

# **Synthesis report 7**

## Phase 7 – Q3/Q4 2022/23

Delivered by Sia Partners

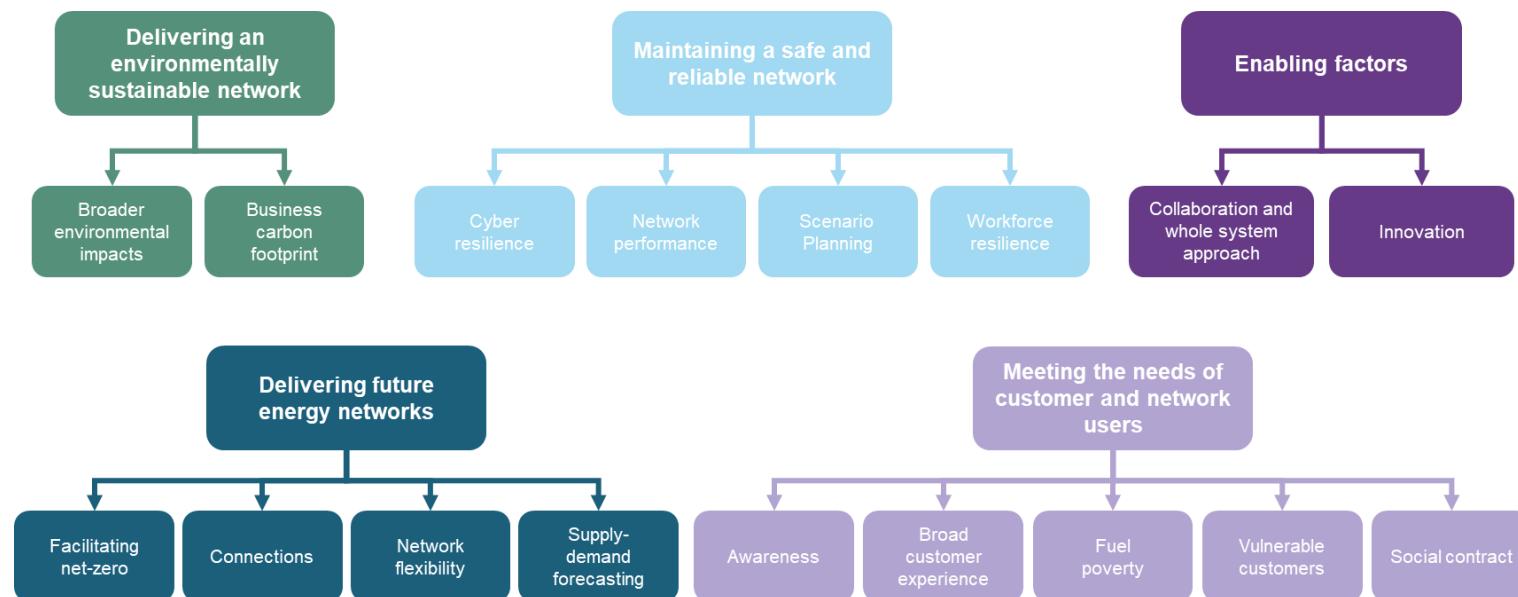
April 2023

# Navigating this report

During the preliminary engagement in 2019, stakeholders were given a blank canvas to discuss the issues which were most important to them. Sia Partners, an independent body, analysed the feedback, grouping it into high-level topics – starting with Ofgem's three output categories, before adding two more for feedback that lay outside of those. Detailed points were then grouped into sub-topics, based on the volume of discussion in each area.

The diagram below visualises the high-level topics, and the sub-topics identified under each one. This report is organised in this structure, with feedback discussed at the sub-topic level. The sub-topics are broadly aligned with the chapters of NGED's business plan, however, there is a large amount of crossover information. It is therefore important that chapter owners review the content in all relevant sub-topics. Identifying the appropriate structure for feedback early in the process (in 2019), allows NGED to understand how feedback has changed over time; with stakeholder views getting more specific as we approach a final business plan.

These reports and this structure will be used in a similar manner for business-as-usual engagement. While topics may be reorganised around the themes/chapters/commitments of the plan, the principle of continuity will remain, allowing leads and stakeholders to see how feedback/opinion has changed over time.



# Summary of Phase 7 Engagement

National Grid Electricity Distribution (NGED) recently completed their RIIO-ED2 engagement programme and subsequently submitted their final business plan to Ofgem. Synthesis reports were created including:

1. Phase 1: Preliminary Engagement (February 2020)
2. Phase 2: Business Plan Development (July 2020)
3. Phase 3: Defining Outputs (January 2021)
4. Phase 4: Business Plan Refinement (May 2021)
5. Phase 5a & 5b: Business Plan Acceptance Testing & Business Plan Gap Analysis (October 2021)
6. Phase 6: Post Draft determination engagement

The seventh stage of this engagement programme builds on the previous work by testing how stakeholder opinions have changed since the submission of the final draft business plan.

This report covers the engagement conducted directly following that submission, in the late half of 2022 and early 2023. This document collates the feedback collected during the seventh phase of engagement, drawn from 14 sources, covering 497 stakeholders, resulting in a total of 456 pieces feedback – summarised and detailed in the pages below.

A summary of the feedback collected during the previous phase has also been included for each sub-topic. Thus far, since recording data in this format (09/2019 onwards), NGED has engaged 15,686 stakeholders, collecting a total of 10,761 pieces of feedback, across 123 total sources.

## Topics covered

As mentioned above, the synthesis work during this phase tested stakeholders' understanding and acceptability of commitments', stakeholders were engaged across a variety of forums and methods from in person and virtual workshops to virtual consumer feedback groups.

The workshops were designed to seek feedback from stakeholders on NG's commitments in the following areas: a smart and flexible network; connections; community energy; innovation; environment and sustainability; customers in vulnerable situations; Social Contract; customer service; network resilience; safety; IT and cyber; and workforce resilience. NGED were looking to get the views of stakeholders across the four-distribution network areas

Each sub-topic is discussed separately and includes a summary and the specific feedback collected. The full detail on each source of feedback can be found in the table in the appendix. The content compiled on each sub-topic has been divided into themes where it is discussed and summarised. The summaries identified under each sub-topic will ultimately validate the triangulation process – informing NGED's decision-makers of any outstanding key customer and stakeholder concerns.

## Stakeholders engaged

The figures below provide a picture of the ‘post-submission’ stage in terms of the stakeholders engaged, their knowledge levels, and the geographical regions covered. Where such information was not recorded, it has been indicated that there was no regional data available. Three methods of engagement were utilised for this engagement phase: Regional in-person workshops (40%), Hybrid workshops combining in-person and online sessions (43%) and completely online session (17%).

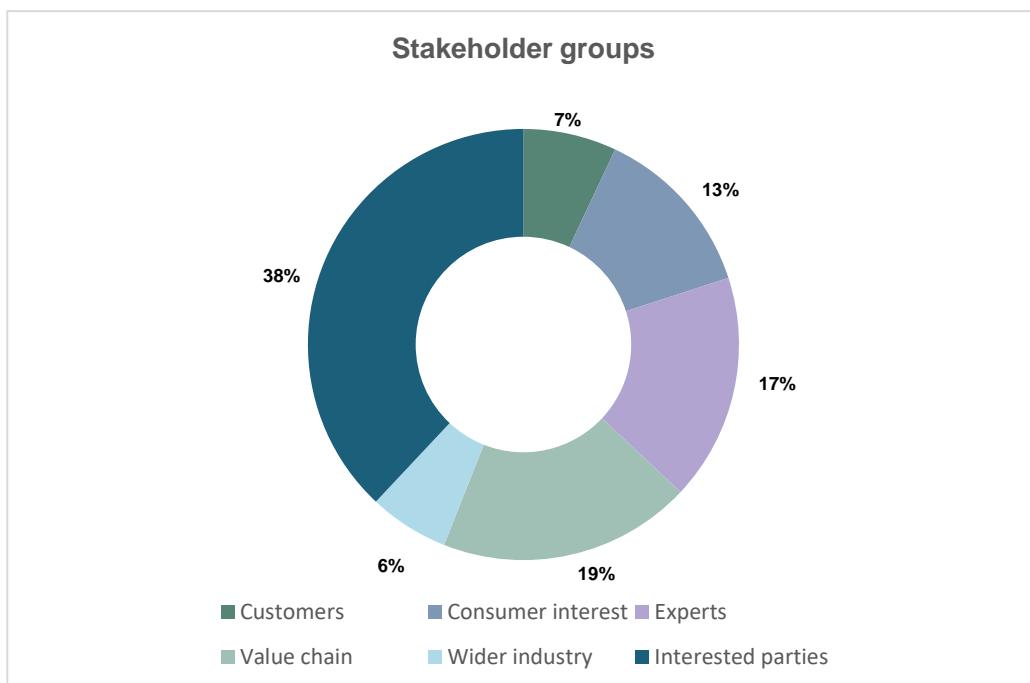


Figure 1: The proportions of stakeholder groups engaged during Phase 7 of NGED’s engagement.

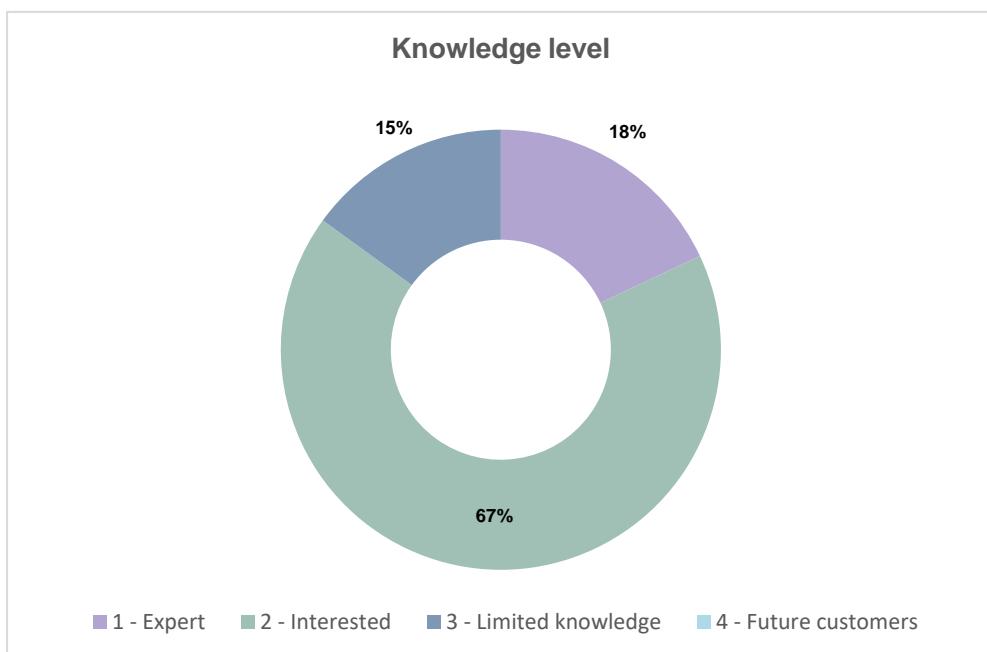


Figure 2: Breakdown of stakeholder knowledge level during Phase 7 of NGED’s engagement

The table below details the number of stakeholders that attended Phase 7 of the Post-submission engagement events from each segment.

| Stakeholder group  | Segment  | Number attended |
|--------------------|--|-----------------|
| Customers          | Business customers   | 11              |
|                    | Distributed generation customers                           | 16              |
|                    | Domestic customers   | 3               |
|                    | Major energy users   | 5               |
|                    | Major connections customers                                | 1               |
| Interested parties | Emergency services   | 3               |
|                    | Healthcare   | 1               |
|                    | Local authorities  | 127             |
|                    | Local Enterprise Partnerships                              | 10              |
|                    | Non-governmental organisations                             | 3               |
|                    | Other  | 42              |
|                    | Trade associations   | 3               |
| Consumer interest  | Charities  | 36              |
|                    | Consumer interest bodies                                   | 12              |
|                    | Parish councils  | 13              |
|                    | Vulnerable customer representatives                        | 2               |
| Wider industry     | Community energy groups                                    | 11              |
|                    | Utilities  | 17              |
| Experts            | Academic institutions                                      | 14              |
|                    | Energy Consultant  | 48              |
|                    | Environmental groups                                       | 11              |
|                    | Government   | 14              |
| Value chain        | Connections providers                                      | 21              |
|                    | Developers   | 39              |
|                    | Electric vehicle charge point manufacturers and installers | 5               |
|                    | IDNO   | 14              |
|                    | Storage / renewables providers and installers              | 14              |
|                    | Energy aggregators   | 1               |
| <b>Total</b>       |  | <b>497</b>      |

Figure 3: The number of stakeholders from each segment that attended Phase 7 workshops. Note: NGED Stakeholders have been excluded from these totals.

## Feedback collected

Feedback from these stakeholders was initially recorded by the organisation running the events – either NGED, Regen, Accent or EQ communications - and has now been documented in NGED's central feedback database. Each specific point of view has been recorded as a separate statement and grouped into high-level topics and sub-topics by Sia Partners who are running the process.

The table below sums the feedback, organised by these high-level and sub-topics, collected throughout Phase 7 of NGED's engagement. The remainder of this report will cover the detail, laying out the specific comments in each area.

| <b>High-level topic</b>   | <b>Sub-topic</b>                        | <b># of feedback</b> |
|---|---|----------------------|
| Meeting the needs of customers and network users<br><b>(36%)</b>  | Awareness                               | 35                   |
|   | Broad customer experience               | 55                   |
|   | Fuel poverty                            | 12                   |
|   | Social contract                         | 18                   |
|   | Vulnerable customers                    | 45                   |
| Maintaining a safe and reliable network<br><b>(21%)</b>           | Cyber resilience                        | 11                   |
|   | Network performance                     | 34                   |
|   | Scenario planning                       | 30                   |
|   | Workforce resilience                    | 21                   |
| Delivering an environmentally sustainable network<br><b>(12%)</b> | Business carbon footprint               | 18                   |
|   | Broader environmental impacts           | 36                   |
| Delivering future energy networks<br><b>(20%)</b>                 | Connections                             | 38                   |
|   | Facilitating net-zero                   | 12                   |
|   | Network flexibility                     | 20                   |
|   | Supply-demand forecasting               | 23                   |
| Enabling factors<br><b>(11%)</b>                                  | Collaboration and whole system approach | 33                   |
|   | Innovation                              | 15                   |
| <b>Total</b>  |   | <b>456</b>           |

Figure 4: The breakdown of feedback volume collected for each high-level topic and sub-topic.

## Table of Contents

|   |    |
|---|----|
| Navigating this report .....  | 2  |
| Summary of Phase 7 Engagement .....                                       | 3  |
| High-level topic: Meeting the needs of customers and network users.....   | 8  |
| Sub-topic: Awareness .....  | 8  |
| Sub-topic: Broad customer experience .....                                | 11 |
| Sub-topic: Fuel Poverty.....  | 15 |
| Sub-topic: Social contract .....  | 18 |
| Sub-topic: Vulnerable Customers .....                                     | 21 |
| High-level topic: Maintaining a safe and reliable network.....            | 25 |
| Sub-topic: Cyber resilience .....   | 25 |
| Sub-topic: Network performance.....                                       | 27 |
| Sub-topic: Scenario planning .....  | 30 |
| Sub-topic: Workforce resilience .....                                     | 32 |
| High-level topic: Delivering an environmentally sustainable network ..... | 35 |
| Sub-topic: Business carbon footprint .....                                | 35 |
| Sub-topic: Broader environmental impacts .....                            | 37 |
| High-level topic: Delivering future energy networks. ....                 | 40 |
| Sub-topic: Connections .....  | 40 |
| Sub-topic: Network flexibility .....                                      | 43 |
| Sub-topic: Facilitating net-zero.....                                     | 46 |
| Sub-topic: Supply-demand forecasting .....                                | 49 |
| High-level topic: Enabling factors .....                                  | 52 |
| Sub-topic: Collaboration and whole system approach .....                  | 52 |
| Sub-topic: Innovation .....   | 55 |
| High-level topic: Business Planning .....                                 | 58 |
| Sub-topic: Acceptability.....   | 58 |
| Appendix 1 – All engagement sources .....                                 | 59 |
| Appendix 2 – Glossary .....   | 62 |

# **High-level topic: Meeting the needs of customers and network users.**

## **Sub-topic: Awareness**

### **What we heard from 2019 to 2022:**

In 2019, stakeholders had limited knowledge about NGED (National Grid Electricity Distribution) and its role in the electricity sector, as well as its social responsibilities, particularly towards vulnerable customers. This lack of awareness posed challenges when stakeholders attempted to assess and engage in NGED's performance. To address this issue, the future NGED Business Plan aimed to provide more comprehensive information on various aspects, including new connections, services, innovation, the transition to a Distribution System Operator (DSO), project application processes, the Electric Nation project, and the deployment of new electric vehicle (EV) charging infrastructure.

By 2020, stakeholders emphasized the importance of NGED improving brand awareness and ensuring clarity regarding its activities. They recognized NGED's crucial role in educating and communicating essential information to stakeholders and customers across various topics, such as vulnerability and new technologies. It was suggested that NGED should leverage online educational platforms and direct messaging to customers to effectively deliver this information. Additionally, collaboration with stakeholders was identified as a crucial mechanism for reducing future customer demand.

In 2021, stakeholders continued to stress the need for NGED to raise awareness and provide education about its projects, initiatives, and the implementation of new technologies. The focus shifted towards educating residents and the public who had limited knowledge and expertise in this area. Stakeholders also highlighted the importance of public safety awareness, particularly in educating contractors and younger individuals operating machinery about safety issues. Additionally, there was an emphasis on educating children from an early age about electrical safety.

In summary, stakeholders initially lacked awareness about NGED and its social responsibilities. Over time, there was an increasing focus on raising awareness, education, and effective communication regarding NGED's projects, initiatives, new technologies, DSO transition, and public safety awareness. The need for collaboration and leveraging online platforms to disseminate information and educate stakeholders and customers became evident.

### **Summary of Phase 7 feedback**

- 1.1 When discussing Awareness, stakeholders talked at length about raising the awareness throughout each element of the community across a number of different subjects. From how NGED conduct their business to which sections of society need focused on, there was detailed discussion around how to reach people and how this should be done.
- 1.2 Regarding feedback, stakeholders had many suggestions for how they thought the performance could be measured; many thought the performance should be measured by stakeholder-defined metrics or by Key Performance Indicators (KPIs).

- 1.3 A total of **33** pieces of feedback were collected for Broad Customer Experience during Phase 7 engagement, which adds to the **458** collected during the previous phases.

## Detailed feedback

Feedback for Awareness experience falls under three themes:

- Information availability
- Vulnerable Customers
- Accountability and performance measurement

### Information availability

- 1.4 A government stakeholder suggested making all information around NGED plans more readily available, it was intimated that if people can find out the information themselves, it will mean they are less likely to complain. (E156)
- 1.5 One measure that appeared was the use of media to deliver messaging, Facebook, Instagram, and Twitter, but also radio and newspapers. The need to promote it amongst many platforms, so more people know about it. (E159)
- 1.6 A developer suggested social media campaigns or wider advertising may be a better solution than sending out packs to children, that they might not even read and would end up being a waste of money. A headteacher could simply call an assembly and give a talk on the matter. (E159)
- 1.7 Building on the importance of having a local presence in communities, Stakeholders were also keen for NG to use a wide network of local contact points to reach this group and spread key messages about the support available. (E159)
- 1.8 A member of an Environmental group suggested NGED classify stakeholders and have a clear taxonomy of who stakeholders are and what their requirements are to allow some clear messaging. (E160)
- 1.9 An Environmental group representative felt that “to bring energy to life” has multiple meanings asked NGED to try and ensure participants such as CE groups, a growing sector of stakeholder groups, are included in all the branding and leaflets. (E162)
- 1.10 There should be some action from the government, such as advertising campaigns telling peoples what's out there. This could socialise and take away some of that stigma. (E159)

### Vulnerable Customers

- 1.11 It was suggested that NGED or its colleagues/customers can ask lots of people if they have any friends or family who may need support, as if they don't need it

themselves, they might know someone who does. A lot of people don't know they are eligible for these grants. (E159)

- 1.12 Alongside this it was suggested that Feeding Britain, a huge resource, could be used to reach customers, they have a huge spider's web of contacts across the whole country. There's a website called Warm Spaces which is a great resource as well. (E159)
- 1.13 One popular option was providing training to local representatives on how to spot signs of potential hardship, and how to direct these kinds of customers towards the right support. Some participants also felt that these personal one-to-one interventions could be supported by NG datasets on low grid-loading. (E159)
- 1.14 One relevant barrier highlighted by Stakeholders was a lack of control in decision making. Stakeholders noted that the large number of public and private renters would be unable to make their own decisions about whether to install smart technologies into their rented dwellings. (E159)

### **Accountability and performance measurement**

- 1.15 Stakeholders had many suggestions for how they thought the performance of a DSO could be measured. At base level, many thought the performance should be measured by stakeholder-defined metrics, as there were concerns that allowing the DSO to define the targets could result in goalposts being moved.
- 1.16 Key Performance Indicators (KPIs) that measure the extent that DSOs are using flexible connections were also seen as a key performance metric for stakeholders to assess performance, and whether DSOs were using every megawatt of capacity every hour of the day, thereby achieving an efficient balance of services and providing flexibility to ensure that substations are always at capacity.

## **Sub-topic: Broad customer experience**

### **What we heard from 2019 to 2022:**

In 2019, stakeholders identified addressing affordability as the second highest priority in the Business Plan. While the current ED1 situation was seen as providing good value for money, there were varying priorities for future investment and bill reduction. Customer service was also highlighted, emphasizing the need for clear communication during power cuts and a designated contact point for connection customers.

In 2020, stakeholders emphasized the importance of improving brand awareness and communication. They recommended utilizing different methods such as online platforms and direct messages to reach out to customers, including those who are harder to contact. Collaboration with industry players was seen as valuable for identifying demand reduction practices.

In 2021, stakeholders acknowledged NGED's high level of customer service but stressed the need for ongoing improvement, particularly due to the impact of Covid-19 and increasing demand from electrification initiatives. Effective communication during power cuts, especially for vulnerable customers, was emphasized. Stakeholders agreed on the importance of balancing ambition and cost. Various communication processes were discussed, highlighting the need to include non-digital native or vulnerable customers. The telephone was preferred for communication during power cuts, while text messages were considered effective for planned work notifications. However, some stakeholders were unaware of NGED's digital services.

During the last phase, when discussing the customer experience, stakeholders were pleased with the speed and scope of customer support during severe weather events. However, they suggested using multiple communication channels such as text messages, WhatsApp messages, social media posts, and radio, for sending updates to customers before, during and after storm events. The need to use different communication channels was particularly acute for vulnerable people to ensure they receive the support they need. Some stakeholders suggested that customers would be more likely to engage with information sent using digital channels as these types of communications would be easier to find than paper-based information packs.

At the same time, others acknowledged the potential problems around these channels, including poor signals in remote rural areas, a lack of electricity to charge the devices receiving them and a lack of digital engagement among some of the vulnerable population. It was stressed that NGED should use every type of communications approach available to ensure that every customer could be contacted, irrespective of their location or circumstances. Ofgem's decision to enforce DNOs to contact customers 24/7 in the event of a power cut was discussed, and stakeholders strongly disagreed with it.

Regarding community and power cuts, stakeholders want NGED to signpost further the support available to communities and partner with local groups to provide emergency support, and more granular information about the power restoration process with accessible communications about the restoration status of local communities.

Stakeholders stressed that NGED should work in partnership with local groups to deliver emergency support, as they would be more trusted within their communities and more approachable as a result. Local figures, bodies, and infrastructure were identified as potential partners for sending out paper-based information packs prior to storms. It was suggested that these figures can be community centres, community first responders, and parish councils as they were trusted figures within their communities.

## Summary of Phase 7 feedback

- 2.1 When discussing the customer experience, stakeholders were keen to continue previous themes around communication and guidance as well as discussing ways to help the more vulnerable elements of the customer base. It was felt that communications need to be carefully planned out and inclusive of all customer groups.
- 2.2 There were also issues and discussions around the level of customer satisfaction that was both being achieved and needed to be achieved. This coincided with discussions around vulnerable groups.
- 2.3 Final aspect of discussions was around the data collected and the systems which the customer had to interact with.
- 2.4 A total of **55** pieces of feedback were collected for Broad Customer Experience during Phase 7 engagement, which adds to the **482** collected during the previous phases.

## Detailed feedback

**Feedback for Broad customer experience falls under three themes:**

- Customer satisfaction and financial implications
- Communications
- Data management

### Customer satisfaction and financial implications

- 2.5 A Customer stakeholder was concerned about worrying people by including load blocks, but we are clear that RLD interruptions remain unlikely and our message is calming. (E161)
- 2.6 An Environmental group representative noted there are several issues for consideration, fuel poverty, power supply vulnerability, growth of community energy and risk of rota disconnections. (E162)
- 2.7 There were calls from stakeholders to ensure that NG's approach to rolling out charging infrastructure included public areas so that new EV owners, including those who live in terraced homes and apartment blocks, would not be disadvantaged. (E165)
- 2.8 There was a consensus that the initial reaction to the introduction of smart meters had been negative. It was commented that many were confused by them and generally mistrusted them, as they did not understand how they work or their potential benefits for customers. (E159)
- 2.9 Commitment 30, Resolve at least 90% of complaints within one day, and 99% of complaints within 25 days, was met with an understanding of a slight reduction in ambition was acceptable here, as long as the resolution of 90% of complaints within one day was maintained. (E153)

- 2.10 There could be great value in NG supporting a Connections Customers User Group to enable a greater level of location, or regional-based activity to both support such customers represented in the room today and to provide NG with early insights into their concerns. (E165)

## Communications

- 2.11 One vulnerable customer representative suggested it was about helping customers to build their own resilience for example if the lights do go off, how can you support customers to manage with this? Communication with customers and businesses helps manage expectations and give reassurance. (E154)
- 2.12 A charity stakeholder commented about having various teams that can help with money, debt or housing, and how people can be referred to into their team. That way, they can take stress away from individuals or organisations who can't commit to a larger project. (E159)
- 2.13 There were calls for NG to make the LAEP process less onerous and to provide more guidance on the information required, and there was a general feeling that the process should be simplified wherever possible. (E165)
- 2.14 Stakeholders were strongly of the view that Smart Energy Action Plans need to be relevant to individual customers' situations and easily accessible. As a result, they stressed that these plans need to use simple language that could be understood by all customers, and that they must be available in digital and hard formats so that customers without technological resources or expertise are not excluded. (E159)
- 2.15 A Business customer noted that as well as management agreeing these actions it was important that staff endorsed the principle of still allowing face to face or telephone contact if customers wished. (E160)

## Data Management

- 2.16 When evaluating the self-assessment tool and same day connection times, most people (74%) feel that this time frame can be reduced by 20% or more with 4% feeling the commitment can be removed altogether. (E153)
- 2.17 There was some robust feedback relating to CRMs generally in the industry, with some stakeholders feeling that none of them worked particularly well. Some felt that calling it a 'customer relationship tool' was a misnomer, as it could never replace the effectiveness of picking up the phone and speaking to a planner. (E166)
- 2.18 A consistent approach across the DNO portals was also seen to be a real goal – working across different portals, which require different datasets, was felt to be needlessly challenging for customers. This complexity was also seen to make life difficult for 'occasional connectors', who do not have the vast experience of regular, more experienced users. The system should be accessible, and comprehensible, to all. (E166)
- 2.19 According to a developer the information requirements vary considerably based on the stage of the application process. In the pre-acceptance phase, one would seek

knowledge about potential capacity and queues, whereas in the post-acceptance phase, understanding the statement of works and construction becomes crucial. (E166)

## Sub-topic: Fuel Poverty

### What we heard from 2019 to 2022:

In 2019, stakeholders had a low priority for addressing fuel poverty but acknowledged NGED's limited ability to assist due to its contribution of only about 20% to the bill. However, stakeholders were pleased with the actions taken and suggested educating fuel-poor customers and providing staff training as future improvements.

In 2020, stakeholders emphasized NGED's responsibility to help reduce fuel poverty. They proposed identifying fuel-poor individuals, collecting data, and accurate mapping. Stakeholders recommended initiatives such as improving customer insulation, facilitating access to affordable electricity from low-carbon sources, and planning for future solutions like peer-to-peer trading and advocating for better electricity tariffs.

In 2021, stakeholders believed that the Covid-19 pandemic worsened fuel poverty, requiring increased efforts from NGED for identification and support. They called for more ambitious targets to address the growing number of struggling customers, while a minority felt the government or suppliers should take greater responsibility.

Collaboration and data sharing among organizations and suppliers, including healthcare providers and emergency services, were seen as crucial for reducing fuel poverty. In the second half of 2021, stakeholders anticipated greater financial challenges for customers in RIIO-ED2 and noted changes in energy consumption patterns due to remote work.

During the last phase stakeholders have suggested affordability as a new priority for National Grid Electricity System Operator (NGED) alongside social inclusion, climate change, stakeholder engagement, change, and risk management.

During a vulnerability and affordability workshop held in June 2022, stakeholders voted for affordability as the highest priority for NGED's sustainability, followed by fair and just transition. There was a feeling that NGED needed to acknowledge the importance of affordability as a priority across its entire RIIO-ED2 Business Plan, particularly as the cost-of-living crisis began to bite.

Stakeholders wanted to better understand NGED's reaction to shocks within the year, including the rise in fuel prices and how they expect to manage them looking forward. Rising costs and a lack of household income were highlighted as the key factors driving fuel poverty. Stakeholders suggested subsidised insulation and debt support as the focus areas for the Energy Affordability Fund.

Customers wanted NGED to be highly agile and flexible, with the ability to focus funds on areas of changing needs. Fuel poverty was the most popular option, followed by community conservation. Many remote areas have off-grid gas connections and cannot get cheaper dual-fuel plans, so stakeholders felt there was a big opportunity for NGED to assist these remote areas by bringing their energy prices down through cheaper renewable energy options.

### Summary of Phase 7 feedback

- 3.1 Affordability was suggested as a new priority, along with social inclusion, climate change, and stakeholder engagement. NGED outlined to stakeholders that it aims to keep customers' bills broadly flat in ED2 (at around £98 per year). Despite this,

stakeholders suggested affordability as a new priority for NGED, along with stakeholder engagement, followed by change and risk management.

- 3.2 Stakeholders were keen to discuss the fuel price crisis, particularly regarding what the fuel poverty partners were doing in this area. They also highlighted rising costs and a lack of household income as the key factors driving fuel poverty.
- 3.3 A total of **24** pieces of feedback were collected for Fuel Poverty during Phase 7 engagement, which adds to the **244** collected during previous phases.

## Detailed feedback

### Feedback for Fuel Poverty falls under three themes:

- Cost of living
- Awareness
- Challenges around advice

#### Cost of Living

- 3.4 Stakeholders identified three key areas constituting immediate crises in their local communities. The most pressing was the cost-of-living crisis. Huge numbers of Stakeholders noted that more people were asking for help than ever before in their local communities, with requests for fuel vouchers spiking. (E158)
- 3.5 Many also stated that these rising bills were dragging new individuals into fuel poverty, and many were concerned that these people were too proud to come forward for help, leaving them languishing in fuel poverty. (E159)
- 3.6 The EPC, which is one of the indicators of fuel poverty is a great indicator of situations. If someone has lived in their house for 40 or 50 years, they never think about it. They don't know if their house is energy inefficient, and they don't know whether to identify themselves as living in fuel poverty. (E159)
- 3.7 A consumer body stakeholder stated that in reference to Smart Energy Plans, people in extreme fuel poverty will not find this issue relevant. They're already using the least amount of energy they can and won't be the ones putting PV on their roofs. (E158)
- 3.8 During discussions on the 'Customers in vulnerable situations' commitments, the overwhelming message from participants was that this support for the vulnerable and fuel-poor is currently utterly vital. They therefore urged NGED to do everything that it could to help these families with their bills. (E158)
- 3.9 When discussing Commitment 18 stakeholders commented that given the likely rise in fuel poverty triggered by the ongoing energy bill crisis, a small number of attendees thought that NGED should not be fully responsible for the work of this commitment. (E156)

- 3.10 When looking at Commitment 19 a local authority representative suggested that everyone needs a Smart Energy Action Plan, and not just people on the PSR. People not on the register should also be supported. Think about how you link in with the emergency services. (E156)
- 3.11 Charity stakeholders were concerned across the board with commitments 18-22, there was concern that NGED actions may push up supply costs and push more people into fuel poverty. It was suggested that general taxation should be used for funding. (E156)
- 3.12 There was a general feeling across most engagements that fuel poverty issues were going to increase. However, some felt that this could be used as a bargaining tool for Ofgem, showing them that if this area is not fully funded, the wider national strategy regarding fuel poverty and vulnerability will be negatively affected. 84% voted to keep this commitment at its current level. (E153)

## Awareness

- 3.13 An area identified was a lack of awareness of these support schemes, and difficulties in accessing them. Many participants remarked that uptake of support, such as government support packages or fuel vouchers, has been lower than expected, as people are simply unaware that they are entitled to it. (E159)
- 3.14 Stakeholders remarked that NGED aren't getting the message out about the £500 voucher for people on prepayment meters. Many people who are entitled have not contacted their suppliers. (E159)

## Challenges around advice

- 3.15 Generally it was understood that currently in today's market it's harder to recruit as there are less stressful jobs for the same money. People giving fuel poverty advice are at breaking point. NGED need to realise the extent of the challenge of giving fuel poverty advice at the moment and should increase the scale of your ambition whilst recognising it is incredibly difficult. (E159)

## Sub-topic: Social contract

### What we heard from 2019 to 2022:

In 2019, stakeholders had varying opinions on the form and placement of a social contract within the business plan, but agreed that it should address workforce efforts, diversity, pay, and transparency of NGED's finances and social partners. Increasing transparency was seen as crucial for improving customer trust.

In 2020, stakeholders discussed the societal impact of NGED's choice of pension fund, advocating against funding unsustainable companies. Stakeholders in Swansea emphasized aligning NGED's social contract with the Welsh government's well-being act to learn valuable lessons.

In 2021, stakeholders in the South-West focused on delivering environmental benefits, meeting Net Zero targets, and addressing customer vulnerability and fuel poverty. Local or regional commitments were deemed important despite NGED's widespread network area. The impacts of Covid-19, affordability concerns, the environmental crisis, and workforce resilience increased the significance of the social contract. Stakeholders proposed partnering with local councils and social housing providers, while also highlighting the need to explore opportunities for sharing surplus electricity through smart energy networks and microgrids.

During the last phase stakeholders supported the initiative to install solar panels on school roofs but felt that it could be applied to other public buildings, such as community centres and care homes. They suggested using these panels as a vehicle for educational programmes for school children and as a source of free electricity for the most vulnerable in communities. Stakeholders thought that affordability, vulnerability, and debt support should be the main future focus areas of the Community Matters Fund, and NGED was urged to provide tools to boost community self-resilience during storms and assist rural communities in helping them access EV charging infrastructure more readily.

Stakeholders put forward several additional areas they would like to see covered by the Social Contract, including traineeships, assistance with retrofitting homes and funds for low-carbon heating. While stakeholders praised the community projects with schools, they felt that NGED could go further and target care homes, community centres, nursing homes and local community sports facilities.

In terms of involvement and communication, stakeholders suggested that NGED should be liaising with local groups, such as charities, local authorities, community energy groups, and school-run organisations, to improve local resilience. They also suggested that Wales's centralised school funding model could be useful for disseminating information about this initiative to all schools in Wales.

### Summary of Phase 7 feedback

- 4.1 The feedback for Social Contract focused on energy schemes, vulnerable customers, and commitments between NGED and its clients. Supporting growth and nurturing connections between NGED and its communities was seen as invaluable.

- 4.2 There were calls to maintain commitments supporting vulnerable customers, however, some participants saw these initiatives as a social provision and questioned whether NG should have to deliver this support. There were also calls to work together with other utilities companies to develop a common support framework and shared messaging about the help available to customers who are just about managing.
- 4.3 A total of **18** pieces of feedback were collected for Social Contract during Phase 7 engagement, which adds to the **510** collected during previous phases.

## Detailed feedback

**Feedback for Social contract can be divided into three themes:**

- Community energy schemes
- Social Contract commitments
- Safety and vulnerable customers

### Community energy schemes

- 4.4 A slight majority of respondents (56%) feel that NGED should maintain its ambitions in supporting growth in communities' energy schemes by facilitating access to funding streams. Despite this majority the feedback points more towards the large minority who feel it should be scaled back or removed entirely. (E153)
- 4.5 House and rental prices are increasing so much at the moment, and it is astronomical, and it means that they might have to move away from where they are living altogether because the houses are so expensive. (E159)
- 4.6 Providing and nurturing the connection between NG and its communities was seen to be invaluable, this is why maintaining the current ambition around Commitment 23 is supported by the majority of respondents (71%) (E153)

### Social Contract commitments

- 4.7 There were multiple calls from stakeholders to work together with other utilities companies to develop a common support framework and shared messaging about the help available to customers who are just about managing. (E159)
- 4.8 Some argued that public contracts should be published more regularly however there was some push back on the true cost of them alongside their effectiveness. There was detailed discussion around who truly reads them and what they achieve. (E153 & E156)
- 4.9 Energy consultants, amongst others, discussed the expansion of commitments such as Commitment 24 to include schools and working alongside communities who engage with local schools. (E154)
- 4.10 Corporate social responsibility was mentioned in a few discussions as it was seen as a key element of social contracts. It was seen as important to any business strategy, as you now need to be seen as more than just a business. (E158)

## **Safety and vulnerable customers**

- 4.11 At the same time, despite being fully supportive of NG's intentions around supporting vulnerable customers, a number questioned whether the company should have to do so. Several participants saw these initiatives as a social provision and were angry that NG had to be in the position to deliver this support. (E163)
- 4.12 A vulnerable customer advocate asked how the NGED work feeds into wider social obligations schemes; it was explained how the Social Contract is aligned with NGED's Responsible Business Charter and benefited from their funding and schemes. (E163)
- 4.13 Children have no sense of risk, so if there are electrical assets near playgrounds, we absolutely need to make sure that there is safety awareness around them. (E158)

## Sub-topic: Vulnerable Customers

### What we heard from 2019 to 2022:

In 2019, stakeholders prioritized the protection of vulnerable customers and the transition to a smarter network. Strategies included educating vulnerable customers, training staff, and deploying appropriate technology.

In 2020, discussions focused on NGED's role in establishing customer resilience, identifying vulnerable customers, partnerships with organizations, and protecting vulnerable customers during the smart network transition. Challenges and opportunities were highlighted, such as new technology access and support needs.

In 2021, the Covid-19 pandemic increased vulnerability and highlighted digital-related challenges. Stakeholders emphasized robust identification processes, data sharing, and a referral network. The 'one-stop-shop' service and widening customer support were supported. NGED's proposals were seen as ambitious regarding communication formats, accessibility, and dedicated support lines.

During the last phase stakeholders agreed that the Covid pandemic presented significant challenges for NGED's most vulnerable customers, including increasing poverty, illness, and isolation. Stakeholders voted on the importance of the current priorities, with vulnerability and fuel poverty ranking the highest, followed by network resilience and reliability, and environment and sustainability.

Stakeholders felt that vulnerability, fuel poverty, and network resilience and reliability were the most widely discussed priorities. There were also discussions around NGED's £1million fund to provide urgent support to 560,000 local families most affected by the pandemic. Stakeholders suggested leveraging community links and partnerships, simplifying the referral process, and making the PSR registration process more accessible and user-friendly.

Rising costs, budget struggles, and exclusion from support in remote communities were identified as key factors driving fuel poverty. Stakeholders also discussed increasing the number of vulnerable and disabled people using EVs, and initial concerns were expressed that these users would be priced out of the market. Stakeholders supported the initiative and urged NGED to consider where these people would most likely charge their vehicles before rolling out infrastructure. Stakeholders also raised concerns about the capacity available on the network to support the electrification agenda and suggested targeted support for households. Stakeholders also discussed sharing information on mental health and suicide and recommended partnering with the DWP to help incentivize access to EVs for disabled people.

### Summary of Phase 7 feedback

- 5.1 The feedback for Vulnerable Customers focused on the themes of vulnerability, fuel poverty, network resilience and reliability. There is widespread agreement that NGED should prioritize keeping bills low through delivering efficiencies, maintaining the current level of ambition for bespoke Smart Energy Action Plans, and ensuring that fuel-poor customers save £60 million annually. The commitment

to provide shareholder-funded support for installing solar panels on schools in deprived areas was also highly approved. There are mixed opinions on whether NGED should undertake some of these responsibilities alone or whether other organizations should be involved.

- 5.2 Some stakeholders suggested that NGED should expand the scope of its commitments, such as supporting community energy programs and discussions on STEM subjects in schools. Others recommended increasing the scale of ambition for certain commitments, recognizing that this might be challenging.
- 5.3 A total of **45** pieces of feedback were collected for Vulnerable Customers during Phase 7 engagement, which adds to the **1,076** collected during previous phases.

## Detailed feedback

**Feedback for vulnerable customers can be divided into three themes:**

- Innovation and cost saving
- Support
- Renewable energy and community energy programs

### Innovation and cost saving

- 5.4 If we keep allowing energy companies to provide [support] it prevents the government from doing it. Heat uses the most amount of energy, and a lot of the time it's these vulnerable customers that are home all day using the energy. You would be taking money from them to give support back to them, it doesn't make sense. The best thing we can do for vulnerable customers is to reduce their energy bills. It doesn't need to be led by NGED, unless shareholders are willing to pay for it. (E155)
- 5.5 Commitment 5 was ranked very important to some manufacturing stakeholders. They had seen in their communities one of the churches have their bill go up 260% and they're now cutting into their savings. (E158)
- 5.6 In regards Commitment 22, it was argued there needs to be some sense of priority on the PSR. Some people will be transiently vulnerable. People on long-term oxygen will need to be on the register permanently, whereas someone just discharged from hospital will need to be on the register temporarily. There does need to be some data cleansing of the register. (E158)
- 5.7 To be fit for purpose for the winter ahead, some stakeholders felt that the programme needed a huge increase in funding for the health and wellbeing strand in order to keep up with the rocketing demand for these particular services. (E159)

### Support

- 5.8 NGED should tell Ofgem that if they do not fund this (Commitment 19) then their strategy regarding the poor in the population will go downhill. (E153)

- 5.9 In addition to the financial implications of the cost-of-living crisis, many remarked that it has had wider implications, such as anxiety, self-disconnection, stress associated with accessing the benefits system for the first time and having to choose between heating and eating. It was highlighted that these wider effects are making the root problem even more acute. (E159)
- 5.10 A community energy group stakeholder suggested that funding would be welcome to engage with communities. Most people are struggling for money, so if NGED could provide funding for us to help people that would be good. (E158)
- 5.11 Stakeholders attended the event mainly to find out more about NG's vulnerability support initiatives and to discuss how their work could dovetail into it. Collaboration was seen as the key avenue for achieving effective outcomes, and Stakeholders hoped that this event could be a useful way of developing wider partnership networks. (E159)
- 5.12 NGED was urged to roll out an educational campaign to boost understanding of smart meters and bust the myths around them that discouraged many vulnerable people from adopting them. At the same time, others specified that this educational campaign should strike a balance by establishing just the right amount of understanding to get customers installing and using smart meters long term, and not scaring them by trying to explain things in minute detail. (E159)
- 5.13 The Customer Vulnerability Programme was generally well received and described as 'admirable' and 'holistic'. It was viewed as a logical progression on the work being undertaken during RIIO-ED1. The developments in the Power Up! programme and the Energy Champions were praised. (E159)
- 5.14 The group discussed the NGED/Hope 4U scheme that supported NHS patients in the Walsall area and talked about the far-reaching impact of the 'Warmth on Prescription' scheme to bring homes to better temperatures. These guarantees homes are warm enough for those with respiratory conditions – savings for the NHS through reduced visits to GPs etc. (E163)

## **Renewable energy and community energy programs**

- 5.15 Commitment 25, £540,000 shareholder-funded support per year to install solar panels on schools in areas of high economic deprivation, received the joint hights approval response with 96% of respondents wishing to maintain this ambition. (E153)
- 5.16 Many of the barriers for vulnerable customers in the transition to Net Zero raised by stakeholders were rooted in issues around smart meters. A large number of Stakeholders were of the view that the lack of understanding among the general public about how much energy they use and how their bills work has hindered the widespread uptake of smart meters. (E159)
- 5.17 There was also a broad feeling that these Smart Energy Action Plans needed to seem realistic to vulnerable customers, particularly those dependent on electricity for medical care at home. Stakeholders pointed to concerns about rolling blackouts this winter and emphasised that customers being offered a plan needed to feel certain that they would receive a reliable electricity supply. (E159)

- 5.18 Key issues for rural customers are not being on the gas grid and being in old properties etc. – customers replacing boilers and going for heat pump without considering the remedial action needed for the house. In developing SEAP (which they support) there is a need to consider these things. (E164)

# High-level topic: Maintaining a safe and reliable network.

## Sub-topic: Cyber resilience

### What we heard from 2021 to 2022:

In 2019, stakeholders recognized the potential risks of a cyber-attack on the network and emphasized the need for resilience in this area. They expected collaboration with government bodies and the adoption of best practices from other industries.

In 2020, discussions focused on the impact of cyber attacks on the system and society, including the vulnerability of NGED's internal operations and physical infrastructure. Concerns were raised about personal data security, particularly with the introduction of new technologies and involvement of third parties. Stakeholders sought more information on incident recovery plans and questioned NGED's strategy in protecting critical infrastructure. Communication and stakeholder awareness were also highlighted.

In 2021, stakeholders emphasized the importance of contingency plans and reliability in the face of unexpected scenarios, particularly considering the impact of Covid-19. Measurement of cyber resilience outputs and addressing existing vulnerabilities, such as unencrypted aspects of the network, were raised. Stakeholders acknowledged the need for education, training, and adopting best practices from other industries to enhance cyber resilience.

241 pieces of feedback were collected during previous phases.

### Summary of Phase 7 feedback

- 6.1 The stakeholder discussions involved the importance of maintaining commitments to cybersecurity (Commitment 39 and 40) in various sectors, including local authorities, developers, vulnerable-customer representatives, energy consultants, academic institutions, business customers, major energy users, government, storage and renewables providers/installers, parish/community councils, and charities.
- 6.2 The need for increased threat monitoring and protection of customer data is emphasized, with concerns over potential cyber-attacks and disruptions to power supply. Diversification of providers in 5G technology is also mentioned as a possible solution to security concerns.
- 6.3 A total of **11** pieces of feedback were collected for Vulnerable Customers during Phase 7 engagement, which adds to the **252** collected during previous phases.

## Detailed feedback

Feedback for vulnerable customers can be divided into three themes:

- Importance of Cybersecurity
- Diversification of Providers
- Consistent Investment

### Importance of Cybersecurity

- 6.4 Commitments 39 and 40 are absolutely crucial and non-negotiable by various stakeholders, including vulnerable-customer representatives, local authorities, academic institutions, business customers, major energy users, storage and renewable providers/installers, parish/community council, and charities. As we become more reliant on heat pumps and smart systems in our homes. Having a secure system is an absolute must. Stakeholders discussed the argument for putting some more money into it. (E157)
- 6.5 Stakeholders came to the consensus that Commitment 39 should be maintained as it is, and it had significant impact on the wider community. It is an urgent one, as it's not just about protecting data, it's also protecting NGED customers against total power losses from potential terrorist attacks. (E158)
- 6.6 The stakeholders emphasize the need for increased threat monitoring, black-out information, and safe networks. The risks associated with cyberattacks are considered significant and could cause disruption to the energy supply and customers. (E158)

### Diversification of Providers

- 6.7 The stakeholders raise concerns about the security implications of relying solely on foreign businesses for 5G technology. They suggest that diversification of providers is necessary to mitigate possible security concerns. (E153)

### Consistent Investment

- 6.8 Consistent investment is considered essential to maintaining the pressure required to compete. The stakeholders suggest that investment in cybersecurity should be a top priority and that the ambition level of commitments related to cybersecurity should be maintained. Some stakeholders suggest that additional funding may be required to ensure the highest level of security is in place. (E153)

## Sub-topic: Network performance

### What we heard from 2019 to 2022:

In 2019, stakeholders emphasized the importance of network performance as the top priority for NGED. Upgrades to infrastructure, implementation of new technologies, and quick response to unforeseen events were highlighted to ensure network reliability and the safety of staff and the public.

In 2020, stakeholders stressed the need for continuous and reliable electricity flow, with a focus on reducing power cuts, their duration, and improving supply quality. The aging network and its ability to handle increasing electricity demand were concerns, and stakeholders called for improved asset monitoring and data utilization.

In 2021, network performance remained crucial, especially with the increased reliance on electricity due to remote working. Stakeholders wanted NGED to be more ambitious in reducing power cut frequency and duration and suggested education and engagement in black start situations. Regional variations in power cut duration reporting were also mentioned. Maintaining a reliable network, addressing supply quality, implementing measures like LIDAR for tree-related faults, and prioritizing vulnerable customers were emphasized. Grid capacity and support for low-carbon technologies were additional areas of focus.

During the previous phase stakeholders discussed several topics related to the operations of NGED. The changes in EHV reinforcement trigger points were well received by customers, who appreciate having more options and have already taken up the additional capacity offered. Stakeholders also discussed the challenges of implementing V2G during outages due to the need for repair work on overhead lines. NGED noted that big battery projects are taking up grid capacity, making it harder to connect. Stakeholders wondered whether NGED should engage more with businesses to discuss their needs and asked about generator needs in case of fuel shortage. NGED explained that it has sufficient resources for restoration and can use third-party providers.

Energy security and the importance of communication to address outages and constraints were also raised. NGED explained that the number of planned outages at 11kV connected sites is difficult to estimate, but this year's numbers are similar to last year's. The importance of network resilience and reliability in the context of Net Zero was also discussed, with some stakeholders arguing that NGED should prioritize investment in vulnerable people.

Stakeholders felt that NGED could improve its approach to extreme weather events by providing more up-front information and better data-sharing among planning bodies. They also discussed statistical analysis of CI targets and comparable data for SIs. NGED is working to reduce/stop outages and is still developing last-gasp information for smart metering SMETS 2.

Stakeholders raised concerns about NGED's communication with customers during outages, particularly regarding advanced warning and re-energizing sites. NGED suggested customers email regional addresses to ask about maintenance cycles for network hardware on their site and explained factors impacting the ability to move planned outages following customer requests. One customer also asked how to add a 33kV isolation switch on a site and who to contact at NGED.

## Summary of Phase 7 feedback

- 7.1 When discussing Network performance, 77% of the respondents want NGED to ensure that 100% of the schemes receive flexible connection, even as heavy reinforcement or connection costs become necessary. Commitments 33, 34, 35, and 36 were all considered important and should be maintained according to several stakeholders, including an academic institution, local authority, energy consultant, and a storage and renewables provider/installer. Two thirds of respondents felt that NGED should continue to maintain its commitment to improving the service for the worst hit customers. Some stakeholders were reluctant to reduce service levels across the board, believing that the more work NGESO can do to the network, the more money it saves in the long term.
- 7.2 Some stakeholders suggested that NGED should publicize power cuts and send winter preparedness advice to people to be forewarned.
- 7.3 A total of **34** pieces of feedback were collected for Network Performance during Phase 7 engagement, which adds to the **669** collected during previous phases.

## Detailed feedback

### Feedback for Network performance can be divided into three themes:

- Forward planning and outages
- Reliability and performance
- Environmental and renewables

### Forward planning and outages

- 7.4 A Stakeholder commented it would be useful to have recommended tactics for dealing with Rota Load Disconnections by various sectors (schools, health & social care, etc.) based on input from consultations with representative organisations (FSB for small businesses, NHS England for hospitals, for Care Homes, etc.) (E161)
- 7.5 A Parish/Community stakeholder noted accurate weather reporting is four days in advance so asked why NGED doesn't publicise power cuts. There was also a suggestion that NGED send winter preparedness advice to allow people to be forewarned. (E161)
- 7.6 On output incentives, some stakeholders advocated measuring the comparison between a flexible procurement and the cost of reinforcement, ensuring that the DSO is judged on whether the right option is pursued for the connection, and whether it provided value for money for the customer. (E166)
- 7.7 Timescales were also suggested, with many stakeholders wanting to see the DSO measured on its ability to manage the queue, and effectively weed out customers sitting on unused capacity. (E166)

## **Reliability and performance**

- 7.8 Network reliability is to ensure supply. The maintenance of the system, the quality of the system, the low fault liability of the system also the reliability of the supply into the network must be considered. More local control is needed rather than offshoring. This can then maybe increase network reliability. (E158)
- 7.9 Commitments 33, 34, 35 and 36 are seen as a priority and should be maintained. This is seen as the core business. It was discussed in relation to achieving Net Zero as it was seen that not maintaining a basic 24/7 supply would hinder the progress towards Net Zero. (E155)
- 7.10 Commitment 33, Improve network reliability so average power cuts are better than one interruption every two years, lasting less than 22 minutes, caused an interesting split with a slight majority (54%) opting for a reduction of 20% in this ambition. Some however felt a drop in this service would be an issue. (E153)
- 7.11 It is difficult to measure DSO performance because it is so new. Stakeholder surveys are very important and should include written comments on what's not working which should be seen by DNOs and OFGEM etc. It's also important for us to have KPIs that look at the extent to which DSOs are using flexible connections. There is a need to have visibility of that to compare speed flexibility. (E166)
- 7.12 A positive idea and discussion from stakeholders were one around having clear, defined milestones; however, a lot of open dialogue is needed around communicating how they are progressed and communicated. (E166)
- 7.13 Stakeholder performance should be stakeholder base so it can determine how effective the DSO is performing. There was a worry about if you go against standard performance metrics, it's about how the DSO perceives those metrics. If put against Time to Connect, an issue with that is the clock stops, you can push those metrics further. (E166)
- 7.14 Timescales were also suggested, with many stakeholders wanting to see the DSO measured on its ability to manage the queue, and effectively weed out customers sitting on unused capacity. (E166)

## **Environmental and renewables**

- 7.15 An Environmental group representative noted the whole power supply interruptions scenarios issue relates by its nature, to low frequency events, but ones with potentially significant consequences - both economic and personal safety to at risk citizens. (E162)
- 7.16 Community for Renewables stakeholder had been following the SCR but it hasn't helped the community generators they are trying to connect. Whilst a new generator no longer pays reinforcement charges one level up, this would benefit an 11kv connection only (E162)
- 7.17 While many stakeholders felt that NGED were starting in the right place, they also felt that it was exactly that, a starting point, and that there were many other areas,

and issues, that also needed attention. Generation was felt to be a key issue for NGED, and for businesses looking to connect and draw power, focusing on demand was not seen to be the only driver for decarbonisation, particularly with constraints at transmission level (E166)

## Sub-topic: Scenario planning

### What we heard from 2019 to 2022:

In 2019, stakeholders highlighted the importance of predicting network demands during extreme weather and flooding. Proactive measures, such as contingency plans and enhanced network monitoring, were suggested to address this concern.

In 2020, stakeholders discussed various scenarios and risks, including climate change-induced weather events and terrorism. Developing and sharing future scenarios and addressing vulnerabilities of assets were key points. Stakeholders emphasized the need for flood resilience and reducing tree cutting while considering natural barriers and asset security.

In 2021, stakeholders emphasized scenario planning, resilience, and collaboration. Extreme weather events and flooding remained significant concerns, with a focus on coordination with local agencies. Tree management and undergrounding or insulating overhead lines near schools were mentioned. Understanding the impact of extreme weather on assets was also highlighted.

Stakeholders during the last phase discussed the need for NGED to lead the plans and provide a framework for Local Authority Energy Plans (LAEPs), while others felt a body with statutory powers should take the lead. They also explored the middle-ground option of combining the two approaches.

Collaboration between NGED and local authorities was seen as key. The stakeholders also discussed extreme weather events, such as the Dudley, Eunice, and Franklin storms that hit NGED regions in February, and the impact of weather events on distribution system hardware, as well as the need to include new priority areas in RIIO-ED2. They also emphasized the importance of improved data mapping and planning prior to storms and shared mapping data more extensively with local authorities. The stakeholders appreciated that calculating Estimated Time to Restoration (ETR) is a major challenge during fast-evolving storm situations, and they preferred the worst-case scenario for ETR, particularly if the power outage lasted more than 24 hours.

### Summary of Phase 7 feedback

- 8.1 The stakeholder focus here is on the NGED proposed changes and how it should manage its network better to prepare for future challenges. They centre around four commitments: the creation of an online viewer to provide more information on planned work and interruptions; investing £216m annually in network maintenance; undertaking 102 flood defence schemes and reducing new assets in flood risk areas; and providing infrastructure to support electric vehicles (EVs), including the installation of charging points.
- 8.2 However, stakeholders had mixed opinions on providing infrastructure to support EVs. Some felt that investing in EV charging points was necessary, while others

believed that hydrogen and heat networks were viable alternatives. There were also concerns about the lack of knowledge among the public, particularly school children, about the electricity industry and the need for education programs.

- 8.3 Additionally, stakeholders raised concerns about the time frame for responding to network issues, the imbalance of phase and the need for innovation. There were also concerns about the increasing risk of floods and fire due to climate change. Stakeholders generally supported NGED's commitments to STEM education programs and maintaining the focus on climate change adaptation.
- 8.4 A total of **30** pieces of feedback were collected for Scenario Planning during Phase 7 engagement, which adds to the **389** collected during previous phases.

## Detailed feedback

### Feedback for Scenario planning can be divided into three themes:

- General – network maintenance and response time
- Extreme weather events – flood defence
- Education and STEM

#### General – network maintenance and response time

- 8.5 Looking at output incentives, some advocated measuring the comparison between a flexible procurement and the cost of reinforcement, ensuring that the DSO is judged on whether the right option is pursued for the connection, and whether it provides value for money for the customer, and many others wanting to see the DSO measured on its ability to manage the queue, and effectively sift out customers sitting on unused capacity. (E166)
- 8.6 Commitment 29, Provide greater insight into planned work and interruptions on our network by creating an online viewer, stakeholders wanted to see NGED maintain the ambition of this commitment (65%). It was argued that the only thing that provides more value than letting customers know when things happen, is telling them beforehand. There's already an online map of roadworks, it just needs publicising. (E153)
- 8.7 Many stakeholders agreed that the creation of an online viewer to provide more information about planned work and interruptions was a positive step. Similarly, most stakeholders agreed that the proposed investment of £216m annually in network maintenance should be maintained. There were also many comments in support of undertaking 102 flood defence schemes and reducing new assets in flood risk areas.
- 8.8 It was discussed whether the responsibility for planning should sit with NGED and/or with local authorities, resourcing however is an issue. It was felt that it made more sense to do local area planning together and not in isolation. Then NGED can use plans to justify investment. (E165)

- 8.9 Cost of upgrading the network was seen, by some, as an inevitable cost. It was somewhat accepted that the network was ageing network and so the network capacity needs to be increased so that it delivers what is needed. (E166)

### Extreme weather events – flood defence

- 8.10 In a close voting decision, respondents felt Commitment 36, Undertake 102 flood defence schemes, and reduce new assets in flood risk areas, needed maintained. With commitment 36, there's potential to work more smartly. The EA and catchment partnerships may be able to bring forward some of their projects, so it's worth a communication with them. (E153)
- 8.11 With climate change and the threats of floods and fire, the view from some was that commitment 40 should be certainly maintained. (E156)
- 8.12 Commitment 36 on flood defences is important. With global warming, we are on an island and surely the situation is only going to get worse, so we need the flood protections in place." Developer

### Education and STEM

- 8.13 Lots of kids don't know what substations are and the security of them might not always be high, so I think education on safety is important. Schools have safety weeks; this could be an opportunity for NGED to become involved with school liaisons. (E154)
- 8.14 STEM talks were discussed as a useful tool, the lack of knowledge among pupils about the electricity industry is higher than expected. There is also a knowledge gap in terms of the local market and available jobs. (E155)

## Sub-topic: Workforce resilience

### What we heard from 2019 to 2022:

In 2019, workforce planning emerged as a significant concern among domestic customers, ranking as the second-highest priority based on a social media poll.

In 2020, stakeholders emphasized the importance of effective workforce planning for NGED. This involved ensuring a skilled workforce, addressing the aging workforce through recruitment and replacements, and upskilling employees to adapt to technological advancements and the transition to a Distributed System Operator (DSO). Diversity, equal opportunities, and career development were also discussed as essential aspects for the existing workforce.

In 2021, stakeholders highlighted the need for workforce resilience, particularly considering the challenges posed by the COVID-19 pandemic and remote work. Upskilling employees to handle new technologies and the smarter network, promoting diversity and inclusion, and ensuring workforce safety were key concerns expressed by stakeholders.

335 pieces of feedback were collected during previous phases.

## **Summary of Phase 7 feedback**

- 9.1 The stakeholders discussed various commitments, including the need for accreditation, prioritizing a reflective workforce, and expanding provisions for STEM training.
- 9.2 There were also concerns raised about increasing salaries to retain employees and increasing resources for health and wellbeing services to support frontline workers. The stakeholders also suggested increasing resilience training and creating a wider support platform to share best practices for supporting vulnerable customers.
- 9.3 Finally, there was a call to increase EAF for 2023 to provide innovation opportunities and stability for partners as well as increased customer support. The stakeholders found the investment workshops valuable for upskilling themselves and meeting their local DMs.
- 9.4 A total of **22** pieces of feedback were collected for Scenario Planning during Phase 7 engagement, which adds to the **357** collected during previous phases.

## **Detailed feedback**

**Feedback for Scenario planning can be divided into three themes:**

- Workforce development and retention
- Diversity and inclusion
- Health and wellbeing of support staff

## **Workforce development and retention**

- 9.5 Stakeholders at all the workshops welcomed the opportunity to engage and saw the investment workshops as being a valuable tool for them in terms of upskilling themselves on local investment in their area – and as a way of meeting their local DMs. (E165)
- 9.6 According to Academic stakeholders, they found that research students join the electricity industry after university, generally stay for a few years and then move to the financial services sector for a better salary. Increasing salaries may be the solution to this problem. (E155)
- 9.7 Several stakeholders emphasize the need to attract and retain the best workforce possible. Some suggest that accreditation such as the Investors in People standard can help attract and retain staff. (E154)

## **Diversity and inclusion**

- 9.8 Several stakeholders highlight the importance of creating a reflective workforce, especially along racial lines. They suggest that this may require concerted effort and understanding of structural engagement barriers that prevent certain minorities from applying. (E155)

- 9.9 One energy consultant suggests that bringing in newer, younger blood who have new ideas can complement the experience of the leadership at the top. (E157)

## **Health and wellbeing of support staff**

- 9.10 Several stakeholders pinpointed the need to increase provisions for health and wellbeing services so that support workers can be more proactive in their response and so that these services can effectively work this winter. (E159)
- 9.11 The stakeholders discussed the stress placed on support staff. With the increasingly difficult circumstances faced by vulnerable customers, participants noted that frontline workers were experiencing increasing levels of work-related pressure and were devoting more and more time to increasingly complex cases. (E159)
- 9.12 Stakeholders were of the view that more training and resources would be extremely useful in helping to increase resilience among frontline workers during the cost-of-living crisis. At the same time, suggestions were made about creating a wider support platform for sharing best practice and relevant information for supporting vulnerable customers. (E159)
- 9.13 Several stakeholders note the increasing stress placed on support staff, particularly those on the frontline dealing with vulnerable customers. (E159)

# High-level topic: Delivering an environmentally sustainable network

## Sub-topic: Business carbon footprint

### What we heard from 2021 to 2022:

In 2019, stakeholders expressed the need for NGED to take more action on environmental issues, specifically in reducing nationwide emissions and aligning with the government's net-zero target. Suggestions included transitioning company vehicles to electric ones, increasing low-carbon electricity usage in buildings, and striving for carbon neutrality in NGED's facilities.

In 2020, stakeholders emphasized the importance of NGED leading in carbon emission reduction, setting ambitious targets, and developing a concrete action plan. Electrifying the company's fleet, promoting sustainable commuting options for employees, improving energy efficiency in buildings, and cautious use of carbon offsetting were key points of discussion.

In 2021, stakeholders favoured the adoption of electric vehicles and decarbonization of buildings and depots. Some suggested considering hydrogen and alternative technologies for larger vehicles. Responsible procurement and minimizing waste in the electrification process were highlighted. Stakeholders acknowledged limited technical expertise regarding operational impacts but called for greater ambition in all targets and a stronger connection between operational impact and NGED's innovation strategy.

The feedback during the previous phase, focused on NGED's business carbon footprint focused on low carbon technologies, network resilience and reliability, and environmental sustainability. Stakeholders highlighted the goal of having 89% of NGED's LCV fleet be electric vehicles (EVs) by 2028. They also suggested additional regenerative actions, such as carbon reduction through habitat-specific tree planting and peat bog restoration.

Stakeholders expressed interest in understanding the decision-making process for NGED company car users who transitioned to EVs, noting that some users were incentivized by low tax rates and government incentives.

In terms of priorities, stakeholders ranked low carbon technologies, network resilience and reliability, and environment and sustainability as the highest-scoring areas. Connections, safety and health, and a smart and flexible network were also important priorities.

### Summary of Phase 7 feedback

- 10.3 The data collected shows different opinions from stakeholders on various commitments made NGED, to become a net-zero business by 2028.
- 10.4 Commitment 10 received a somewhat even split of opinions, with 52% of respondents wanting to maintain the ambition. Commitment 12, aimed at reducing SF6 losses by 20%, scored the joint-highest number of votes with Commitment 11, with 85% of participants opting to maintain current levels. Commitment 13 had a majority of respondents (63%) favouring reducing its ambition by 20%.

- 10.5 A total of **18** pieces of feedback were collected for Business Carbon Footprint during Phase 7 engagement, which adds to the **504** collected during previous phases.

## Detailed feedback

### Feedback for Business Carbon Footprint fell under two themes:

- General
- Environmental challenges

#### General

- 10.6 There was a debate about the cost and feasibility of each commitment. Some stakeholders suggested that other commitments, such as achieving zero waste to landfill, could be reduced by 20%, while others felt that the commitments were necessary to inspire people and show leadership. (E155)

#### Environmental challenges

- 10.7 Commitment 12 received some of the highest levels of positive feedback with the majority of stakeholders in favour of maintaining current levels of commitment. It was felt that it should also be an industry wide obligation not just an NGED one. (E156)
- 10.8 Decarbonisation was also seen as a vital metric for measuring DSOs, with the capacity to connect more renewable generation surfacing once more as a touchstone issue: 'The key criterion is the rate of increase in generation over time.' (E166)
- 10.9 In terms of ambition, it was argued that NGED had to rapidly decarbonise. Decarbonisation is an important area to look at. Some stated that the main barrier to decarbonising the system is the problem with connections and there's a double problem connecting on the distribution level because you often get stuck in two queues. It was suggested by some that NGED remove those in the queue at both transmission and distribution level. (E166)
- 10.10 Commitment 15 centred around achieving a 10% net gain in biodiversity, with most agreeing (67%) that spending on it could be reduced by 20%. Stakeholders believed that the cost of reaching Net Zero by 2028 would be significantly higher than by 2035, and some of the challenges in doing so might be quite difficult to overcome. Stakeholders also suggested that Commitment 15 should be more nuanced. (E154)
- 10.11 Customer satisfaction in terms of ability to connect and reliability of connection are also important. You're providing a service, so both are important for evaluating your success. (E166)

## Sub-topic: Broader environmental impacts

### What we heard from 2019 to 2022:

During the preliminary engagement phase in 2019, stakeholders primarily focused on reducing carbon emissions and expressed a desire for broader environmental impacts and sustainability to be prioritized in NGED's business plan.

In 2020, stakeholders emphasized the importance of analysing the environmental impact of NGED's supply chain, reducing leaks (especially in SF6), addressing biodiversity and wildlife concerns, promoting sustainable land-use practices, and reducing waste.

Stakeholders in 2021 continued to prioritize environmental considerations, including carbon emissions, plastics, and waste reduction, with a specific interest in minimizing the network's impact on biodiversity. While stakeholders supported the removal of overhead lines in Areas of Outstanding Natural Beauty, they expressed concerns about the potential disruption caused by underground lines.

During the last phase stakeholders debated whether NGED should solely focus on three of the 17 Sustainable Development Goals (SDGs), including sustainable cities and communities (SDG 11), responsible consumption and production (SDG 12), and climate action (SDG 13), or expand the number of targeted goals or include all the goals in their plan. Some delegates supported the affordable and clean energy goal (SDG 7) and the gender equality goal (SDG 5) as well.

Regarding biodiversity, stakeholders agreed that NGED should share its learnings on biodiversity and net gain, considering that this was a new challenge for many organizations. They suggested using heat maps to display areas where biodiversity has increased, newsletters, local case studies, online forums, workshops, and display boards to educate and raise awareness among the wider public.

Stakeholders emphasized the need for education, communication, and targeted commitments to avoid "greenwashing." They recommended the use of low-impact signage to educate the public about the rewilding work taking place. Stakeholders also suggested sharing best practices with businesses, local authorities, schools, universities, and partnering with local nature partnerships such as LNPs, Natural England, and the Wildlife Trust.

Finally, delegates discussed expanding NGED's learnings on biodiversity and net gain into other areas by first analysing how the program worked and examining the non-technical conditions for its success, including internal staff and external stakeholder buy-in, before rolling it out to other areas. Stakeholders urged NGED not to be too conservative and include all the SDGs in their plan.

### Summary of Phase 7 feedback

- 11.1 Overall, the information highlights the importance of maintaining a commitment to the Net Zero target, prioritizing the commitments, and acknowledging the regional differences in achieving Net Zero targets. Respondents believe that the commitment to Net Zero is important and that it must be maintained (52%) believe that NGED should maintain its ambition of achieving Net Zero by 2050.
- 11.2 Commitment 14 (Improving visual amenity) is deemed less essential, and respondents believe it could be reduced or eliminated altogether. Additionally,

removing 50km of overhead lines in Areas of Outstanding Natural Beauty (AONB) is suggested to be reduced by 20%, further reduced, or removed altogether.

- 11.3 A total of **36** pieces of feedback were collected for Broader Environmental Impacts during Phase 7 engagement, which adds to the **564** collected during previous phases.

## Detailed feedback

**Feedback for the Broader environmental impacts can be divided into three themes:**

- Net Zero Target
- Prioritisation of targets
- Regional differences

### Net Zero Target

- 11.4 The majority of Stakeholders (52%) believe that NGED should maintain its ambition of achieving Net Zero by 2050, with some areas achieving it by 2028. Some argued that Net Zero is the strategic goal and flexibility is one way to achieve it. (E153)
- 11.5 Stakeholders also believe that the commitment to Net Zero is important and that it must be maintained. However, while it is significant priority for the region, there was discussion on whether NGED needs to lead it. (E153)
- 11.6 On a wider point, some stakeholders were critical of the approach that prioritised individual travel, such as EVs and aeroplanes, over other options, such as trains. Switching the focus from ports and airports to improving the grid for generation and putting pressure on government to prevent new coal and gas licences was advocated, as well as reinforcing the network for more decarbonised connections, which was seen as a key barrier to progress. (E166)

### Prioritisation of targets

- 11.7 Commitment 11 (Reducing oil leaks from fluid cables by 50%) received the joint-highest percentage of votes, with 85% of stakeholders opting to maintain its current level. (E153)
- 11.8 Commitment 14 (Improving visual amenity) is deemed less essential, and respondents believe it could be reduced or eliminated altogether. (E158)
- 11.9 Major Energy User's Council wondered if the real-life cost of having an EV is no more than diesel so should NGED be able to change over its fleet. - electrification of the fleet did have additional investment so could now propose to invest to electrify 67% of the fleet. (E162)

## **Regional Differences**

- 11.10 A stakeholder noted that the electricity grid in Wales is not fit for purpose and given the reduction in RIIO ED2 Business Plan investment allowed and the increase in demand for low carbon technology connections to the network there are concerns. (E160)
- 11.11 Some stakeholders suggest that the need in Cornwall is different from other regions, where people are living in poor houses and cannot afford EVs. They emphasize the importance of looking for alternative solutions like generation. (E155)
- 11.12 The railway network, in particular areas, has been underutilized and therefore is not electrified. Promote and support the use of this medium to allow generation connections whilst also supporting faster electrification of the railway systems. Refer to the Riding on Sunbeams project. (E166)

# High-level topic: Delivering future energy networks.

## Sub-topic: Connections

### What we heard from 2019 to 2022:

In 2019, stakeholders raised concerns and suggested changes to the application process and charging methodologies for connections in NGED's preliminary engagement phase. Issues included the lack of clarity, consistency, and communication in the application process, as well as the ambiguity surrounding changes in charging methodology. Stakeholders proposed improvements such as digitalization, providing a single point of contact, and simplifying the process.

In 2020, stakeholders discussed the need for more information and improvements in the speed, simplicity, and availability of the application process. Future options for connections, particularly smart and three-phase connections, were also explored. The cost and lack of understanding were identified as barriers to uptake. Low carbon technology connections, especially for EV charging points, received significant feedback regarding their cost, incentivization, and potential demand.

In 2021, stakeholders emphasized the importance of early engagement, support, and information on the application process and capacity, particularly for community energy groups. Prioritizing community energy groups when power exists was suggested to encourage their participation. Collaboration, strategic planning, and competition were called for in connection-related discussions. Three-phase connections and alternative options were debated, with varying opinions on their benefits, limitations, and costs. Low carbon connections and the impact of Covid-19 on development plans were also discussed by stakeholders.

Discussions during the last phase centred around NGED plans to invest £60 million in network reinforcement to meet demand and generation capacity needs, prioritizing new connections. Stakeholders have differing opinions on the reforms, with some willing to pay more for faster connections while others prefer to wait for better deals.

Concerns were raised about managing capacity, requesting comprehensive data sharing and simpler language on connection platforms. Stakeholders representing EV charge point manufacturers expressed concerns about high demand and suggested creating a spreadsheet and running a social media campaign for better communication.

Stakeholders also desired more grassroots-level interaction and clearer guidance on the connection process.

## Summary of Phase 7 feedback

- 12.1 The stakeholders expressed their opinions on specific commitments related to community energy, connection challenges, accessible data, and vulnerable customers. There was a divide among stakeholders on how best to collaborate for expanding NG's reach to vulnerable customers. Some Stakeholders believed that the company could tap into wider networks to spread the word, while others believed less locally targeted measures would help customers maximize their income.
- 12.2 Stakeholders also suggested that NGED should take on a greater convener role to facilitate more collaboration between partners and share best practices within its partner network. Some stakeholders suggested that local authorities, community groups, and healthcare bodies could be potential sources of support for vulnerable customers. Lastly, stakeholders discussed the changes NG has made to its EV connections process.
- 12.3 A total of **38** pieces of feedback were collected for Connections during previous Phase 7 engagement, which adds to the **935** collected during phases.

## Detailed feedback

### Feedback for Connections can be divided into three themes:

- Connection challenges
- Environmental issues
- Vulnerable customers

### Connection challenges

- 12.4 It was also felt that NG could tap into wider networks to spread the word and harness them as trusted sign-up points within local communities. Many Stakeholders thought that NG could look to include more organisations supporting fuel-poor customers in its PSR referral network. (E159)
- 12.5 Some suggested less locally targeted measures, such as utility social tariffs and reduced council tax for single-occupant households, which would help customers to maximise their income. At a more local level, councillors, local charities, community groups and healthcare bodies were also seen as potential sources of support. However, with the vast array of potential local touchpoints, Stakeholders were strongly in favour of tying them together in a single coordinated framework with joined-up processes and networks. (E159)
- 12.6 Stakeholders welcomed anything that could be done to simplify the connections process was seen as positive, and the changes presented were described as a well-thought-out and welcome change. The point was made that there are lots of smaller customers, including those wanting solar PV on village halls and other public buildings, who may have previously been prevented from connecting to the electricity network due to the complexity of the process. (E165)

- 12.7 Stakeholders were broadly supportive of the changes made to NGED's connections policy, although it was felt that more should be done to prevent connections customers 'banking' capacity, or not moving forward with their developments in a timely manner. (E165)
- 12.8 Larger developers stated that they would welcome a simpler process to connect to the network, as well as more accurate information regarding capacity and reinforcement costs. It was also felt that the connections process should be simplified for commercial developers, including those in the agricultural sector, as this will facilitate growth and help to address some of the very real challenges facing these sectors as energy costs continue to rise (E165)
- 12.9 There were markedly different perspectives on whether stakeholders would be delaying their connections schemes until after the SCR, and responses tended to diverge depending on the type and size of connection, and relative budget and expertise of the stakeholder questioned. (E166)
- 12.10 It was agreed that greater access to data, particularly half-hour meter readings, would be useful to customers when making targeted applications through the connections portal, along with demand and generation data. (E166)

## **Environmental issues**

- 12.11 Distribution Managers from each area introduced the second session. This included an outline of the changes NGED has made to its EV connections process and the improvements it has made to its website to make the process of connecting to the grid easier for smaller, domestic customers in particular. (E165)
- 12.12 Stakeholders discussed the challenges with SF6 and replacement technologies, and the need to be patient to ensure the right technology is used. (E158)

## **Vulnerable customers**

- 12.13 Stakeholders were divided about the most appropriate form of collaboration for expanding the PSR's reach and getting NGED to more vulnerable customers. Some were of the view that the main factor holding people back from signing up to the service was a widespread lack of knowledge of its existence in the first place. (E159)
- 12.14 Many Stakeholders thought that NGED could look to include more organizations supporting fuel-poor customers in its PSR referral network. They suggested that NGED could put on a collaborative event that brings together different organizations to share best practice around supporting vulnerable customers. (E159)
- 12.15 Some suggested less locally targeted measures, such as utility social tariffs and reduced council tax for single-occupant households, which would help customers to maximise their income. At a more local level, councillors, local charities, community groups and healthcare bodies were also seen as potential sources of support. However, with the vast array of potential local touchpoints, Stakeholders were strongly in favour of tying them together in a single coordinated framework with joined-up processes and networks. (E159)

## Sub-topic: Network flexibility

### What we heard from 2019 to 2022:

In 2019, feedback on "Delivering future energy networks" sub-topic highlighted the varying interest in participating in flexibility services, with domestic customers more inclined than businesses. Trust in NGED and concerns over device control were key barriers to participation. EVs were more popular than renewable heating devices, particularly among domestic customers.

In 2020, increasing renewable electricity generation and transitioning to a DSO necessitated greater network flexibility. Limited information and educational resources hindered the adoption of flexible technologies and services. Tariffs were seen as an effective tool to incentivize behavioral change, especially for domestic customers. Automation and new technologies like smart meters and batteries could facilitate domestic customer participation. The suitability of targeting commercial customers for flexibility was debated, considering their larger energy demands but potentially limited flexibility in demand profiles. Clear, simple steps were needed for both customer groups.

In 2021, the impact of Covid-19 emphasized the need for network upgrades to support decarbonization and electrification efforts. Policy developments, education, cooperation across sectors, and residential EV flexibility were identified as drivers for domestic flexibility adoption. Community groups required support and guidance, particularly in technical aspects. Stakeholders were interested in battery storage and sought NGED's input on strategic investment. Simplifying rules and processes for procuring DSO flexibility services was essential. Balancing investment in a smarter, digitalized network with capacity improvements was crucial.

During the last phase stakeholders discussed NGED's transition from a DNO to a DSO, focusing on introducing flexible services to domestic customers. They emphasized the need for NGED to identify overlapping priorities and explore agile flexibility models beyond cable laying. NGED's new flexibility product, Sustain, received positive feedback, with agreement on using smart meter data to monitor compliance. Stakeholders recommended offering customers a choice between fluctuating and fixed prices, considering different energy needs and ambitions.

Building trust and ensuring simplicity for customers were key points of discussion. While some suggested suppliers as partners, concerns about communication led others to recommend engaging aggregators. The involvement of various parties, including developers and energy consultants, was seen as vital. Stakeholders highlighted the importance of simplicity, tailored community energy specialists, and a fair energy transition. Some believed fluctuating prices could benefit vulnerable customers, while tech-savvy individuals might prefer them. Collaboration with community energy groups and automation were mentioned to enhance accessibility and optimize customer home systems.

### Summary of Phase 7 feedback

- 13.1 When he stakeholders' opinions are divided, with 68% of them supporting NGED's ambition to keep bills low by adopting a flexibility approach. The majority (85%) of the respondents feel that NGED should maintain its ambition to unlock existing capacity, thus avoiding the need for reinforcement. The stakeholders believe that

avoiding reinforcement is not the right approach, and the whole system must be looked at to achieve the desired results.

- 13.2 Stakeholders suggest funding local community energy projects to deliver value to communities by enabling them to generate their electricity and make savings in the long run. NGED should publish further data on capacity, renewable generation, and battery storage to provide more transparency. Some stakeholders are sceptical about the likely uptake of EVs, while others see enormous potential, and NG should also help to facilitate more battery storage.
- 13.3 A total of **20** pieces of feedback were collected for Network Flexibility during previous Phase 7 engagement, which adds to the **473** collected during phases.

## Detailed feedback

### Feedback for network flexibility can be divided into three themes:

- Maintaining Low Bills and Flexibility First Approach
- Smart and Flexible Network
- Capacity, Renewable Generation, and Battery Storage

#### Maintaining Low Bills and Flexibility First Approach

- 13.4 Two thirds (68%) of respondents favoured maintaining the ambition of keeping bills as low as possible and adopting a 'flexibility first' approach. (E153)
- 13.5 68% of respondents felt NGED should maintain its ambition of keeping bills low through adopting a flexibility approach, this was reinforced as it was noted that in manufacturing, everything in core materials is tripled. The cost is rising for everything, so bills are crucial. (E153)
- 13.6 Flexibility means could mean NGED can review the reinforcement works, and it will be better for the environment. It could save a lot of building works by just focusing on flexibility. (E153)
- 13.7 Some stakeholders argued that avoiding reinforcement is probably not the right approach and that NGED may need to be looking at the whole system. (E154)
- 13.8 Flexibility is a key tool. It's also key to remember that it isn't the solution to everything. It shouldn't be a blanket, to use flexibility to reduce the need for reinforcement. We need DNOs to continue pinpointing where reinforcement is absolutely required and investing ahead of need. (E156)
- 13.9 The opportunities for flexibility provided by commercial developments were raised in the workshops, and there was a feeling that NG should also help to facilitate more battery storage – although it was accepted that, for regulatory reasons, DNOs like NGED must remain 'agnostic' in terms of the types of connections they make. (E165)

- 13.10 Stakeholders emphasize the importance of flexibility in avoiding costly reinforcement works and reducing the environmental impact. However, some express concerns that flexibility should not be considered a universal solution and that investments in reinforcement may still be necessary in certain cases, considering the overall system. (E166)

### Smart and Flexible Network

- 13.11 When stakeholders were asked to rank all the discussed topic areas in order of priority, 'Smart and flexible network' came second, with an average score of 8.32 out of 12. 85% of respondents felt NGED should maintain its ambition to unlock existing capacity, thus avoiding the need for reinforcement, and stimulating the development of flexibility markets. (E153)
- 13.12 A Govt stakeholder discussed the reliability on demand side flexibility from both business and consumer perspectives. An experiment showed customers were willing to try and change behaviour and cut demand but when colder weather arrives customers want heat. (E162)
- 13.13 Another potential option put forward was support for local community energy projects. It was argued that funding these kinds of projects could deliver value to communities by enabling them to generate their own electricity and make savings in the long run. (E159)
- 13.14 Flexibility is a key tool. It's also key to remember that it isn't the solution to everything, there is a need for DNOs to continue pinpointing where reinforcement is absolutely required and investing ahead of need.

### Capacity, Renewable Generation, and Battery Storage

- 13.15 A Customer stakeholder suggested NGED publish further data in relation to capacity, renewable generation and battery storage, noting it would be very useful, particularly from a community energy perspective. It would be a nice add on if it could also show current Renewable generation, but the former is more important. (E160)
- 13.16 Regarding EV charge points, heat pumps and other LCT's, stakeholders were interested to learn more about how NG formulates its projections to inform its Best View. Some stakeholders were sceptical about the likely uptake of EVs, even questioning whether they are a long-term solution, while others saw huge potential – although the point was made that self-driving cars may in the future reduce car ownerships, and therefore pressure on the network. (E165)
- 13.17 The opportunities for flexibility provided by commercial developments were raised in the workshops, and there was a feeling that NG should also help facilitate more battery storage. (E160)

## Sub-topic: Facilitating net-zero

### What we heard from 2019 to 2022:

Stakeholders in 2019 and 2020 emphasized the importance of reducing emissions and facilitating the government's net-zero target. They suggested various strategies such as incentives for low carbon technologies, education on emission reduction, collaboration with stakeholders, and the development of vehicle-to-grid technology. Electric vehicles (EVs) were a significant focus, including discussions on charging infrastructure, affordability, and grid reinforcement. Stakeholders also highlighted the need to facilitate renewable energy generation, storage, and heat decarbonization.

In 2021, stakeholders continued to prioritize decarbonization but raised concerns about technical barriers, grid capacity, costs, and lack of education and awareness. Interest in circular economy and renewable heat technologies was also mentioned.

Discussion in the last phase highlighted the challenges of decarbonizing heat in buildings, focusing on the commercial sector and housing stock. Priorities included low carbon technologies, environment, and sustainability, and addressing vulnerability and fuel poverty. Stakeholders suggested expanding Sustainable Development Goals (SDGs) and emphasized the need for better access to user-friendly information and engagement for community energy projects.

Upskilling the workforce and prioritizing heat pumps, district heating, and thermal storage were seen as crucial for decarbonization efforts. Local authorities prioritized decarbonization but faced obstacles due to lack of knowledge and fear of outdated technology.

SMEs sought support for energy cost reduction, and the ZCB Partnership aimed to provide free advice on energy efficiency. Community energy was seen as a means to promote positive behavioural changes, with varying opinions on the adequacy of NGED's plans.

### Summary of Phase 7 feedback

- 14.1 The Stakeholders suggest focusing on energy efficiency in schools rather than just installing photovoltaic (PV) panels. A local authority recommends creating schemes for schools to deliver recycling and energy efficiency practices to parents. Another charity suggests tailoring PV installations to each school's specific needs. Commitments to achieving Net Zero should be maintained, but a balance must be struck with the cost to customers. Large-scale generation and demand projects take priority to secure capacity and avoid delays.
- 14.2 Business customers are worried about limitations in the primary substation and potential capacity issues, so they are mitigating these by being ready to put their projects in place as fast as possible.
- 14.3 A total of **12** pieces of feedback were collected for Facilitating Net-Zero during previous Phase 7 engagement, which adds to the **1,701** collected during phases.

## Detailed feedback

**Feedback for Facilitating Net-zero can be divided into four themes:**

- General
- Energy Efficiency
- EV infrastructure installation
- Net-Zero

### General

- 14.4 One key theme highlighted by an energy consultant is the importance of prioritizing energy efficiency in schools rather than solely relying on photovoltaic (PV) installations. The consultant emphasizes the need to address outdated technologies such as old lighting systems before implementing PV systems. (E154)
- 14.5 A charity suggests that PV installations in schools should be tailored to the specific needs of each institution rather than implementing a standardized approach. The charity proposes using the available funds to support individual schools according to their requirements (E154)
- 14.6 The engagement process of NGED does not align well with the changing timescales of local authorities' plans for Net Zero. A local enterprise partnership (LEP) suggests that NG should establish local points of contact for effective communication before project applications are submitted. (E165)
- 14.7 A business customer expresses concern about potential capacity issues that could cause delays in their Net Zero projects. They aim to mitigate these issues and ensure readiness by addressing limitations in the primary substation. (E166)

### Energy efficiency

- 14.8 The local authority recognizes the effectiveness of engaging children in promoting sustainability practices such as recycling and energy efficiency. The involvement of students creates a "nag factor," where children inform their parents about initiatives like insulation. (E154)

### EV infrastructure installation

- 14.9 An academic institution advises against being complacent in terms of installing electric vehicle (EV) infrastructure. They emphasize the need to continue such installations beyond the next price plan period to support the growing demand for EVs. (E157)

## **Net-Zero**

- 14.10 When discussing further collaborative opportunities to help ensure that customers in vulnerable situations can access the opportunities of Net Zero, stakeholders were strongly of the view that NG and others can work together to raise the profile of smart technologies and ensure that they are accessible to all customers. (E159)
- 14.11 A Major Energy User also talked about the net zero target being 2028 and asked if that will slip back to 2035 and is it fair to expect today's customers to pay or is it better to slip back. (E162)
- 14.12 Those not delaying their schemes were more likely to be working on large-scale generation and demand projects, with large capital outlays. Their priority was to secure capacity now, with a strong feeling that any delays were bad for business, bad for the UK's Net Zero goals, and bad for NGED in terms of forecasting visibility and managing and balancing the network. (E166)

## Sub-topic: Supply-demand forecasting

### What we heard from 2021 to 2022:

In 2019, stakeholders emphasized the need for accurate prediction of fluctuations in demand and generation as NGED transitions into a DSO. Concerns were raised about future network capacity and the need to reinforce the network to integrate more renewable generation and achieve the net-zero target.

In 2020, stakeholders recommended investing ahead of need to keep up with the rapid uptake of new technologies and ensure net-zero compliance in new developments. Lobbying for changes in technology deployment targets and incentives was seen as important. Stakeholders believed that transformative investment in the present would reduce the cost of net zero in the future while considering affordability for customers.

In 2021, supply-demand forecasting became crucial due to changes in energy profiles caused by the Covid-19 pandemic. Stakeholders stressed the need to future-proof the network, meet excess demand through flexibility, and stimulate the uptake of low-carbon technologies. Recommendations included addressing increased demand from home working and EVs, promoting behavioural change, and collaborating with industry bodies for future growth. A highly anticipatory investment approach was suggested.

Stakeholders provided feedback during the last phase on supply-demand forecasting, focusing on demand-supply balancing, and future-proofing the network. They emphasized the importance of considering transport policy, car-sharing schemes, vehicle-to-grid options, and costs. Stakeholders recognized NGED's role in facilitating the transition to Net Zero through Distributed Future Energy Scenarios (DFES) and collaboration with Local Area Energy Plans (LAEPs).

A majority agreed that NGED should work with councils to build their LAEPs, highlighting the benefits of holistic network planning and interrelationships between regions and authorities. Customer behaviour and flexible markets were also discussed as driving factors for demands.

Stakeholders also considered future-proofing the network, with discussions on vehicle-to-grid options, wider transport policy, and car-sharing schemes. The question of providing data to local authorities for their LAEPs or developing individualized plans was debated, with a small majority favouring NGED working with councils for broader network planning.

### Summary of Phase 7 feedback

- 15.1 The majority of stakeholders feel NGED must maintain their current ambition of producing electric vehicles (EVs), with some concerns about whether it is the right course of action. Respondents were split regarding the maintenance or reduction of current ambitions in Community Energy.
- 15.2 Most stakeholders were interested in the development of NGED's business plan, but there was concern that this could mean a reduction in the amount of money that NG would invest in their area, impacting growth ambitions and service levels.
- 15.3 Domestic EV applications were set to ramp up significantly in the coming years, with some concerns about whether the network can accommodate all of them. Some stakeholders confirmed they would delay their schemes, especially those

with smaller demand connections or those working within local authorities with constrained budgets.

- 15.4 A total of **27** pieces of feedback were collected for Supply-demand Forecasting during Phase 7 engagement, which adds to the **252** collected during previous phases.

## Detailed feedback

### Feedback for Supply-demand forecasting can be divided into two themes:

- General
- EV ambition and concerns
- Network – Connection process and Network capacity

#### General

- 15.5 Opinions regarding community energy are divided. 41% of respondents support maintaining the current ambition, while another 41% favour reducing it by 20%. Concerns are raised about the limited energy generation potential of community projects and the need for reliable connections to fully benefit from such initiatives. (E153)
- 15.6 Stakeholders express differing views on the frequency of DFES forecasts (Commitment 4). Some argue that more frequent forecasts allow for accurate direction forecasting and should be maintained, while others suggest flexibility based on the proactiveness of local councils. (E154)
- 15.7 Stakeholders were interested in the development of NGED's Business Plan, which was then at the Draft Determinations stage. There was some concern expressed that this would inevitably mean a reduction in the amount of money that NGED would invest in their area, which could impact stakeholders' growth ambitions and lead to a reduction in the levels of service offered by NGED. (E165)
- 15.8 Stakeholders who choose to delay their schemes are typically those with smaller demand connections or working within local authorities with limited budgets. (E166)

#### EV ambitions and concerns

- 15.9 54% of respondents believe that NGED should maintain its current ambition for EV production. However, there are concerns about the adequacy of the ambition and the need to double the required capacity to accommodate increased EV usage along with heat pumps. Some developers suggest that hydrogen is a better long-term solution, highlighting additional stresses that EVs put on the network. (E153)
- 15.10 Stakeholders anticipate a significant increase in domestic EV applications in the future. While some express concerns about the network's ability to handle the

demand, improvements to the connections process are generally welcomed. (E158)

### **Network – Connection process and Network capacity**

- 15.11 Concerns are raised about the ability of DNOs to provide timely quotes and manage the potential influx of connection requests. Stakeholders suggest more automation and smoother processes to alleviate these concerns. (E166)
- 15.12 Discussions revolve around prioritizing access to hospitals for charging staff vehicles and generating electricity. Some stakeholders argue that airports and ports should have a lower priority compared to hospitals in the context of network capacity. (E166)
- 15.13 Several stakeholders highlight capacity constraints and the resulting delays in housing and project developments. Concerns are raised about the inability to meet the required capacity, the time-consuming process of higher-voltage work, and the impact of delays on investment and costs. (E156)

# **High-level topic: Enabling factors**

## **Sub-topic: Collaboration and whole system approach**

### **What we heard from 2019 to 2022:**

In 2019, stakeholders emphasized the need for collaboration in various services, such as vulnerable customers and EV charging. They wanted NGED to facilitate collaboration among different parties involved, potentially through local hubs, to improve service delivery.

In 2020, collaboration was discussed extensively across workshops. Stakeholders highlighted the importance of utilizing NGED's partners inside and outside the electricity industry to enhance customer service. Planning, particularly in new housing developments and low-carbon energy plans, was a significant topic. Stakeholders believed NGED should be more involved in crafting planning regulations and applications and helping other organizations develop their low-carbon plans. Collaboration, transparency, and alignment of strategies were stressed, especially regarding heat, transport, and connections. Stakeholders also wanted NGED to be a leader in collaboration, lobby for decarbonization policies, and establish partnerships with various organizations.

In 2021, stakeholders supported proactive and open discussions facilitated by the Distributed Future Energy Scenarios (DFES) and emphasized that engagement and collaboration are crucial for accurate future energy scenarios. Collaboration and frequent engagement were seen as essential for a whole-system approach, ensuring transparency and alignment between NGED and local authorities. Stakeholders supported collaboration within the industry and data sharing with interested parties. Specific stakeholders and engagement suggestions were provided by local authorities for a comprehensive approach.

During Phase 6 of the Collaboration and Whole Systems Approach, stakeholders provided feedback on partnerships, collaboration, and future energy plans. They discussed joint learning, prompt payment, communication, and telecoms infrastructure resilience.

Stakeholders highlighted the need for networking forums, partnering on superconducting cables, and publicizing NGED's data. They urged NGED to facilitate energy distribution beyond the traditional infrastructure model. Future energy plans involved workshops, community champion training, and partnerships with organizations like the Energy Saving Trust for community energy schemes.

Stakeholders emphasized transparency, consistency, and clearer communication on capacity. They called for unlocking unused capacity, engaging with local authorities and communities earlier, and focusing on asset design and resilience. Stakeholders suggested linking with existing plans to share resources and build larger networks.

## **Summary of Phase 7 feedback**

- 16.1 There was a distinct split amongst stakeholders with some feeling that the ambition of utilizing a whole system approach for major reinforcement should be maintained whilst others felt the ambition should be reduced. Stakeholders highlighted the need for capital investment to achieve some of the commitments and the importance of community energy groups in bringing down the cost of power for consumers.
- 16.2 There were positive comments about the Power Up! advice hubs and Energy Champions initiatives. The stakeholders also identified two key strategies for reaching 'just about managing' customers and preventing them from falling into poverty this winter.
- 16.3 Finally, some stakeholders suggested that the NGED could work more closely with other partners to promote grants and other funding opportunities for smart technologies and increase literacy around smart energy.
- 16.4 A total of **33** pieces of feedback were collected for Collaboration and Whole Systems Approach during Phase 7 engagement, which adds to the **704** collected during previous phases.

## **Detailed feedback**

**Feedback for Collaboration and whole systems approach can be divided into two themes:**

- General
- Vulnerable customers, Community Projects, and Power Up initiative

### **General**

- 16.5 71% of stakeholders felt that the ambition of utilizing a whole system approach for major reinforcement should be maintained. It has been asked about rural areas losing phone service going digital, and it was confirmed that NGED is working as an industry and attending a working group concerning 2025 resilience. However, nearly a third of respondents felt that the ambition should be reduced, and the general feedback points more towards this than the former. (E153)
- 16.6 Capital investment is seen as the biggest barrier to achieving certain commitments, and stakeholders suggest that NGED needs to lobby the government to help with capital investment. (E157)
- 16.7 One developer suggested that NGED should focus on biodiversity efforts at their own offices and depots from a health and safety perspective. (E158)
- 16.8 There is convergence of opportunities and needs within the electricity network that points to the urgent issue of how to address Battery Energy Storage alongside Demand Side Energy Management at various voltage levels and how this might

help increase resilience as well as the ability to manage the network to accommodate Low Carbon Technologies. (E162)

- 16.9 An Environmental group representative suggested a regional map of needs showing relationship between local authorities/partners and DNOs and the link to social contract (see soft system methodologies (SSM) which helps recognise opportunities and threats allowing sight of the 'rich picture'). (E163)
- 16.10 The stakeholders suggested that NGED could work more closely with other partners to promote grants and other funding opportunities for smart and low-carbon technologies. They thought that NGED could improve grant uptake by flagging them up to relevant customers. (E162)

### **Vulnerable customers, Community Projects and Power Up initiative**

- 16.11 The Power Up! advice hubs were praised in particular, with a number of attendees taking the view that they would be especially suited to the expected challenges during the winter ahead. They also identified the Energy Champions as another particularly strong initiative. (E159)
- 16.12 Provide individual PSR sign-up points in local community centres, which would make the PSR visible and accessible. They also suggested creating a joined-up map displaying all other types of support available in a local area to facilitate collaboration. (E159)
- 16.13 Stakeholders wanted to see a centralised communications approach and individual sign-up points in local community centres for the Priority Services Register (PSR) to support 'just about managing' customers and prevent them from falling into poverty. (E159)
- 16.14 Stakeholders believe that community projects of this type need more funding to be successful. There is also a belief that community energy groups should be encouraged as they can help bring down the cost of power. (E158)
- 16.15 A government representative was interested in what schemes were already out there and how their organisation could help dovetail into what's already there. It was also felt that NGED could play a bigger role in schools around career advice. (E156)

## Sub-topic: Innovation

### What we heard from 2019 to 2022:

In 2019, stakeholders emphasized the integration of technical and non-technical innovation into NGED's services, drawing inspiration from best practices across various industries.

In 2020, innovation was seen as crucial for improving NGED's operations and adapting to changing demand and supply patterns. Community energy projects and education were highlighted as key areas for innovation, along with the deployment of new technologies like smart meters, heat pumps, and EV charging infrastructure. Stakeholders also emphasized NGED's role in lobbying the government and suppliers to enhance tariff options and promote consumer engagement in flexibility services. NGED was urged to take a proactive approach and establish a national innovation strategy and fund, while supporting partner organizations in developing their own strategies.

In 2021, NGED's focus on innovation was praised, and stakeholders called for stakeholder engagement and collaboration with councils and social housing providers. Community energy-specific innovation projects were seen as beneficial for addressing capacity constraints, and a dedicated community engineer was suggested for improved communication and support. Digitalization, data publishing, and learning from best practices implemented by other DNOs were also important considerations.

Discussions during the last phase on innovation centred around developing a telecommunications plan to automate network assets and exploring the Equal EV project for EV adoption among vulnerable individuals. Stakeholders considered NGED as a neutral facilitator, prioritizing flexibility, and data transparency.

NGED aimed to foster innovation by establishing an innovation contact in every business area and pursuing projects like the Digital Twin. Stakeholders emphasized the importance of industry, innovation, and infrastructure, including topics like load management, asset replacement, fault detection technology, and the Value of Loss Load. They urged NGED to enable energy distribution beyond traditional infrastructure and serve as a "social enabler" through peer-to-peer technology.

NGED's innovation strategy, the Digital Twin project, and Ofgem's CIF (Innovation Fund) were discussed. Overall, the feedback highlighted the significance of innovation, adoption of low-carbon technologies, and the promotion of flexibility and data transparency. Stakeholders emphasized the need for NGED to actively engage with EVs, community energy projects, and digitalization strategies to achieve their objectives.

### Summary of Phase 7 feedback

- 17.1 The stakeholders discussed NGED's energy plans with particular focus given to Innovation. 46% of respondents supported maintaining NGED's ambitious Local Area Energy Plans by engaging proactively with local authorities, but the majority of responders favoured reducing the plan's ambition by 20% or more. Stakeholders also believed that network data accessibility should be reduced slightly or significantly or removed altogether.
- 17.2 Stakeholders agreed that innovation commitments should be prioritized, but spending the money smartly and ensuring the right decisions are made up to 2050

is essential. Stakeholders suggested that electrification may not be the solution for all industries or means of transport and that hydrogen may be the future. Local production of hydrogen and a local approach to its creation and dispensing can help reduce costs. Rural areas require a strategy to help the agricultural sector, given that farms are major energy users and are often looking to diversify and/or make better use of low-carbon technologies.

- 17.3 A total of **15** pieces of feedback were collected for Broad Customer Experience during Phase 7 engagement, which adds to the **957** collected during previous phases.

## Detailed feedback

### Feedback for innovation can be divided into four themes:

- Local area plans
- Accessibility of Network Data
- Innovation
- Environmental targets
- Rural areas and agriculture

### Local area plans

- 17.4 The majority of stakeholders, (46%), favour NGET maintaining its ambitious Local Area Energy Plans, but some stakeholders suggest that the focus should be broader and include wider aspects such as housing stock. (E153)

### Accessibility of Network Data

- 17.5 The majority of stakeholders (59%) feel that the accessibility of network data should be reduced slightly, significantly, or removed altogether. However, some stakeholders argue that data is crucial and should be provided more efficiently. (E153)
- 17.6 Data is at the centre of everything. Stakeholders suggested that by providing further data NGED and the network as a whole can be seen as more efficient. (E153)

### Innovation

- 17.7 Innovation is a top priority for NGET, and many stakeholders agree that innovation commitments should be prioritized and spent strategically. Some suggest that innovation is essential in facilitating the transition towards an electrified Net Zero future. (E155)
- 17.8 Innovation commitments should be prioritised, but the money needs to be spent smartly and strategically. The key thing is spending the money smartly and ensuring that the right decisions are made up to 2050 as part of a logical sequence. (E155)

## **Environmental targets**

- 17.9 Some stakeholders are sceptical about environmental targets such as accreditation and feel that they are a box-ticking exercise. However, some believe that these targets are essential and should be kept as they are.

## **Rural areas and agriculture**

- 17.1 Agri-tech is a huge thing NGED need to be aware of. For example, Dyson farms. They're using innovative technologies including robotics and vertical farming. They also use anaerobic digestion and heat pumps for power. (E165)
- 17.2 At workshops in more rural areas, the need for a strategy to help the agricultural sector was cited, especially as farms are major energy users and are often looking to diversify and/or make better use of LCTs. (E165)
- 17.3 In more rural areas, stakeholders suggest that a strategy to help the agricultural sector is necessary as farms are major energy users. Some stakeholders see hydrogen as the future, although electrolysis required to produce hydrogen requires electricity. (E165)

# **High-level topic: Business Planning**

## **Sub-topic: Acceptability**

### **What we heard in 2019 to 2022:**

Regarding the layout and structure of the business plan, opinions varied. Some found it comprehensive and easy to understand, while others felt it was too long and challenging to follow. Suggestions were made for the inclusion of an executive summary.

In terms of the content of the business plan, a significant percentage of voters (73%) believed that priorities had changed, or new issues had emerged, largely due to the impact of the Covid-19 pandemic, Brexit, and the focus on environmental sustainability. Some individuals expressed concerns about the complexity of the content and called for commitments to be presented as SMART targets.

Regarding customer bills, there was general agreement that bill increases would be necessary to achieve net-zero goals and fulfil the outlined commitments. However, some stakeholders mentioned that the lack of cost information until the final stage of consultation made it challenging to assess the balance between these commitments and associated costs.

Opinions on the engagement process varied, with some praising it and others considering the "best view" to be somewhat conservative. There were suggestions for NGED to ensure that the chosen approach aligns with the country's net-zero targets. 459 pieces of feedback were collected during previous phases.

### **Summary of Phase 7 feedback**

- 18.1 No feedback has been collected during this period. 459 pieces of feedback were collected during previous phases.

## Appendix 1 – All engagement sources

| Date       | Phase  | Event  | Event code | Description   | Delivery partner | Top 5 segments engaged (% of total event)  | Stakeholders |
|------------|--|--|------------|---|------------------|--|--------------|
| 22/09/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | RIIO-ED2 Draft Determinations Stakeholder Workshop - Nottingham    | E153       | On 22 September 2022, National Grid (NG) hosted a stakeholder workshop, focused on its RIIO-ED2 Business Plan Draft Determinations.   | NGED/EQ          | 1) Local authorities (41%)<br>2) Other (17%)<br>3) Government (7%)<br>4) Charities (7%)<br>5) Connection Providers (7%)  | 29           |
| 21/09/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | RIIO-ED2 Draft Determinations Stakeholder Workshop - Milton Keynes | E154       | On 21 September 2022, National Grid (NG) hosted a stakeholder workshop, focused on its RIIO-ED2 Business Plan Draft Determinations.   | NGED/EQ          | 1) Energy Consultant (23%)<br>2) Environmental Groups (15%)<br>3) INDO (15%)<br>4) Local authorities (15%)<br>5) Everyone else on same %                               | 13           |
| 13/10/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | RIIO-ED2 Draft Determinations Stakeholder Workshop - Cornwall      | E155       | • On 13th October 2022, National Grid (NG) hosted a stakeholder workshop, focused on its RIIO-ED2 Business Plan Draft Determinations. | NGED/EQ          | 1) Developers (17%)<br>2) Distributed generation customers (14%)<br>3) Academic institutions (14%)<br>4) Energy consultant / Local authorities / Parish councils (10%) | 29           |
| 10/10/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | RIIO-ED2 Draft Determinations Stakeholder Workshop - Cardiff       | E156       | On 10th October 2022, National Grid (NG) hosted a stakeholder workshop, focused on its RIIO-ED2 Business Plan Draft Determinations.   | NGED/EQ          | 1) Local authorities (18%)<br>2) Charities (11%)<br>3) Connections providers (11%)<br>4) Government (11%)<br>5) INDO (7%)  | 45           |
| 11/10/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | RIIO-ED2 Draft Determinations Stakeholder Workshop - Bristol       | E157       | On 11th October 2022, National Grid (NG) hosted a stakeholder workshop, focused on its RIIO-ED2 Business Plan Draft Determinations.   | NGED/EQ          | 1) Local authorities (26%)<br>2) Energy consultant (22%)<br>3) Other (13%)<br>4) Parish councils (13%)<br>5) Academic institutions (13%)                               | 23           |

|            |  |  |      |   |         |  |    |
|------------|--|--|------|---|---------|--|----|
|            |  |  |      |   |         |  |    |
| 10/09/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | RIIO-ED2 Draft Determinations Stakeholder Workshop - Birmingham              | E158 | <ul style="list-style-type: none"> <li>On 10th September 2022, National Grid (NG) hosted a stakeholder workshop, focused on its RIIO-ED2 Business Plan Draft Determinations.</li> </ul>   | NGED/EQ | 1) Local authorities (27%)<br>2) Other (20%)<br>3) Charities (10%)<br>4) Developers (10%)<br>5) Energy consultant (5%)                                   | 59 |
| 02/11/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | Social Obligations Stakeholder Workshop                                      | E159 | On 2 November 2022, National Grid Energy Distribution (NG) hosted a virtual workshop, focusing on its support for customers in vulnerable circumstances during the coming winter and beyond, into the ED2 Business Plan period (2023–28). | NGED/EQ | 1) Charities (33%)<br>2) Local authorities (11%)<br>3) Community energy groups (9%)<br>4) Consumer interest bodies (6%)<br>5) Academic institutions (4%) | 54 |
| 02/02/2023 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | NGED CUSTOMER PANEL Connections and Local Investment surgery 2 February 2023 | E160 | NGED Customer panel - held 2nd February 2023  | NGED    | 1) All are 20%   | 5  |
| 15/12/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | NGED CUSTOMER PANEL December 2022  | E161 | NGED Customer panel - held 15th December 2022   | NGED    | 1) All are 33%   | 3  |
| 29/09/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | NGED CUSTOMER PANEL September 2022   | E162 | <ul style="list-style-type: none"> <li>NGED Customer panel - held 29th September 2022</li> </ul>  | NGED    | 1) Environmental groups (22%)<br>2) Utilities (22%)<br>3) All others (11%)   | 9  |
| 19/01/2023 | <b>Synthesis report 7</b>                            | NGED CUSTOMER  | E163 | NGED Customer panel - held 19th January 2023  | NGED    | 1) Non-governmental organisations (25%)<br>2) All others (12%)   | 8  |

|            |  |  |      |  |         |   |     |
|------------|--|--|------|--|---------|---|-----|
|            | Phase 7 – Q2/Q3 2022/23                              | PANEL January 2023   |      |  |         |   |     |
| 16/03/2023 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | NGED CUSTOMER PANEL - March 2023   | E164 | NGED Customer panel - held 16th March 2022   | NGED/EQ | 1) Consumer interest bodies (57%)<br>2) All others (14%)  | 7   |
| 18/10/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | National Grid Local Investment Workshops: Summary Report                       | E165 | Between 18 October and 22 November 2022, National Grid hosted eleven in-person investment workshops in locations across its four licence areas. Each workshop was aimed at eliciting feedback on the following themes: Supporting Growth and New Connections (including Policy and Process, Customer Service Improvements, and the Significant Code Review (SCR), and Supporting the Transition to Net Zero (including Distribution Future Energy Scenarios (DFES), LAEPs, and Enhanced Engagement Opportunities). | NGED/EQ | 1) Local authorities (54%)<br>2) Energy consultant (13%)<br>3) Other (7%)<br>4) Developers (5%)<br>5) LEP (5%)                    | 102 |
| 16/11/2022 | <b>Synthesis report 7</b><br>Phase 7 – Q2/Q3 2022/23 | National Grid Electricity Distribution Connections Hybrid Stakeholder Workshop | E166 | On 16 November 2022, National Grid hosted a hybrid stakeholder workshop focused on connections. The workshop was designed to seek feedback from stakeholders on the following topics: connections access, forward-looking charges and the Significant Code Review (SCR), self-serve online connections, supporting the transition to net zero via the 'Take Charge' initiative, and measuring the performance of a DSO.  | NGED/EQ | 1) Local authorities (17%)<br>2) Developers (14%)<br>3) Energy consultant (14%)<br>4) Other (11%)<br>5) Connection providers (9%) | 111 |

## Appendix 2 – Glossary

| Term   | Description                                  |
|--------|--|
| ALoMCP | Accelerated Loss of Mains Change Programme   |
| ANM    | Active Network Management                    |
| BEIS   | Business, Energy & Industrial Strategy       |
| CE     | Community Energy                             |
| CI     | Customer Interruption                        |
| CVP    | Consumer Value Propositions                  |
| DECC   | The Department for Energy and Climate Change |
| ETRs   | Estimated Time of Restoration                |
| EV     | Electric Vehicle                             |
| HGVs   | Electric Heavy Goods Vehicles                |
| ICE    | Incentive on Connections Engagement          |
| LAEPs  | Local Area Energy Plans                      |
| LCT    | Low carbon technologies                      |
| LoM    | Loss of Mains                                |
| NIA    | Network Innovation Allowance                 |
| PV     | Solar Photovoltaic                           |
| SCR    | Significant Code Review                      |
| SDG    | Sustainable Development Goals                |
| SI     | short interruptions                          |
| SMEs   | Small or Medium-sized enterprise             |
| SSEN   | Scottish and Southern Electricity Networks   |
| UN     | United Nations                               |