

# Insights for the decarbonised electricity system: journeys through planning

Interim findings  
July 2024

# Executive Summary

The Aldersgate Group, RenewableUK and CPRE, the countryside charity, are working together to investigate how the ‘onshore’ planning system for renewable energy and grid infrastructure can be improved.

A better planning system would enable the construction of renewable energy and grid infrastructure at pace to decarbonise, whilst protecting nature and landscapes, and enhancing communities’ right to input. Focusing on Nationally Significant Infrastructure Projects (NSIP), this report sets out our interim findings, early recommendations for Government and next steps for the project.

Our climate is changing, and we need to act quickly to protect our economy, wellbeing, and natural environment, ensuring access to a secure and resilient supply of energy into the future. This includes decarbonising our energy system through new infrastructure, including wind turbines, solar panels and the power network to bring electricity to our homes and businesses.

Current challenges affecting the delivery of new energy infrastructure include skills shortages, supply chain disruption and the planning system. This project focuses on the planning system through which onshore energy infrastructure must receive consent ahead of construction. Challenges in the planning system for energy infrastructure are widely acknowledged, including reports of long delays, environmental concerns, and local impacts, with campaign groups organising effective opposition to projects. The role of key public sector stakeholders such as Ofgem and the National Energy System Operator (NESO) is also evolving.

To better understand what works well and what doesn’t, we took a user journey approach, exploring how the following three user groups interact with the NSIP regime:

- energy developers
- the environment
- local communities

User journeys are a tool to map engagement points and interdependencies between stakeholders or users in a system. An overview of each user journey is presented in more detail in the report, including reflections on the scope, gaps or other important users to consider.

The user journeys helped identify system challenges that contribute to unintended or cascading consequences affecting energy developers, the environment and local communities. The system challenges identified so far are as follows:

- **Lack of strategic plan, joined-up policy and public engagement:** the NSIP regime is designed to deliver on a project-by-project basis, rather than taking a whole-system programmatic approach to delivery. The choice of location is frequently driven by the availability of grid connections or the need for new grid infrastructure for offshore developments, rather than holistic consideration of issues facing developers, the environment and local communities. The public also report lack of information on decarbonisation more widely. This lack of strategic plan, joined-up energy and environment policy, and wider engagement is contributing to cascading challenges in the system.
- **Resourcing challenges across the system:** resource and skills shortages, especially across statutory bodies and local authorities, as well as particular expertise such as ecology or public engagement, result in delays and timeline uncertainty.
- **Data:** the NSIP process requires significant data and evidence gathering and sharing, critical to engagement with stakeholders and decision-making. Inefficiencies are introducing additional strain into the system.
- **Uncertainty** is inherent throughout the process. The characteristics of the environment are highly local and aren't fully known at the onset of a project, before environmental surveys have been carried out. In the case of innovative technologies, understanding of impacts and effectiveness of mitigation evolve with time. Uncertainty is not always best managed or communicated, with potential negative consequences for trust and engagement. Opportunities to learn lessons through monitoring and research are also missed.
- **Trade-offs** can be complex, needing to balance local impacts and national public interest priorities. In some cases, policy is not viewed by stakeholders as sufficiently clear to set out how trade-offs should be managed and support decision-making.

## Early recommendations and next steps

Mapping these user journeys has enabled us to build a better understanding of the shared challenges across the NSIP system and at its boundaries. The final report will present recommendations informed by the user journeys and the second phase of the project. However, as the new Government begins to implement its plans for decarbonisation across supply and demand, we recommend:

- The NSIP process can work well. When the Government considers changes to the planning system, the emphasis for the NSIP regime should be on resolving practical challenges to increase efficiency and reduce uncertainty.
- It is vital that the Government involve planning experts, communities, environmental groups and infrastructure developers from sectors including energy, housing, transport and energy-intensive industries in developing upcoming policies, including the Strategic Spatial Energy Plan. Going beyond consultation, Government may wish to convene these stakeholders to identify and deliver solutions. Engagement will be essential to identify solutions, inform decision-making on trade-offs, and build national buy-in.
- The Government should invest in capacity building for statutory consultees and planning authorities across the country, focusing on allocating core funding for resources and upskilling. Prioritising resourcing and providing guidance, with a focus on how national policy can be translated at the local or project level, is important to enable the NSIP regime to operate more effectively.

Building on these recommendations, the next stage of this project will explore in further detail:

- 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 consideration of energy, environment and local community needs from the outset. This deep dive will aim to identify opportunities for reducing inefficiencies and uncertainty that currently emerge later as projects progress through the NSIP process. Considerations for implementation of upcoming policies, such as the Strategic Spatial Energy Plan, will also be explored.
- Early engagement: early engagement is viewed across stakeholders as good practice and a critical moment for wider input, shaping a project and improving outcomes. This deep dive will examine 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 make the most of opportunities during early engagement.

Within these two deep dives we will also consider resourcing, the needs and roles of different stakeholders, including new stakeholders such as NESO and political stakeholders.

The final recommendations from this project, to be published in the autumn, will aim to inform government policy to ensure the planning system helps facilitate the rapid decarbonisation and modernisation of the electricity system while protecting nature and landscapes, and allowing communities to influence developments in their local area.

# 1. Introduction

Delivering a decarbonised energy system requires bold collaboration across a range of sectors and disciplines and will be crucial to unlock economic growth, improve productivity and energy security. Working together, the Aldersgate Group, RenewableUK and CPRE, the countryside charity, are investigating how the terrestrial planning system for renewable energy and grid infrastructure can be improved. A better planning system would enable the construction of renewable energy and grid infrastructure at pace to decarbonise, whilst protecting nature and landscapes, and enhancing communities' right to input.

Our climate is changing, and we need to act quickly to protect our economy, wellbeing, and natural environment. This includes decarbonising our energy system to heat our homes and power our industry with significantly reduced impact on the climate, whilst strengthening our energy security. To generate and transport green electricity we need new infrastructure, including wind turbines, solar panels and the grid, to bring electricity 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.<sup>1</sup>

This collaboration will make recommendations in the autumn about how to ensure the planning system can work effectively to facilitate the construction of a decarbonised electricity system, while allowing affected communities to influence projects. The first step is to develop a shared understanding of what works well and where the challenges with the planning system currently lie. Focusing on the 'onshore' Nationally Significant Infrastructure Projects (NSIP), this report sets out our interim findings, mapping user journeys through the system and next steps.

This project does not consider wider energy system decarbonisation challenges, such as supply chain and skills challenges.

## 2. The policy context

The UK Government has committed to bring forward the date from 2035 to 2030, by which to decarbonise the electricity system.<sup>2,3</sup> The Committee on Climate Change's 2023 Progress in reducing UK emissions report highlighted that the deployment of renewable energy generation was below the rate required to meet the Government's targets.<sup>4</sup>

New energy infrastructure must go through the planning system to gain approval for construction, with the planning regimes differing depending on the technology and power output. Proposed renewable energy infrastructure that generates less than 50MW are considered through the Town and Country Planning Act (TCPA) system. For renewable energy infrastructure generating more than 50MW, except onshore wind and electricity storage such as batteries, proposals go through the NSIP planning regime. The NSIP regime is the focus of this project. The NSIP and TCPA planning regimes are in force in England and in some cases in Wales, with a different system in place in Scotland.<sup>5,6</sup>

The 2008 Planning Act established the NSIP regime 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 acts under the delegation of the 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.<sup>7</sup> The Planning Inspectorate makes recommendations, and final decision-making rests with the Secretary of State.

The planning system for energy infrastructure is currently evolving, with challenges across the system having been widely acknowledged.<sup>8</sup> The Electricity Networks Commissioner Nick Winser made recommendations to accelerate electricity transmission network development in August 2023.<sup>9</sup> The UK Government responded in November 2023 with the Transmission Acceleration Action Plan and the announcement of plans to reform the NSIP process.<sup>10</sup> The UK Government also published revised Energy NPSs in January 2024, including an overarching statement and specific

statements for renewable generation and electricity networks, setting out Government policy and guidance on the need for nationally significant infrastructure and defining low carbon infrastructure as a critical national priority.<sup>11, 12, 13</sup>

The role of key stakeholders is also evolving. Ofgem now has a net zero mandate alongside consumer protection and the National Energy System Operator (NESO) is being set up.<sup>14, 15</sup> NESO and Ofgem are due to be commissioned by UK Government 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 forecast demand, energy security needs and our 2050 targets. The SSEP will enable the creation of a Centralised Strategic Network Plan by NESO, due in 2026.<sup>16</sup> NESO and Ofgem are also set to implement a number of Regional Energy System Planners, responsible for strategic planning for electricity distribution systems.<sup>17, 18</sup>

With regards to the natural environment, the UK Government revised the Environment Improvement Plan for England in 2023.<sup>19</sup> Biodiversity net gain targets for developers were introduced with the Environment Act and are expected to become mandatory for NSIP projects in 2025.<sup>20</sup> The Government also set out its intention to replace Strategic Environmental Assessments (SEA), NPS appraisals of sustainability, and Environmental Impact Assessments (EIA) with Environmental Outcomes Reports (EOR), noting that secondary legislation and policy for EORs is under development and timelines are uncertain.<sup>21</sup>



### 3. The user journey approach

User journeys are a tool to map interaction points and engagement between stakeholders or users in a system to better understand what works and what are the challenges, and unintended or cascading consequences. In the context of this project, we have explored three user journeys through the planning system for renewable energy and grid infrastructure:

- **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 in close proximity to new developments.

Other users are important in the system, including public sector organisations, such as Ofgem and NESO, the end users of energy such as industry and household consumers, and national heritage organisations. We focused on the three users most directly relevant to this project, noting that key perspectives in the system may be missing at this stage and will be explored further in the next phase of the project.

When mapping user journeys, we focused on the NSIP process for energy infrastructure, with the following stages:

- **Energy National Policy Statements:** at a strategic level, the UK Government sets out policy for nationally significant infrastructure. The Energy National Policy Statements set out guidance on the need for energy infrastructure, and what should be considered in decision-making for new developments, including the environment and local communities. Where other specific policies are relevant to the user journeys, these have been included.
- **Early engagement:** ahead of the formal application process, developers are encouraged to engage the community and other relevant stakeholders to best prepare their application. Ahead

of formal application, developers will also carry out surveys and other activities for environmental impact assessment; for energy-generating infrastructure, developers will need to secure a connection to the grid.

- **The Planning Inspectorate (examination) process** (pre-application, acceptance into the application process, pre-examination, examination)<sup>22</sup>: developers must take an application through each of these stages, with input from statutory consultees and other interested parties. The Planning Inspectorate (referred to in legal terms as the 'Examining Authority') examines the application and makes a recommendation to the Secretary of State. Local authority and local community views, such as local impact reports, are considered as part of the process.
- **Development Consent Order**: the Secretary of State for Energy Security and Net Zero makes a decision, following recommendation from the Planning Inspectorate and further advice from civil servants.
- **Post-decision**: the decision can be challenged in the High Court during a 6-week period. Following consent, planning conditions will also need to be discharged before construction begins, with review and sign-off by local authorities and statutory bodies.

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 will 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 involve significant uncertainties.<sup>23</sup> Following the NSIP process, consent for 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.<sup>24</sup>

The user journeys presented in this report 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.

## 4. Reflections on the scope

The NSIP regime for onshore developments only applies to projects generating more than 50MW and some transmission and distribution infrastructure as specified in the Planning Act 2008. For transmission and distribution infrastructure, different parts of a project may go through the NSIP or the TCPA process according to those thresholds.

Onshore wind was removed from the NSIP regime in 2015 by the UK Government, with planning decisions to be determined by local authorities through the TCPA process in England. The UK Government also introduced tests for local authority decisions. In 2023, the Government made changes to introduce additional ways to identify suitable locations.<sup>25</sup> Very few onshore wind turbines have been built in England since 2015.<sup>26</sup> The Government elected on 4 July 2024 has announced the intention to revise the National Planning Policy Framework and remove tests that apply to onshore wind.<sup>27</sup>

We have not explored the TCPA regime in detail. Across interviews with key stakeholders, we heard that elements of the TCPA regime work well and others present challenges.<sup>28</sup> This forms part of the decision-making for renewable energy developers considering whether to propose a project under or above the threshold to enter into the NSIP process, alongside other factors such as grid connection, supply chain and economies of scale. For grid developers, the decision to enter the NSIP process is determined by the thresholds in the Planning Act and requirements for infrastructure.

## 5. The renewable energy and grid developer's user journey

Energy and grid developers have significant interactions with the NSIP process. Companies and trade associations will engage with the UK Government on policy development, including through public consultations. Developers then follow the process with their application.

### What works well

- **The NSIP process as a whole is viewed positively by renewable energy developers, providing a high degree of process certainty and objective assessment.** This factors into some developers' decisions on whether to enter the NSIP or TCPA process, with process certainty one of the reasons to justify the additional resources needed for the NSIP process. The NSIP process also supports power cable connections, whereas projects going through the TCPA process will need to be located close to the grid or require permissions for cabling. The TCPA process can be quick but it is also viewed as having the potential to be more subjective or driven by local politics. Uncertainty in timelines for the NSIP process is, however, increasing.
- **Early engagement is viewed as good practice.** In the NSIP process, consultation is a statutory requirement at the pre-application stage. It can contribute to constructive engagement and takes place at a stage when co-development of solutions can be possible. From a developer perspective, this is the time when changes can be made, with increasingly limited scope for change as an application progresses through the system. Good early engagement can contribute to reducing challenges, uncertainty and setting a good relationship with other stakeholders from the start of the process, contributing to better outcomes for all.<sup>29, 30</sup>

### Challenges and unintended consequences

- **The choice of location for renewable energy infrastructure can be driven by specific factors such as location and availability of grid connections, leading to cascading challenges.** Other factors include connection capacity, eligibility of the technology, supply chain considerations and economies of scale. With other

considerations coming later, this can lead to potential challenges around environmental impact and the local community. The Planning Act 2008 sets out eligibility for proposed projects to enter the NSIP regime rather than the TCPA regime. This does not necessarily align with the reality of when the NSIP process becomes appealing to developers due to its costs and resourcing requirements. For example, a renewable energy proposal can be submitted into the NSIP if its output is above 50 MW (except onshore wind); however, it is not necessarily viewed as cost effective to enter the NSIP process for a 50MW power output, resulting in more applications just under the threshold at 49 MW or significantly above 50MW. **The choice of location and decision to enter the NSIP process for grid infrastructure has different drivers**, including location of energy generation and energy users.

- **Additional uncertainty may be introduced with regards to the location of the grid connection.** With the current high demand for grid connections and legal requirements for National Grid Electricity Transmission (NGET) to meet demand, renewable energy developments may be offered a connection but the exact location remains ambiguous for some time. This introduces challenges, including for engagement with the local community and environmental impact assessment.
- **Lack of resources and skills for statutory consultees introduce unintended consequences, with variation in process timescales.** A lack of early engagement by statutory consultees, often due to lack of resources, can result in unexpected requests for additional time and information during the formal application process, introducing delay. Productive conversations at early engagement help develop more thorough and high-quality applications upfront and reduce the back and forth in the formal process. Some energy developers use paid services (e.g. Discretionary Advice Service, Service Level Agreements, Planning Performance Agreements) but these are not viewed as a complete solution to the challenge.
- **Early engagement carries risk**, including due to the cost, the skills required to engage well, and the difficulty of communicating uncertainty at an early stage in the design with other stakeholders. One of the risks that can materialise is raising expectations with stakeholders that are not then delivered upon, undermining trust.
- **Uncertainty in process timescales introduces risk to the project**, potentially jeopardising the project's position in the grid connection queue and with its supply chain arrangements.

Delays can stem from lack of resourcing at statutory consultees to respond in reasonable time or time taken at the final decision stage with the Secretary of State, viewed as slower than necessary. The challenge lies with efficiency in the system, and in some cases additional time is necessary to ensure good outcomes.

- **Innovative renewable energy technologies with low deployment levels carry inherent uncertainty**, and data gaps for environmental impact and mitigation are likely to exist. This can be challenging as part of the process if the lack of evidence available for innovative technologies is not recognised, or where monitoring and evaluation aren't used to learn lessons as deployment of new technologies progresses.
- **Inefficiencies affect the environmental impact assessment process.** 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. Energy developers can consider environmental impact data as commercially sensitive, limiting data sharing. In addition, the availability of accessible environmental data is limited. This can introduce duplication, wasted resource or additional time to the process if further assessment is required.<sup>31</sup> Some developers view the EIA process as overcomplicated. EIA documents are not always readily available or understandable to the public.
- Public opinion and trust can evolve over time and varies depending on the technology. **'Bad developers' affect public trust** in the wider industry. The interactions between the energy developer and local community user journeys are detailed in the local community user journey.
- **Lack of policy clarity is introducing uncertainty, delays and politics into decision-making.** Policy clarity on how to balance trade-offs is considered to be lacking, introducing challenges for the Planning Inspectorate to make recommendations. Politics can also enter decision-making, for example in some situations the Planning Inspectorate's recommendation is not followed.
- **Increasing number of High Court challenges introduce investment risk** for developers, due to the time and cost committed by this stage and uncertainty of the time taken for judicial review. This concern has strengthened the focus on ensuring the process is followed correctly to reduce risk in the event of judicial review.

## Upcoming changes and uncertainty

From a policy perspective, a number of changes are in the pipeline with little specific information available at this stage and introducing uncertainty. The NSIP process is being reformed, with new guidance published in spring 2024. The Strategic Spatial Energy Plan (SSEP), due to be published in 2026, is expected to inform siting decisions. Reform to the connections queue for the grid, noting lack of action on the existing queue, as well as planning for the modernisation of the transmission and distribution grid are also ongoing. Significant uncertainty also remains with regards to the Government's commitment to replacing EIAs with EORs.

The UK General Election took place on 4th July. The Labour Party election manifesto included proposals to reform the planning system, with likely policy changes coming from the new Government.<sup>32</sup> The recent King's Speech on 17th July 2024 outlined a new Planning and Infrastructure Bill which will aim to streamline the delivery process for grid and renewable infrastructure, including through simplifying the consenting process and to use development to fund nature recovery<sup>33</sup>.

Globally, demand for renewable energy and grid technologies is increasing faster than supply. This has introduced supply chain challenges and long lead times for key components. The UK market is also now competing with other markets, with concerns that challenges in the planning system contribute to UK lack of competitiveness for investment.

## 6. The environment's user journey

We consider the environment as a 'user' of the system, noting that it isn't a typical user. In this case, the journey includes how the environment is considered as part of the NSIP process, for example requirements for environmental impact assessments, and how stakeholders representing the environment, such as NGOs, interact with the system.

The environment is formally considered as part of the NSIP process with policy set out in the Energy NPS, and requirements for environmental impact assessment and guidance in relevant regulation. The Energy NPSs also consider landscapes, with a requirement for projects to be designed with consideration for potential impact on landscape and protection for National Parks, the Broads and National Landscapes (previously known as Areas of Outstanding National Beauty).<sup>34</sup> The statutory consultees include Natural England, the Environment Agency, National Landscapes Conservation Boards, the Forestry Commission, and local planning authorities and town and parish councils.

Environmental experts and NGOs can engage with UK Government on policy development, including through public consultations. At the project level, environmental stakeholders who aren't statutory consultees can register as an 'interested party' to participate in the pre-examination and examination stages of the process. This requires organisations to have sufficient resources to participate.

The environment is not one homogeneous user, and in some cases different environmental interests may involve trade-offs with regards to impacts and mitigation.

Heritage sites are not in scope of this user journey. It is worth noting that heritage sites are also considered in the Energy NPSs and throughout the NSIP system. Heritage site owners and managers also have particular rights and processes as landowners. However, this project has not investigated or identified potential specific challenges.



## What works well

- **The NSIP process is generally viewed positively** by environmental NGOs interviewed for this project. It is seen to provide a high degree of process certainty, consideration of the environment and mechanisms for stakeholders to engage.
- **Some forms of new energy infrastructure are viewed as an opportunity for nature recovery, if done well**, with nature considered throughout siting, design and management. Renewable energy developers are generally viewed by NGOs as coming with goodwill to identify nature-positive solutions and opportunities, noting that this is not always the case with examples of bad practice.
- **Early engagement is viewed as good practice to improve outcomes for the environment** with scope for change more limited later in the process. This point was particularly noted by NGOs with regards to nature, highlighting that local communities and environmental experts can help provide locally specific information and knowledge. One example was a project in Norfolk routed close to a nature reserve, where early engagement and a Defra-funded wetlands pilot project enabled a positive dialogue to try to find solutions.
- **Good developers will want to follow due process.** The risk of judicial review is viewed as incentivising other developers to produce planning applications that have assessed environmental impacts and mitigations thoroughly, and to follow due process fully.

## Challenges and unintended consequences

- **Energy and wider environmental considerations in policy are not currently joined-up**, creating a perception that nature and landscapes are considered secondary and generating a lack of trust in the balancing of trade-offs in the Energy NPS and at the Development Consent Order stage.<sup>35</sup> The strategy to meet legally binding targets for nature recovery, alongside decarbonisation targets, is unclear. Environmental NGOs have also raised concerns that the new Critical National Priority status could favour the need for energy developments over potential environmental impacts, overriding nature and landscape protections and may remove the incentive to look for low environmental impact sites. This is reinforced by the decision to rule out availability of alternative sites as a justification for refusing an application. Energy developers are still required to take steps to mitigate impacts and enhance the environment.

- In the case of grid infrastructure, **the policy mandate states a preference for overhead lines, with local community groups calling for alternative solutions.**
- **Trade-offs can be complex and highly specific** to the local areas, with cost and impacts on nature of alternative solutions, such as offshoring and undergrounding, varying depending on the area. For example, in some cases undergrounding transmission lines may be beneficial to elements of the environment, with evidence of overhead powerlines negatively impacting birds in some locations and landscapes,<sup>36, 37</sup> whereas in other cases overhead lines are considered better for nature, compared to disruption to habitats caused by digging for undergrounding cables and subsequently for their maintenance.<sup>38</sup>
- **Environmental stakeholders raised concerns that environmental considerations come in second with regards to siting.** Siting for renewable energy infrastructure is determined by a number of factors but can be driven in particular by the availability of a grid connection. This can introduce challenges for projects depending on the specific characteristics of the local area and environment.
- **Environmental NGOs are dependent on developers to be able to participate in early engagement and share environmental assessment data in a timely manner.** Not doing so can result in missed opportunities to integrate the views and environmental concerns of NGOs and co-develop solutions. NGOs can participate as interested parties during the examination stages, however at this stage changes to the design are likely to introduce additional time to the process and scope for change may be significantly limited. Data provided late in the process, at the examination stage, introduces challenges for stakeholders to deal with under pressured timescales and contributes to lack of trust and adversarial engagement rather than collaboration. In addition, engagement does not guarantee environmentally sound decisions.
- **The environmental data required to develop a NSIP application can pose challenges.** These include data availability, a lack of data sharing (often on the grounds that data is commercially sensitive), resulting in duplication of data gathering across different planning applications.<sup>39,40</sup> Lack of data available at the site selection stage can create additional work for developers. The surveys required may also 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, or that conclusions need to be changed as new data comes to light.

- **Lack of resources for statutory consultees and key stakeholders in the process is a significant concern.**<sup>41</sup> Skills shortages, including ecologists, are also increasing with growing demand from both the public and private sector. Many local authorities don't have in-house ecologists. The new requirement for biodiversity net gain will exacerbate these resourcing challenges. NGOs and environmental experts have limited resources and, as developments increase, are not able to contribute their expertise to consultations on all important developments.
- **Following completion of the development, NGOs highlighted missed opportunities with monitoring and evaluation** to ensure lessons are learnt to enable better outcomes in future developments. Developers can commit to monitoring activities during the process. However, this is not always followed through or lacks in transparency, with limited sharing of information with other environmental stakeholders. Environmental NGOs noted that this has contributed to a lack of trust in the industry. Post-development monitoring and data sharing is not currently enforced, in part due to lack of resources at local authorities. Monitoring and evaluation would also help increase understanding, reduce uncertainty and resolve evidence gaps on the environmental impact and effective mitigation for innovative technologies, for example floating solar panels.<sup>42</sup>

### **Upcoming changes and uncertainty**

Biodiversity Net Gain (BNG) will become mandatory on NSIPs from November 2025, providing an opportunity to further integrate nature considerations into NSIP. Local authorities are also currently developing Local Nature Recovery Strategies (LNRSs) that may provide information valuable for siting from an environmental perspective. It is to be seen whether these policy developments will provide better environmental outcomes in the context of the NSIP process.

LNRSs are due to be in place across the whole of England by March 2025.<sup>43</sup>

The Department for Environment, Food and Rural Affairs is expected to publish a Land Use Framework, anticipated to help resolve issues around competing land uses in the UK. How the Land Use Framework and the SSEP will interact is unclear at this stage, noting that the SSEP is expected to include consideration of the environment. EIAs are due to be reformed and replaced with an 'Environmental Outcomes Report' system introduced in the Levelling Up and Regeneration Act 2023. Specific details and implementation plans have not been announced to date.

BNG is viewed as an initial step by environmental stakeholders, with expectations that BNG will be expanded to consider wider environmental net gain.

## 7. The local community user journey

NPS EN-1 mandates that all nationally significant infrastructure projects should mitigate the adverse impacts on local communities and sets out a framework for doing this. The document draws attention to the opportunity for energy development to deliver benefits to communities that are relevant to the local area and provides guidance on the need to balance energy development, the cost of energy to the end consumer, the disruptive impacts on local communities and the possible benefits.

At the national level, policy development includes public consultations. At the project level, developers have a requirement to consult with local authorities, affected persons and communities at the pre-application stage. Local authorities provide a statement on adequacy of the application and may also provide a local impact report, taking into account local community views shared during the process. Members of the public can also attend the examination hearings and, if registered as an interested party, ask questions.

Alongside the planning process and separate to consenting, developers may engage local communities to define the wider benefits to be delivered alongside the development. There are a wide variety of benefits, broadly including finance for local projects, outreach initiatives or direct benefits to individuals in a local area. Separate from discussions between the developer and local communities on wider benefits, the UK Government is recommending mandatory formal 'community benefits' for transmission infrastructure, with an electricity bill discount and funds per km or type of infrastructure.<sup>44</sup> While discussions on benefits are not a material consideration and sit outside the planning consent process, for the local community the separation may not feel relevant.

## Local community views

Factors influencing local community views and decision making, including whether they support, oppose or even engage in the process, can vary hugely across the community and include social, economic, political and environmental factors.<sup>45</sup> Community views may also evolve during the process as information is shared on the specificities of the project including scale and location, and can be influenced by how the process is run and perceptions of procedural justice. Local communities are also not homogeneous.

Polling found 82% overall support for renewable energy in Winter 2023.<sup>46</sup> A recent survey found that 60% of people trust either the UK national government or their local authority to make decisions on solar and wind farm projects, and 59% on electricity grid upgrades.<sup>47</sup> This is within a broader context of low public trust in Government, politicians and the ability to deliver large infrastructure.

Community views (support, opposition, neutral or undecided) can vary at the outset of the process and the early engagement stage. The approach taken by the developer and the initial views in the community can contribute positively or negatively to initial trust and relationship-building between developers and local communities.

Factors affecting community views include the type of infrastructure proposed, its specific location and disruption during construction, impacts and benefits, and perceived distributional and procedural fairness.<sup>48</sup> For example grid transmission infrastructure can face more opposition than renewable energy generation<sup>49</sup>, due to more negative public perceptions and a perceived or real lack of benefits to the local area.<sup>50</sup>

The wider context can also have a bearing, for example if the community are facing a large number of project proposals due to proximity to a grid connection with cumulative impacts or following a negative experience with previous participation in NSIP or other aspects of the planning process. The wider media discourse and political landscape can also have an influence on upfront community views.<sup>51</sup>

It's important to recognise that resistance can't always be overcome and unanimous support is not the aim.

## What works well

- **Early engagement is viewed as good practice** to ensure understanding of projects and enable input of local communities to shape the project, with scope for change more limited during the NSIP process.<sup>52</sup> The success of early engagement however can be dependent on community views at the outset, the engagement methods used by developers and the developer engaging before plans are finalised to allow meaningful community input. Good examples include the use of well-designed visuals and accessible materials, and transparency with regards to design choices, trade-offs and where the community can influence.
- **The NSIP regime provides process certainty**, with a standard process and specific consideration of local communities.<sup>53</sup> The local authority is a statutory consultee and other interested parties can register to input in the process. However, process certainty is not viewed positively across all stakeholders from local communities, especially individuals or groups who feel the proposed development is a done deal and they aren't being listened to.

## Challenges and unintended consequences

- **Some local community groups who have experienced the NSIP process report significant antipathy and anger at the process**, with community engagement and public consultation viewed as a tick box exercise. Co-design or co-development of solutions is not standard practice or required in the current process. Lack of transparency in decision making is also highlighted as an issue, including a lack of transparency in the organisations and stakeholders involved at both the national level shaping policy and the project level making early design decisions. For example, with regards to overhead power lines, local community groups have campaigned against the Energy NPS' starting assumption for overhead power lines and against specific projects, proposing alternative approaches.
- **Clustering of proposals in one location is a significant challenge, with cumulative impacts on the local community.** Depending on the availability of grid connections or demands for new grid infrastructure, some communities may be affected by multiple proposals, at the same time or in sequence. As a project-based process, the NSIP system is not well equipped to account for cumulative impact of multiple projects in one area. Clustering of proposals is also likely to negatively impact local community views, raising concerns about impact and disruption, and straining or limiting resources to engage with each proposal.

- **Building trust between the local community and the developer is an important factor to enable good engagement.** However, trust can be difficult to build if local opposition is high from the onset or good early engagement isn't carried out by the developer. Good engagement requires a certain skillset from both the developer and communities to work well. Similarly, trust can be easily lost if the developer does not apply good practice. Some developers aren't fully transparent with information, the art of the possible or make unrealistic promises. For example, ideas for mitigation of impacts and other opportunities for benefits to the local area may be discussed but then not included into the final proposal, with no or poorly communicated rationale. This can result in loss of trust and negative responses from those who participated in engagement and feel that they weren't listened to.
- **Developers' approach to community engagement varies.** Engagement can be done very poorly, limiting communities' ability to participate in the process and affecting wider trust in developers, views on the proposed project and future proposals. Examples of poor engagement include drop-in meetings scheduled at impractical times (e.g. during the working day), inconvenient locations requiring significant travel for some people, inaccessible or poorly communicated information, or during other local events such as farm shows.
- **Community engagement and influence on the site selection, or route in the case of power lines, can be limited or absent,** contributing to the view that the infrastructure is being imposed on the local community. The choice of location of renewable energy infrastructure is primarily determined by grid connections and geographic conditions such as flat land and windiness or in the case of grid infrastructure by system requirements, for example linking new offshore wind farms to energy demand. Multiple proposals can cluster around a grid connection, prompting concerns of longer or wider scale disruption if multiple proposals are successful as well as engagement fatigue.
- **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** such rooftop solar, energy efficiency or demand reduction. Climate Outreach research found that very few people feel the Westminster or local Government have given them clear, relevant information, or consulted them on the policies and technologies being implemented to transition away from fossil fuels.<sup>54,55</sup> The onus of answering the 'why this project is



needed' and 'why here' questions currently lies with developers, who report that significant time during engagement with local communities can be spent on discussing the overall need for new energy infrastructure rather than the specifics of the project. The limited scope of influence on the design and proposed infrastructure by local communities further contributes to the notion that projects are imposed on them.

- **Local community views may not be prioritised in design decisions when balancing trade-offs.** For example, the regulator will focus on the cost that is passed to the final energy consumer and there is clear policy mandate to minimise impact on end consumer bills. The policy mandate for how to deal with trade-offs is also in some cases unclear or opposed by local community groups.
- **Opposition to projects can be strong and well-organised, from the onset or increasing over time.** In some cases, this leads to wider support from influential stakeholders and the local MP, generating national media coverage.<sup>56</sup> Negative media coverage can affect wider public opinion and creates political pressure, in some cases resulting in delays to decisions by the Secretary of State. Opposition to projects can also decrease over time, for example in the case of onshore wind, polling shows that communities become more supportive once the infrastructure is built.<sup>57</sup>
- A local community is not homogenous. **Engaging the whole community is challenging, in particular time-poor people, those who feel indifferent or social pressures may have limited or no engagement with the process.**<sup>58</sup> The process itself is complex to engage with, hearings can feel daunting and formal, and the technical information and jargon further adds barriers to the engagement of lay people. This can result in a minority dominating engagement. The complexity of information can also lead to misinformation, for example around costs of design choices or differing impacts on landscape and natural habitats, that can vary depending on location.
- **Lack of resources at local authorities and in local groups or organisations can limit effective community engagement and representation in the process.**<sup>59</sup> A legal expert interviewed noted that, during examination, the inspector takes on points on behalf of the local community, in recognition that they don't have the same resources as developers. This has contributed to a view that the planning inspectorate has taken on a role as broker between the developer and local community, detracting from its assessor

role.<sup>60</sup> The Planning Advisory Service has acted on behalf of local communities in some cases, but this is not universal.

- **Negative community experiences have the potential for wider negative consequences.** In the cases where local communities have negative experiences with a proposal, this can impact their views of future proposals. Similarly, issues that arise following consent, during construction, operation or decommissioning of the development, can impact views of future proposals. There are concerns that public support for decarbonisation more widely could become strained or reduce as a result.
- **Views on community benefits vary in reported research.**<sup>61, 62</sup> Although community benefits are completely separate from the consenting process, some local communities have signalled that they consider community benefits in the form of payments as a bribe.<sup>63</sup> The quality of the wider benefits provided to the community may depend on the developer and the extent to which the community are able to advocate for themselves.

### Upcoming changes and uncertainty

The UK Government is due to commission NESO to develop a Strategic Spatial Energy Plan (SSEP) and a Centralised Strategic Network Plan (CSNP), with consideration of local communities. The extent to which communities will be consulted and engaged, and how environmental impacts will be addressed, is uncertain. How this strategic plan will influence and integrate with other spatial and strategic plans, such as regional energy plans and local nature recovery strategies, as well as other local infrastructure such as housing, and the extent to which local communities can engage in all of these is also uncertain.

The UK General Election took place on 4th July. The Labour Party election manifesto included proposals to reform the planning system, with likely policy changes coming from the new Government.<sup>64</sup> The recent King's Speech on 17th July 2024 outlined a new Planning and Infrastructure Bill which will aim to streamline the delivery process for grid and renewable infrastructure.<sup>65</sup>

A key uncertainty is around onshore wind. With very few onshore projects since 2015 and technological developments, local communities will likely be unfamiliar with the increased scale of onshore turbines and local community reaction is uncertain.

The UK Government is proposing to mandate what the Government terms 'community benefits' for transmission infrastructure, develop a community benefits register and provide clear guidance on the benefits.<sup>66</sup> There is a potential risk of legal challenge for other forms of infrastructure, where community benefits aren't mandated.

## 8. System challenges, interdependencies and trade-offs

### Lack of strategic plan, joined-up policy and public engagement

The NSIP process was designed to deliver on a project-by-project basis; a strategic planning approach is still under development. The framework of the SSEP, CNSP and RSEPs should help provide a more integrated approach than currently exists, assuming these plans are developed with public input and environmental assessment. Currently, communicating and balancing national priorities with local impacts is challenging and left to the developer or local planning authorities to explain. An example of missed opportunities for joined-up policymaking are the 2009–2011 NPSs. The Electricity Networks Strategy Group developed an outline map for possible grid reinforcements, but without a strategic environmental assessment, the NPS didn't include the map nor were decisions on trade-offs informed or anticipated, resulting in discussions at the project stage rather than at the strategic level.

The choice of location is not currently based on a holistic assessment of developer requirements, environmental or local community considerations. Rather, the location of proposed renewable energy infrastructure is often primarily driven by the availability of grid connections, for example where former fossil fuel plants have shut down, or the location of grid infrastructure is being driven by the location of offshore windfarms and energy consumers. Other considerations for developers include supply chain and skills. This can result in cascading challenges across the user journeys, with environmental or local specificities coming to the fore later in the planning process.

The Energy Act 2023 and recent changes to the National Policy Statement for Energy<sup>67</sup> have been received positively by energy developers and climate groups, providing certainty on the direction of travel for renewable energy and grid infrastructure. The need to minimise the impacts on communities, nature and landscapes and where possible deliver co-benefits, such as biodiversity net gain (soon becoming a requirement) and local jobs, are highlighted. Stakeholders interviewed however noted remaining lack of clarity, especially with regards to how trade-offs will be considered in

decision-making or how to identify integrated solutions. Clear and up-to-date policy guidance is essential to allow the Planning Inspectorate to be an inquisitor, rather than an arbiter having to navigate unclear or outdated guidance.<sup>68</sup>

Upcoming policy may help address this gap, although information at this stage is limited with policy in development.<sup>69,70</sup> This includes the Strategic Spatial Energy Plan (SSEP), Regional Spatial Energy Plans, Centralised Strategic Network Plan, Land Use Framework, and Local Nature Recovery Plans. The SSEP, as currently proposed, is expected to provide a strategic view of what infrastructure is needed when and where, with consideration of the economy, the environment and communities. The timelines for planned policy changes are not necessarily aligned and how they will join-up is unclear, introducing further uncertainty and lack of stability for users, as well as further demands on time and resources if they are consulted on separately and sequentially.

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. This generates a view that key stakeholders don't have a say, contributing to lack of trust in the process and active opposition to projects. Well-organised opposition to a project can then have knock-on effects, including political stakeholders opposing individual projects, despite being supportive of wider decarbonisation and environmental objectives.

### **Resourcing challenges across the system**

The resource and skill shortage across statutory bodies and local authorities, who need to provide technical expertise and information, contributes to unintended negative consequences and process timeline uncertainty.<sup>71,72</sup> Limited resources can make it challenging for statutory bodies and local communities to participate in early engagement, a crucial moment to improve applications. This challenge is likely to become more acute as the volume of applications increases to deliver the target of net zero power by 2035. In spring 2024, the Government introduced new provisions for some statutory consultees to be able to charge applicants for their services.

Part of the resourcing challenge is the skills shortage and lack of pipeline for key skills, such as planners and ecologists. Demand for these skills is also increasing across the public and private sector, driven by the introduction of requirements such as biodiversity net gain. The number of planners working in the public sector decreased by a quarter between 2009 and 2020 and their

remuneration has been in real term decline.<sup>73</sup> It is also worth noting that resource constraint at the local authority level can have an adverse impact on long term outcomes. For example, local planning authorities need the resource to monitor biodiversity net gain (BNG) over the statutory 30-year period as currently set out in the Environment Act 2021. There is uncertainty with what will happen with regards to monitoring BNG after the statutory period for infrastructure with longer lifetimes.

## Data

Linked to this lack of resource and skills is the challenge of information gathering and sharing between stakeholders. The NSIP process requires significant data and evidence gathering and sharing, critical to decision-making. Inefficiencies, such as the lack of data sharing and duplication, introduce additional strain on resources and time to the process. Sharing data early in the process could enable better engagement and input from environment and community stakeholders on options available. Similarly, the technical nature of the information can introduce barriers to engagement. Digital technology may offer solutions and improvements, noting challenges around trust and commercial sensitivity that will need to be overcome.<sup>74,75</sup> The Department for Environment, Food and Rural Affairs' MAGIC map was identified as a good start.<sup>76</sup>

## Uncertainty

Policy changes, recent planning reform and announced upcoming reform, introduces uncertainty and requires resource from all stakeholders to understand and act upon changes.

The process carries inherent uncertainty, due to a number of factors. The characteristics of the environment are local, and additional requirements for surveys or assessment may emerge as more evidence becomes available. The environmental impacts and public perceptions of innovative technologies may not be well understood initially, with that understanding evolving over time. In some cases, research gaps are known, based on studies conducted in other countries but not in the UK.

Communicating uncertainty can be challenging. Uncertainty may be particularly high at the onset of a project and early engagement needs to navigate this, with potential negative consequences if mismanaged.

## **Trade-offs**

Trade-offs are one of the interdependencies between the user journeys and balancing local impacts and national public interest priorities. Managing trade-offs is complex and in some cases, policy is not viewed as sufficiently clear to support decision-making. Design choices have different location-specific implications for environmental, landscape or community impact, as well as cost. Regulation and land leases can also shape design choices and introduce limitations.

## 9. Next steps for the project

Mapping these user journeys has enabled us to build a better understanding of the shared challenges across the NSIP system and at its boundaries. Following this first phase, this project will look at exploring in further detail two key topics:

- **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 consideration of energy, environment and local community needs from the onset. This deep dive will examine upcoming policies and aim to identify gaps and suggestions for implementation, including interim measures.
- **Early engagement:** early engagement is viewed across all stakeholders as good practice, a critical moment for wider input shaping a project and improving outcomes. This deep dive will examine 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 make the most of opportunities during early engagement.

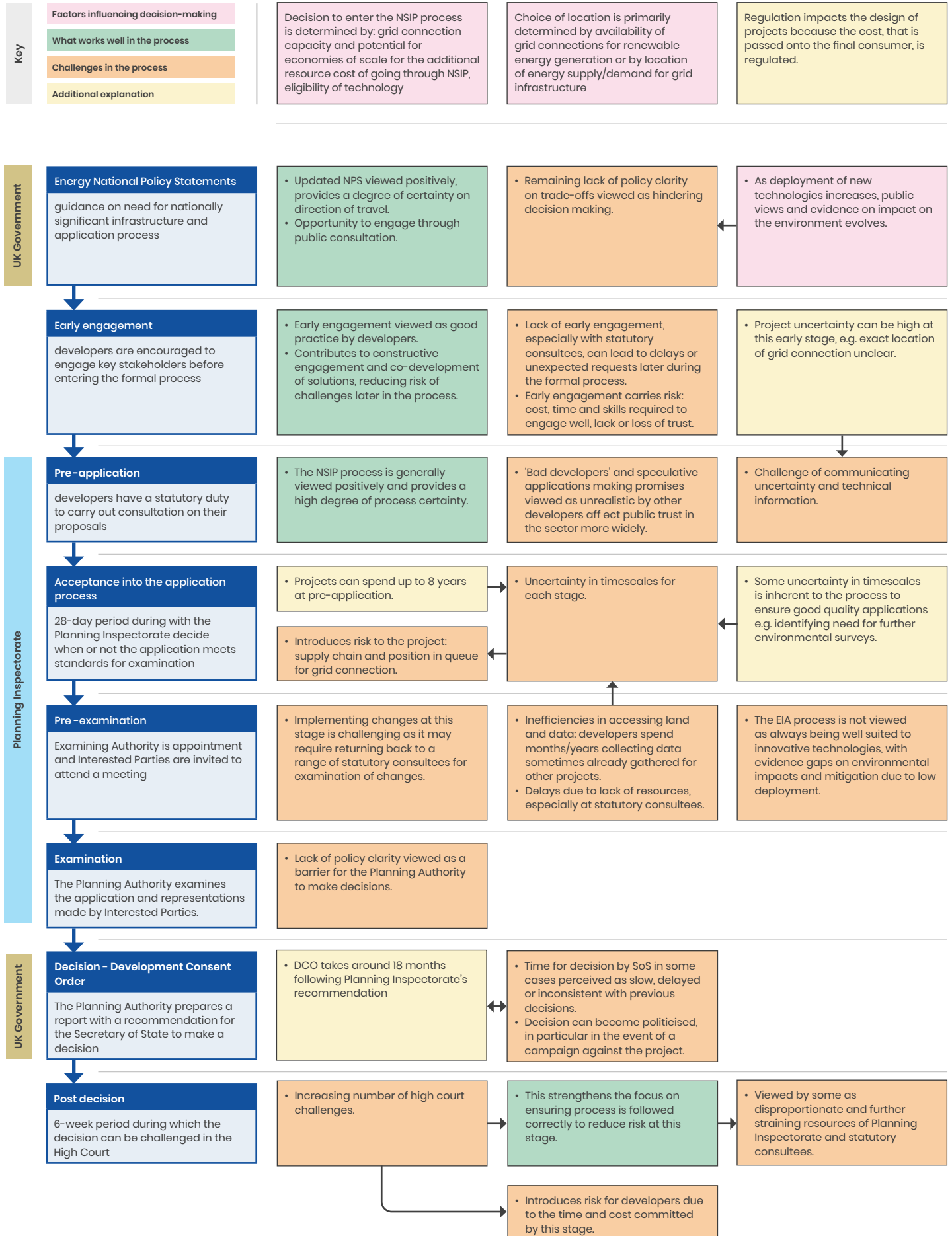
Within these two deep dives, consideration will be given to resourcing, the needs and roles of different stakeholders, including new stakeholders such as NESO and political stakeholders, how the local and national political process interacts with this system, potential for process efficiency improvements, mechanisms for engaging stakeholders and opportunities for the environment and local communities.

The finalised findings of the project and recommendations will be published in autumn 2024.



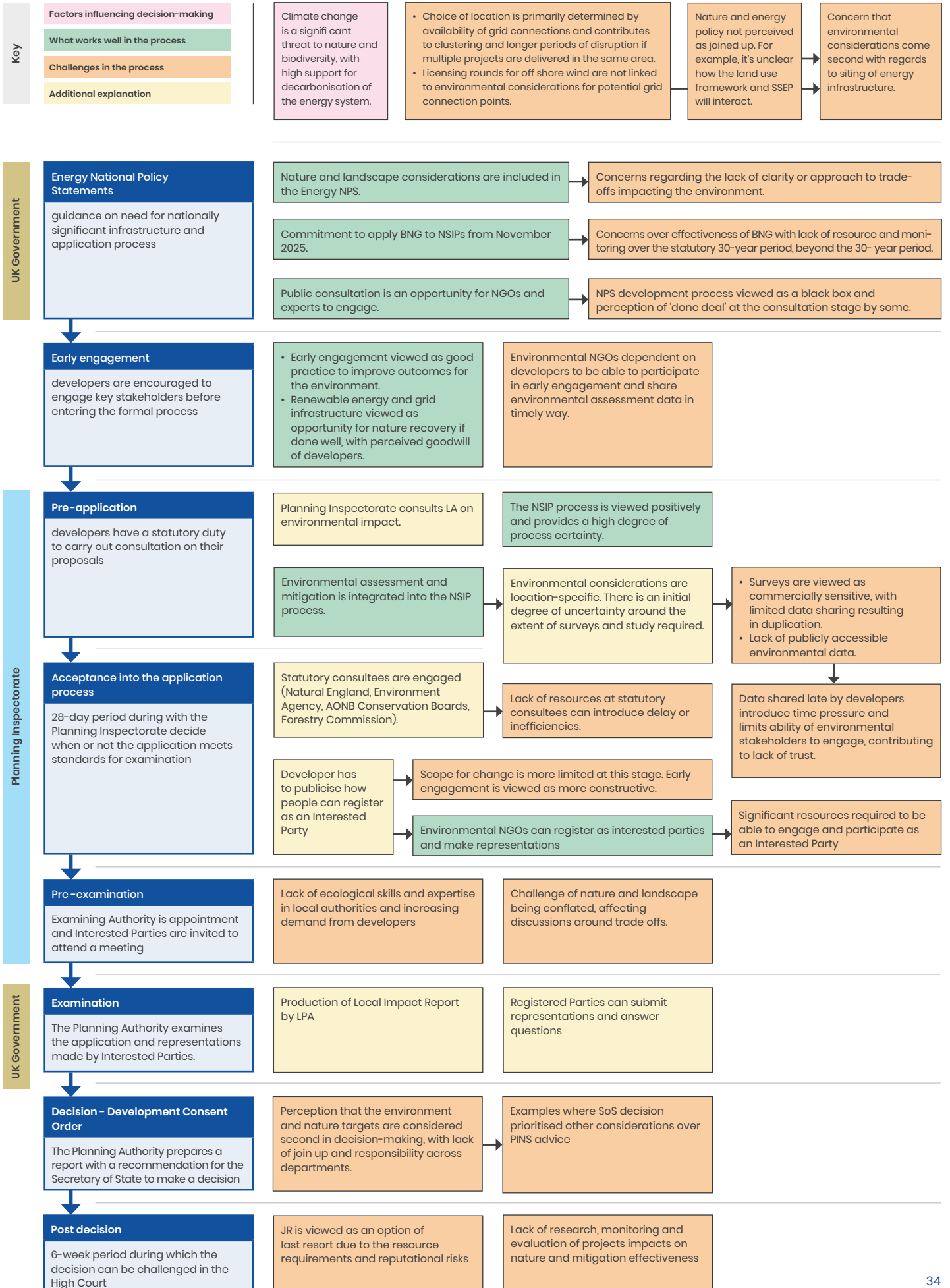
# Annex 1

## User journey: Renewable energy and grid developers



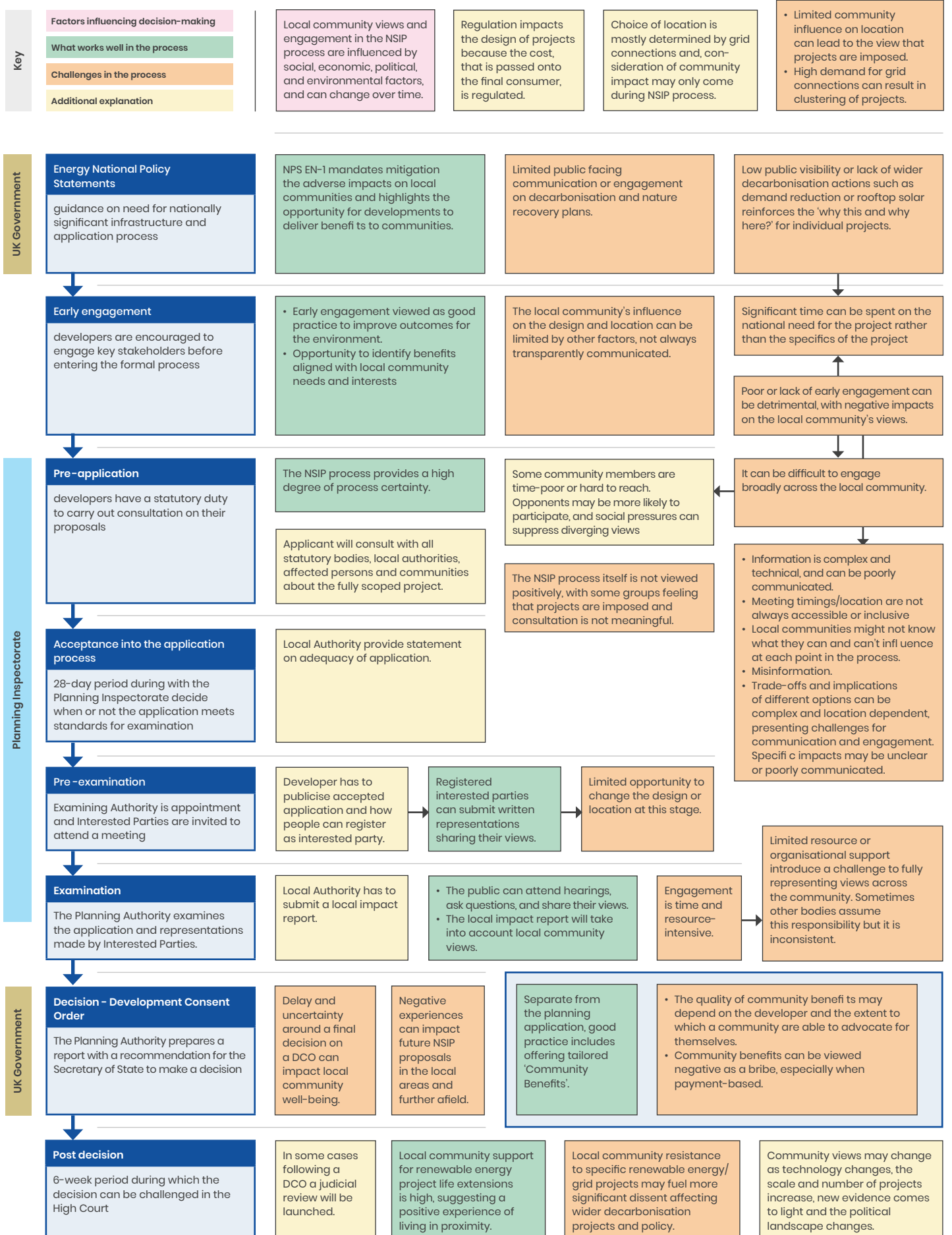
# Annex 2

## User journey: Environment



# Annex 3

## User journey: Local communities



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