an opportunity to integrate environmental considerations into early decision-making for developments. It would avoid directing development to the most harmful locations, providing developers and investors with increased clarity and confidence. For local communities, it would help inform the discussion on suitable areas for development and what is environmentally valuable, and could provide early sight of potential impacts and trade-offs.
- A strategic environmental impact assessment would help resolve data and monitoring challenges, improving efficiency in the planning system. A standard and universal evidence base, with consistent monitoring and improved data should be made available to all stakeholders. Flexibility should be incorporated to ensure new findings can be incorporated as they emerge. An Environmental Observatory could act as a central body aggregating and managing this data.
- This discussion was focused on renewable energy and grid infrastructure; however, it would also be relevant to other types of developments such as housing and transport.

Considerations for implementation

- A strategic environmental assessment wouldn’t be an alternative to project-level environmental impact assessments. Workshop participants viewed the strategic assessment as reducing the need for project-level assessment by avoiding poorly targeted proposals, but project-level impact, mitigation and consent were still viewed as necessary.

- The strategic environmental impact assessment would need to be given sufficient weight in policy and considered to be robust by a range of stakeholders to ensure it can be used effectively. Further work is needed to understand the level of granularity required and feasibility of delivering national or regional assessments, recognising the scale of this undertaking. Concerns were raised with regards to the time needed, risk of legal challenge, risk of lack of flexibility for technology change, and resources required to deliver. Some workshop participants viewed it as unlikely to be achievable within the necessary timescales.
- The scope of the assessment should be carefully considered and may be a means to ensure feasibility. Participants suggested that the assessment could be prioritised by region, or look at specific issues such as undergrounding of transmission lines. Separate assessments could be carried out for grid infrastructure and renewables, in alignment with the energy spatial plans.
- The strategic environmental assessment should inform other spatial plans, such as the SSEP and CSNP. This was viewed as a potential challenge due to timescales for delivery.
- Trust in the approach and its outputs will be essential to ensure that environmental stakeholders, local communities and developers have confidence.
- Planning is devolved. Consideration needs to be given to the role of the devolved administrations.

Provocation 2: the Government runs a national public engagement campaign on its decarbonisation plans.

This provocation aimed to explore how the public can be engaged on strategic spatial planning.

Risks

- Workshop participants questioned the extent to which people listen to communications campaigns. Ensuring that outreach goes far and wide and isn't just a small subset of the population can be a challenge. Young people were identified as key stakeholders that tend to be less engaged with such campaigns. Innovative engagement methods or a more participatory and deliberative approach may provide solutions.
- Public mistrust is currently high and may limit the effectiveness of such a campaign. Low trust in government is another similar factor.

- A potential unintended consequence would be to prompt the mobilisation of lobby groups, anti-net zero or anti-new development campaigners. A campaign would provide them time to mobilise and could result in greater and better-organised opposition as projects enter the planning process later on.

Considerations for delivery

- A coalition of organisations was viewed as essential and the most effective way to reach a wide range of people and strengthen the message, bringing together Government, public sector bodies such as NESO and local authorities, NGOs and industry. Polling shows that organisations like the National Trust and RSPB are trusted by the public on climate change. The campaign would aim to set out a vision for a decarbonised UK and a national mandate for action.
- The public engagement campaign should sit alongside an energy strategy and an action plan. This would set out the 'offer' for key stakeholder groups and how delivering new energy infrastructure can benefit them more directly. Community benefits were highlighted as a key policy area that would need to be clarified.
- The scope of the campaign must be well defined. If it's too high level, people may struggle to engage and feel that their views aren't represented or have been ignored. The campaign will need to explain how things might look on the ground and impact the individual. This is likely to require significant resource to be delivered well. Participants considered cost and distributional impacts and benefits as key points to be addressed. Energy security, economic growth, benefits for local communities, and nature were identified as other key themes to highlight.
- A two-way process, sharing information with the public but also involving them and gathering insights and feedback from diverse segments of society, would help inform policy design.
- Supporting data and evidence will be essential, in particular trusted and transparent insights on trade-offs, such as the costs of undergrounding.
- The French Commission du Debat Public or forums to engage representative groups were suggested as potential models for delivery.
- The campaign must be based on science and evidence. It has a critical role to play to fill the information void with good quality, trusted information and reduce the spread of misinformation.

Provocation 3: Regional authorities develop regional energy spatial plans informed by local nature recovery strategies and the national Strategic Spatial Energy Plan.

This provocation was used to explore how national and local policy could be linked and coordinated.

Considerations for implementation

- Regional plans may be able to provide a valuable level of detail that is unlikely to be possible in a national energy spatial plan. This could include clear links to local plans and economic development as well as valuable regional context to inform grid development, for example with capacity studies. Regional plans may be seen more positively and increase local buy-in for developments.
- In this scenario, the SSEP would act as a national vision and mandate. Regional plans would set out delivery of the vision at the local scale. This would require continuous refinement based on evolving local needs and national priorities. 'Informed' was not viewed as sufficiently strong.
- Local nature recovery strategies are not subject to rigorous environmental assessment, which would be needed for good infrastructure development. The quality of LNRS across local authorities is also currently unclear as they are in development. Additional requirements may be necessary to ensure LNRS can be used as part of regional planning.
- An effective governance mechanism would need to be developed across local, regional and national levels, alongside shared data, planning processes and adoption of digital tools. Local plans are not currently aligned and concerns were raised around the time and cost needed to bring together an already complex landscape. Not all areas are covered by a regional authority, which could introduce additional complexity for decision-making. Effective links and coordination between onshore and offshore spatial plans would be necessary.
- The timings of different plans are not currently aligned and may introduce a 'chicken and egg' problem with regards to the order in which plans are developed. It will be important to ensure that plans are produced ahead of infrastructure project developments, rather than midway through.
- The SSEP and LNRS currently have limited opportunities for open scrutiny. The transparency and legitimacy of the plans may be questioned or challenged.

Potential solutions to support implementation

- A public sector body similar to Active Travel England might have a role to play to support coordination and delivery of regional plans, providing specialist support to local authorities.
- Regional plans could be linked to funds for environmental surveys to support planning applications and help increase efficiency by reducing the duplication of efforts across multiple projects.
- Green Growth Boards, proposed by the RTPI, offer a model to support coordination and interlinks across a region. Greater Manchester was highlighted as the most advanced on this, with potential to learn lessons for other areas.

Provocation 4: the Government identifies 'turnkey sites' for developers, with community consent and environmental impact assessment already completed.

This provocation drew on a policy example from France to explore what frontloading or decision-making could be informed by a strategic spatial energy plan, and how that might help accelerate the delivery of projects.

Risks

- Participants were cautious about the prospect of 'turnkey sites'. From an environmental perspective, there was a worry that environmental assessments may be less rigorous or detailed, with negative experiences from the EU's approach with Renewable Acceleration Areas. From a developer perspectives, concerns were raised around unintended consequences and implications for non-turnkey sites, with the risk that they would then be deemed unsuitable or unattractive and limit their scope to attract investment. Developers may then be limited in their ability to choose alternative locations based on specific project requirements or changing market conditions.
- The risk of unintended consequences was considered to be high and would need to be well understood to ensure policy outcomes are successfully delivered. For example, Australia used a zoning approach with renewable electricity zones. Areas of the country with high potential for renewable energy were provided with a commitment to develop the grid infrastructure alongside. This resulted in new developments around the edge of the zone taking advantage of the same benefits.
- Validity of community consent may introduce risk over time, with a question of how long a community's consent would be valid for

and what would happen if a community change its mind. Lack of trust in local authorities and government more generally may introduce further challenges to support and trust in the process for turnkey sites.

Considerations for implementation

- ‘Turnkey sites’ were viewed as an opportunity to bring real step change in delivery if done well. In particular, they would provide greater certainty and confidence for developers and supply chains, as well as incentives for technical and financial support to use selected sites.
- Giving the remit for site selection to a public sector body is an opportunity for policy coordination, drawing on neighbourhood development plans, the SSEP and considering co-location in hubs whilst avoiding sites of importance for nature. The different tiers of local government would need to be brought together to identify suitable areas.
- Questions were raised with regards to who would be best suited to identify and carry out the relevant assessments for a ‘turnkey site’. Central Government was not necessarily viewed as the right stakeholder, rather local authorities with local development plans and subject to local scrutiny may be better placed. Appropriate resourcing would be needed.
- Stakeholder engagement, including local communities and landowners, would be important and necessary to build ongoing support.
- The ‘turnkey site’ approach may work better for certain technologies or types of projects, for example tidal or pumped hydro, and community energy projects. Linear infrastructure projects would be well suited to an approach with coordination across the different local areas affected.
- ‘Turnkey sites’ could provide an opportunity to deploy innovative technologies for environmental impact assessment and mitigation, and develop strategic data monitoring, such as for birds.
- Wales and the EU have valuable case studies and lessons to learn from, including where approaches have been unsuccessful or divisive.

Reflections on interim measures

Strategic spatial plans will take time to produce. The SSEP is due to be delivered in 2026.

Participants shared concerns around risks of continuing business as usual until the delivery of the Strategic Spatial Energy Plan. Key risks included growing public opposition, the slow pace of renewable energy and grid infrastructure deployment, and missed opportunities for UK competitiveness and nature recovery. Interim measures will be essential to ensure progress and improvement of the planning system for energy infrastructure in the meantime, with suggestions included in Figure 5.

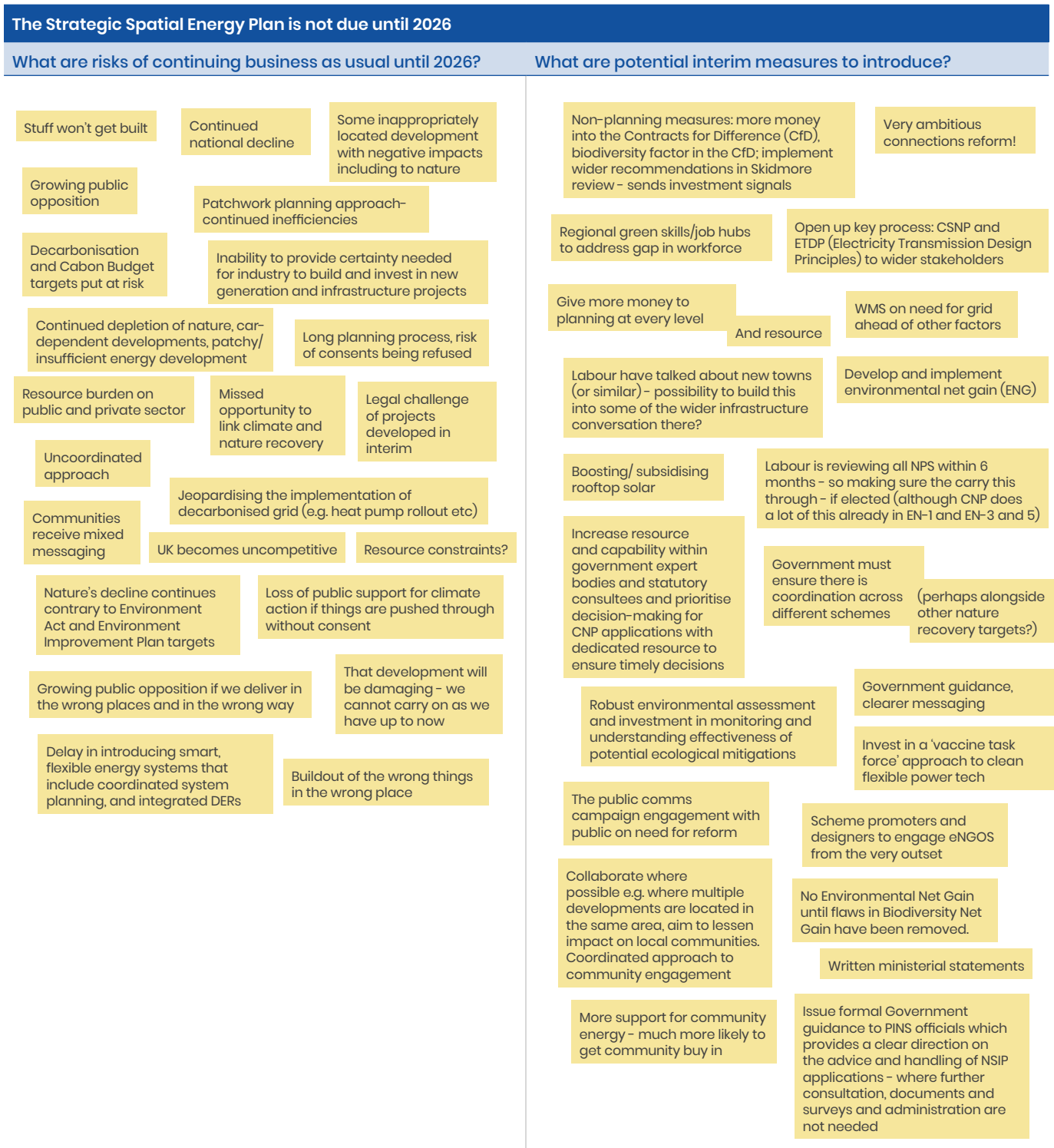


Figure 5. Risks and potential interim measures identified by workshop participants to introduce ahead of the delivery of the Strategic Spatial Energy Plan

Annex C – Workshop summary: early engagement

Summary of key points

- Early engagement is widely recognised as an opportunity, improving the involvement of local communities in projects affecting them and reducing the risk of delays or opposition later in the system. Bringing local knowledge into the project at an early stage can also help inform developers' decisions and improve outcomes.
- Challenges facing early engagement are focused around those barriers limiting wider involvement of people across the community, misinformation and communicating uncertain or technical information. The project-by-project nature of NSIPs and lack of an 'honest broker' for local communities can further exacerbate challenges with local community engagement.
- Good practice and case studies were identified with lessons to learn from.
- A national public engagement campaign and the role of public sector stakeholders were explored as potential solutions.

Introduction

The Aldersgate Group, RenewableUK and CPRE, the countryside charity, explored how to improve the 'onshore' planning system for renewable energy and grid infrastructure, whilst protecting nature and enabling community and expert input. The scope of the project was focused on the planning system for Nationally Significant Infrastructure Projects (NSIPs) delivered on land.

In the first phase of the project, we mapped user journeys through the NSIP planning system to better understand how different 'users' or stakeholders engage with the planning system, what does and doesn't work. We focused on three 'users': energy and grid developers, the environment, local communities. Overall, we found that the NSIP process generally works well but faces systemic

challenges that, if resolved, would increase efficiency and reduce uncertainty. Challenges identified include lack of strategic planning and joined up policy, resources across the system, data, managing uncertainty, and trade-offs.

A particular opportunity to resolve challenges and the focus of this workshop is early engagement with local communities and other relevant stakeholders. Early engagement is the engagement that takes place between energy developers and local communities or other stakeholders before entering the formal planning application process.

Early engagement is viewed as good practice and is a critical moment for wider input to shape a project and improve outcomes. It takes place at a point in the project when changes can be made, with scope for change increasingly limited as the project progresses through the planning application process. Good early engagement can build good relationships and trust from the start of the process and contribute to reducing uncertainty or challenges that may otherwise arise later in the planning application process.

However, good early engagement does not always take place. Some of the challenges or barriers to early engagement identified this project were:

- Early engagement carries risk – it requires money, resources and particular skills to engage well.
- Uncertainty at an early stage in the project design and complex technical information can be challenging to communicate effectively.
- Building trust between the local community and the developer is an important factor to enable good engagement. Bad practice from developers (including separate projects in the same local area), lack of transparency on what local communities can influence, and raised expectations that aren't then met can all undermine trust.
- Non-statutory stakeholders are dependent on the developers involving them at this early stage. This includes environmental NGOs for consideration of nature.
- Engaging widely across whole local communities is challenging, especially where people are time-poor, indifferent, or feel unable to engage due to social pressures.

The workshop took place in June 2024 and explored how to better engage local communities and other relevant stakeholders. The aims of the workshop were to:

- Understand opportunities and barriers to early engagement
- Identify and test possible solutions

The workshop brought together participants with diverse experiences and expertise, including from the private sector, NGOs, local authorities, research organisations, and think tanks.

Opportunities and challenges for good early engagement in energy infrastructure projects

Workshop participants were invited to share their thoughts on opportunities and challenges for good early engagement in energy infrastructure projects. The discussion highlighted potential solutions for good early engagement and challenges that would need to be resolved (Figure 1).

- Local knowledge is valuable both to better develop the infrastructure project and to tailor engagement to the local community. Potential solutions highlighted trusted messengers and organisations that could support engagement with communities more widely, such as housing officers and community organisers. Sharing of good practice, guidance, toolkits and reproducible processes for good early engagement will also help improve practices more widely.
- Challenges to address included the difficulty in engaging across communities, in particular time-poor or disengaged people, the general lack of trust in politics, communicating technical information, and public awareness or risks from misinformation.

What are the opportunities and challenges for good early engagement in energy infrastructure projects?

Opportunities



Challenges



Figure 1. Opportunities and challenges for good early engagement in energy infrastructure projects, identified by workshop participants

Workshop participants identified a number of case studies to learn lessons from, including EirGrid's and SwissGrid's approaches to early engagement; National Grid in Essex; the mobile phone network roll-out; examples from housing providers on retrofit and low carbon energy resident engagement; and Suffolk County Council's guidance on NSIP. Other examples that were highlighted included methods used in the VILCO research program in Brussels. This aimed to improve collaboration between communities and their local authorities. One example to leverage trust and biases was to organise shadowing sessions (e.g. a citizen following a civil servant for an afternoon or following the day-to-day of a local association). Another example was a tool developed by Nesta to engage citizens in the process of identifying policy priorities for their council. Innovative methods included using "testimonies from the future" to help understand how different policies might affect different citizens. This tool facilitated a one-hour session ending by a pool to rank policy proposals, with data being collected by the council.

Suggestions to tackle challenges with early engagement

Building on the discussion of potential solutions to improve early engagement, participants shared suggestions to tackle particular challenges.

- Communicating uncertainty and technical information
 - Using visuals, photography and illustrations can show the potential results of the infrastructure, before coming to plan them in practice. This can help reduce uncertainty and fears about the planned project. Focus on the outcome will also help engagement.
 - Balance needs to be struck between how early to engage and what information can be provided. Lack of detail can prompt concerns that information is being hidden. Engagement needs to be clear on what is communicated and when.
 - Potential host communities may benefit from meeting with other communities who have already gone through the planning process, to hear about their experiences and outcomes.
 - Approaching tackling climate change as a national endeavour, like building the NHS, could help support the context for engagement.

- Engaging widely across communities
 - Understanding the different power dynamics and potential conflicts or biases that might occur can help inform how to best approach engagement.
 - Building a shared vision, aligning goals and barriers with all stakeholders (citizens, council, planning) can help support wider and more effective engagement.
 - Identifying key messages and starting by listening were also highlighted as good practice.

Testing solutions and considerations for policy implementation

Participants were presented with ‘provocation statements’ to test solutions further and draw out practical points for policy implementation. The provocations were purposefully simple and slightly crude to prompt reactions and tease out particular concerns, risks or better approaches to achieve desired policy outcomes.

Participants were presented with three provocations and invited to discuss challenges and opportunities from each. In this case the provocations were designed to explore the potential role different public sector stakeholders could play as part of early engagement and how that might work best. The provocations were:

1. Government coordinates a public campaign on the infrastructure needed for the decarbonised electricity system (increasing local community awareness ahead of early engagement).
2. The National Energy System Operator (NESO) has an active role in early engagement for linear infrastructure projects.
3. Parish councils are resourced to be more involved in early engagement and help bridge between communities and developers.

Key themes emerged across the discussion and are presented below.

Trust

- Trust was viewed as a ‘key commodity’ that was lacking in the NSIP process and mechanisms to build trust were a vital but challenging part of early engagement. One comment was that

early engagement could be focused on building trust rather than discussing project specifics.

- The quality, rather than quantity, of early engagement was felt to be important for building trust. Smaller, reflective groups that remained in place for the duration of a development (taking people ‘on a journey’) were seen as helpful for this.
- Other participants suggested that approaches to building trust from the development sector could be applied usefully to the NSIP regime, or that the Government could establish a specialist body to help engage with local communities. ‘Active Travel England’ was referenced as a body that is well-regarded by local authorities.
- The role of ‘honest brokers’ in facilitating early engagement was also discussed, with local authorities and town and parish councils identified as bodies with a potential role in this.

National dialogue

- The need for a national engagement campaign around climate change and net zero energy infrastructure was discussed, with consensus across participants that there is a need for it and a current absence of dialogue and political leadership on the issue. If the national government could explain the need for net zero infrastructure, it would make it easier for local communities to engage with energy developers – the ‘why’ around net zero infrastructure would have been explained already. However, one challenge with this is that there is a lack of trust in national government.
- EirGrid and the mobile phone network roll-out were highlighted as good examples to learn from.

The role of NESO and strategic planning

- Participants suggested that a strategic and spatial approach would give the NSIP regime coherence, and that interim measures could be useful while the strategic spatial approach is developed.
- NESO is not well known by the public and local communities. It will be important to introduce NESO to the public and build trust. An engagement plan is needed prior to the launch of the SSEP to familiarise people with the organisation and the SSEP.
- Coordinating communications at national, regional and local levels must be carefully considered. A national body won’t know local communities as well and it might be difficult to tailor engagement. A one size fits all approach is risky.

- A consistent message across the country that is tailored to local areas would be helpful. NESO could potentially develop a specialist engagement team and play a coordination role.

Parish councils

- Parish councils were identified as one body that could act as an honest broker. The structure of parish councils and the duties parish councillors must abide by could assist with an honest broker role. In addition, many local authorities are working to help parish councils operate efficiently and professionally.
- Parish councils might not be seen as representative or an honest broker by some communities. Not every area has one. Other key anchor organisations include housing associations, libraries, universities etc.
- Cost and resourcing would need to be considered before giving parish councils or other local organisations new duties. Adding cost to the NSIP regime will lead to questions about who ultimately should bear these costs. If it is developers who bear these costs, they may pass them on to customers in the form of higher bills.

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