Synthesis report 6

Phase 6 – Q1/Q2 2022

Delivered by Sia Partners

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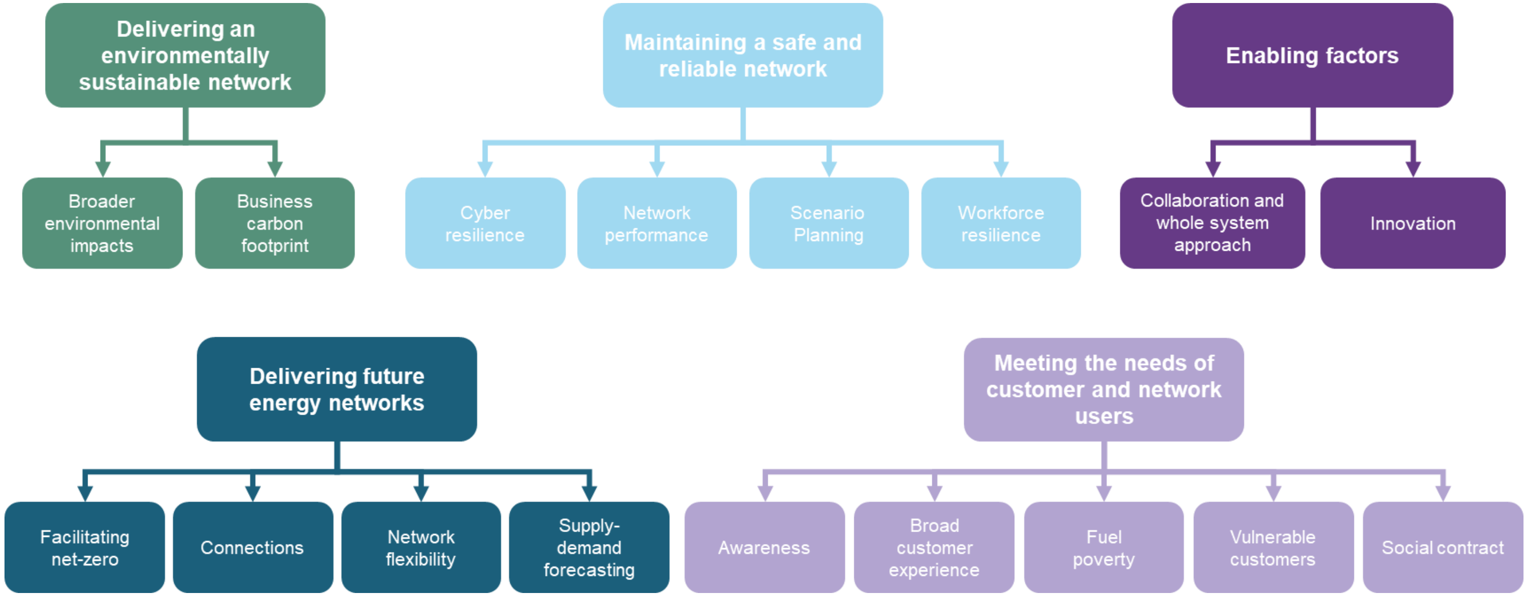
Navigating this report

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. In addition to this diagram, one other high-level topic has been added containing feedback received on the business plan and its acceptability overall. This is called 'Business Planning' and has one sub-topic, 'Acceptability'. 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 6 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)

The sixth stage of the RIIO-2 engagement programme built on the previous work by sharing and testing stakeholder opinions on the business plan as a whole including the previous confirmed and any refined or new commitments and their ambition.

This report covers the engagement conducted directly following that submission, in the early half of 2022. This document collates the feedback collected during the sixth phase of engagement, drawn from 21 sources, covering 1,454 stakeholders, resulting in a total of 391 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', Consumer Value Propositions (CVP's) and key areas' level of ambition and bill impact. Stakeholders were engaged across a variety of forums and methods, such as workshops, some on specific topics such as Customer service and Consumer vulnerability, Innovation and digitalisation, Connections and Community Energy, while some others were regional and were looking to get the views of stakeholders across the four distribution network areas. Stakeholders also shared their future plans during the Distribution Future Energy Scenario (DFES) workshops.

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. Although all engagements were online, due to the Covid-19 pandemic, a regional breakdown is provided based on the regionality of stakeholders engaged. Where such information was not recorded, it has been indicated that there was no regional data available. Four methods of engagement were utilised for this engagement phase: online workshops/meetings (28%), research (5%), panels (57%) and webinars (10%).

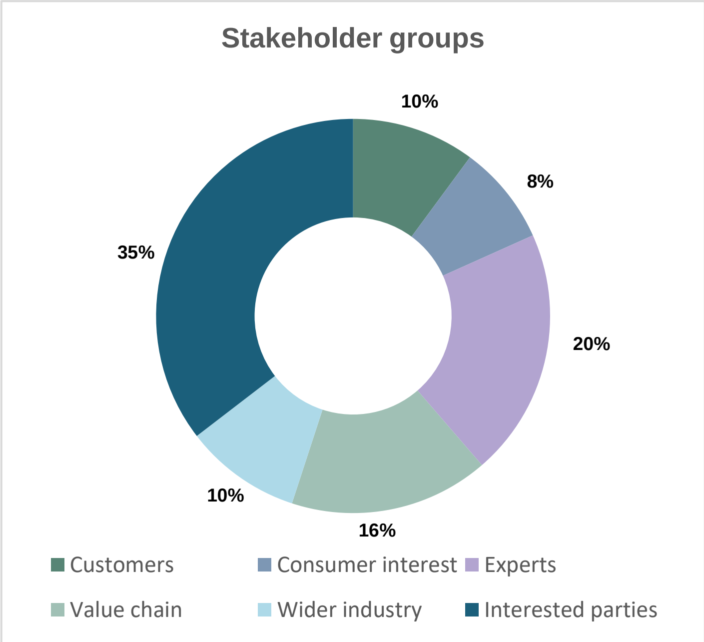


Figure 1: The proportions of stakeholder groups engaged during phase 6 of NGED's engagement

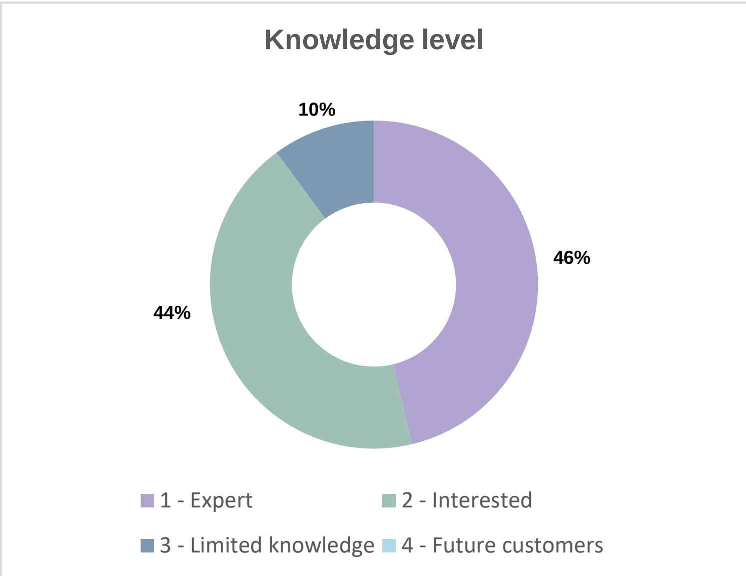


Figure 2: Breakdown of stakeholder knowledge level during phase 6 of NGED's engagement

The table below details the number of stakeholders that attended phase 6 of the Post-submission engagement events from each segment.

Stakeholder group	Segment	Number attended
Customers	Business customers	32
	Distributed generation customers	4
	Domestic customers	96
	Major connections customers	1
	Major energy users	14
Interested parties	Emergency services	7
	Healthcare	3
	Housing Association	9
	Local authorities	173
	Local Enterprise Partnerships	135
	Other	180
	Trade associations	8
Consumer interest	Charities	92
	Consumer interest bodies	1
	Parish councils	25
	Vulnerable customer representatives	1
Wider industry	Community energy groups	27
	Utilities	56
	Water company	56
Experts	Academic institutions	46
	Electric vehicle manufacturers	1
	Energy Consultant	105
	Environmental groups	13
	Government	131
Value chain	Connections providers	8
	Developers	60
	Electric vehicle charge point manufacturers and installers	6
	Energy aggregators	125
	Energy constructor	2
	Flexibility service provider	1
	IDNO	17
	Storage / renewables providers and installers	19
Total		**1,454**

Figure 3: The number of stakeholders from each segment that attended the Phase 6 engagement events. Note: NGED attendees 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 6 of NGED's engagement. The remainder of this report will cover the detail, laying out the specific comments in each area.

High-level topic	Sub-topic	# of feedback
Meeting the needs of customers and network users **(33%)**	Vulnerable customers	40
	Broad customer experience	31
	Fuel poverty	36
	Awareness	0
	Social contract	21
Maintaining a safe and reliable network **(15%)**	Workforce resilience	0
	Network performance	34
	Scenario planning	23
	Cyber resilience	0
Delivering an environmentally sustainable network **(6%)**	Business carbon footprint	5
	Broader environmental impacts	20
Delivering future energy networks **(39%)**	Facilitating net-zero	74
	Connections	30
	Supply-demand forecasting	11
	Network flexibility	36
Enabling factors **(8%)**	Collaboration and whole systems approach	17
	Innovation	13
Business planning **(0%)**	Acceptability	0
Total		**391**

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

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High-level topic: Meeting the needs of customers and network users
Sub-topic: Awareness

What we heard from 2019 to 2021:

In 2019 stakeholders were broadly unaware of NGED, its role in the electricity sector and its social responsibilities, such as to vulnerable customers, causing difficulties when stakeholders attempt to assess and engage in NGED's performance. Therefore, the future NGED Business Plan would have included more information regarding new connections, services, innovation, transition to DSO, project application processes, the Electric Nation project and deploying new EV charging infrastructure.

In 2020, stakeholders stressed the need for NGED to improve awareness of their brand and its activities and play a crucial role in educating and communicating vital information to stakeholders and customers on various topics, from vulnerability to new technologies via online educational platforms or direct messages to customers. Also, collaboration was noted as a crucial mechanism for reducing future customer demand.

In 2021, stakeholders highlighted the need to keep raising awareness and education on NGED's projects and initiatives, new technologies implemented, the DSO transition and the smart future, directing education, especially to residents and the general public who have the least knowledge and expertise. Also, stakeholders addressed public safety awareness with a focus on educating contractors and younger people operating machinery on safety issues and educating children on electrical safety from an early age.

Summary of Phase 6 feedback

1.1 No feedback has been collected during this period. **228** pieces of feedback were collected during previous phases.

Sub-topic: Broad customer experience

What we heard from 2019 to 2021:

In 2019 during the preliminary engagement phase, addressing affordability within the Business Plan was identified as the second highest priority among stakeholders. While most stakeholders agreed that the current ED1 situation reflected good value for money, priorities regarding future investment and/or bill reduction differed between events. Customer service was another key element of the preliminary engagement feedback. Clarity and good communication were highlighted as critical areas of improvement, both in providing speedy and informative updates to customers during power cuts and providing a single point of contact for connection customers.

In 2020, stakeholders stressed the need for NGED to improve awareness of their brand and its activities, which will ultimately also help them in their educational programs. In addition, different methods of communication should be utilised, including online educational platforms, direct messages to customers, and working with third parties to reach those that are hard to contact. Collaboration with other industry players was viewed as important to help identify best practices to enable demand reduction.

In 2021, stakeholders believed that NGED was already providing a high level of customer service but that the company still needed to maintain and improve in light of both Covid-19 and the continuously increasing demand due to electrification initiatives. Covid-19 stressed the importance of communication in planned and unplanned power cuts more than ever, especially to vulnerable customers. Although most customer service and satisfaction improvements were welcome, there was widespread agreement that there needed to be a balance between ambition and cost. Stakeholders discussed a range of communication processes and systems, such as telephone and social media platforms, needed. However, it was noted that any effort to digitalise customer service should not leave the non-digitally native or vulnerable behind. Especially during power cuts, the telephone was seen as the preferred means of communication. Moreover, there was support for mapping initiatives. However, half of the stakeholders engaged were unaware of NGED's existing digital services. At the same time, text messages were seen as the most effective way to push notifications to the right people for planned work.

Summary of Phase 6 feedback

2.1 When discussing the customer experience, stakeholders were pleased with the speed and scope of customer support during severe weather events. However, the need to use different communication channels for sending updates to customers before, during and after storm events, such as Text messages, WhatsApp messages, social media posts and radio, was shared among stakeholders.

2.2 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.

2.3 A total of **31** pieces of feedback were collected for Broad Customer Experience during phase 6 engagement, which adds to the **427** collected during the previous phases.

Detailed feedback

Feedback for Broad customer experience falls under three themes:

- Communications process and systems
- Customer and community
- Power cuts and faults

Communications process and systems

2.4 One particularly popular measure suggested was a single emergency after-care message during storms to help communities to navigate through these extremely challenging events (E126).

2.5 Stakeholders were largely satisfied with NGED's approach to customer support during severe weather events and praised the speed and scope of the communications in particular (E126).

2.6 NGED was urged to think beyond phone calls, texts and online resources during storm events, as telephone and internet networks may be down and people may not be able to charge their devices (E126).

2.7 It was stressed that this need to use multiple contact methods was particularly acute for vulnerable people to ensure they receive the support they need (E126).

2.8 No clear trend emerged around a preferred communications channel for contacting customers during major storms. However, the key message from the discussions was that NGED should use the full range of communication methods available in order to provide up-front information prior to storms so that people can prepare (E126).

2.9 Stakeholders were strongly of the view that NGED should be ensuring that information about any support available is proactively disseminated so that customers do not need to seek it out in a panic during or after a storm (E126).

2.10 Text messages, WhatsApp messages and social media posts were popular among a large number of attendees as channels for sending updates to customers before, during and after storm events. Examples of good uses of these communication methods included sending out bitesize storm preparation checklists and power restoration updates. Some stakeholders also thought that customers would be more likely to engage with information sent using these channels, as these types of communications would be easier to find than paper-based information packs (E126).

2.11 However, at the same time, others acknowledged the potential problems around these channels, including potential 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 (E126).

2.12 As a result, radio announcements and landline telephone updates were seen as potential good alternatives (E126).

2.13 While no clear preferred communications channel emerged, attendees stressed that NGED should use every type of communications approach available to it to ensure that every customer could be contacted, irrespective of their location or circumstances. The key message from delegates was that NGED needs to prepare customers ahead of storms and provide clear information to make customers more self-resilient (E126).

2.14 A range of communications channels was suggested, ranging from digital ones (such as text messages and social media posts) and paper-based ones (such as posted information packs) to in-person checks conducted by local resilience groups (E126).

2.15 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 Ofgem's decision (E129).

2.16 In the discussions, participants overwhelmingly favoured worst-case scenario ETRs. This sentiment was also reflected in the Slido voting, where 85% of respondents chose it as their preferred option. However, others felt that the approach to worst-case scenario ETRs could be tweaked by incorporating more granular local information about power restorations, enabling customers to plan more effectively (E126).

Customer and community

2.17 The main message from delegates was that they wanted to be more self-resilient but wanted NGED to provide them with some tools to empower them to do so (E126).

2.18 Building on the idea of self-resilience, stakeholders were generally of the view that NGED could go further in signposting the support available to communities (E126).

2.19 In addition, participants stressed that NGED should work in partnership with local groups to deliver this emergency support, as they would be more trusted within their communities and more approachable as a result (E126).

2.20 One final area where delegates felt that information dissemination could be improved was through simple initiatives, such as fridge magnets featuring emergency telephone numbers. This suggestion proved very popular (E126).

2.21 Stakeholders identified local figures, bodies and infrastructure as potential partners for sending out paper-based information packs prior to storms containing key information that customers could read. These figures can be community centres, community first responders and parish councils. These were suggested as it was felt that they were trusted figures within their communities to whom people would turn for assistance, therefore making them ideally placed to promote it (E126).

2.22 Other stakeholders suggested more structural approaches, such as using the tactical coordination group and the strategic coordination group structure in order to ensure that the support packages are targeted more effectively at the right groups of people (E126).

2.23 The final area where attendees thought that NGED could improve its storm customer service was recognising the strong reliance of communications systems on the electricity network when contacting people during and after storms (E126).

2.24 They were also keen to put forward suggestions about what they thought NGED could do in future storms. One of the key areas where it was felt that NGED could assist was helping to build community self-resilience before, during and after storms (E126).

2.25 Other attendees supported sending out paper-based information packs prior to storms containing key information that customers could read. This would provide a sense of reassurance, would create self-resilience and would not be rendered useless should the phone or internet network go down (E126).

2.26 Another very popular avenue among stakeholders was leveraging contacts and partnerships with local groups to ensure that support reaches everyone. This could take the form of something as simple as getting in touch with an alternative contact for a vulnerable person through to working with community resilience groups, which could act as a dissemination point for key information (E126).

Power cuts and faults

2.27 Stakeholders liked the new NGED power outage incident pages and approved of the proposed designs (E122).

2.28 Stakeholders would not want updates/notifications for each update on the power cut – but instead would like one notification to point them to the right webpage which they can go back and check at their leisure (E122).

2.29 Stakeholders would like information from NGED to feel up to date and personal, i.e. messaging from the contact centre that feels personalised for each incident (E122).

2.30 Stakeholders expressed that community resilience is just as important as grid resilience over these periods. It was thought that NGED could help to develop this self-resilience through resilience partnerships, which could involve training groups of individuals within communities in how to respond during a power cut. These new key contact points could play a vital role in ensuring that communities can get through prolonged power cuts during storms, as local people could approach them for support and NGED could contact them about coordinating the response (E126).

2.31 In particular, they strongly urged the company to make local communities aware of what exactly is available on the ground should there be a prolonged blackout, before a storm happens. By doing so, it was hoped that this would provide a sense of reassurance during storms and would ease pressure on the emergency services (E126).

2.32 Large numbers of delegates were of the view that honesty is the best policy and that customers would prefer to have the worst-case scenario so that they can plan appropriately. Although some cited the potential irritation of making plans and then having the power restored far ahead of the stated timeframe, there was an overwhelming feeling that it would be preferable for NGED to underpromise and overdeliver (E126).

2.33 This feeling was also reflected in the Slido online voting. When asked to vote how they thought NGED should provide estimated times of restoration during major storms, 85% of stakeholders voted for NGED to provide the worst-case ETR scenario (E126).

2.34 Despite the huge popularity of worst-case scenarios, some participants supported them with caveats. In particular, there were calls for NGED to provide more granular local information about the power restoration process, while others wanted to see clear and accessible communications about the restoration status of local communities (E126).

Sub-topic: Fuel Poverty

What we heard from 2019 to 2021:

In 2019, stakeholders in the preliminary engagement phase placed a low priority on addressing fuel poverty. Many stakeholders stated that NGED had limited power to help this group as it only contributed ~20% of the bill. However, stakeholders were pleased to see action in this area and had several suggestions for future work; educating fuel-poor customers about the services available and staff training were noted as potential future improvements.

In 2020, Stakeholders felt that NGED should do everything possible to help reduce fuel poverty. This starts with the identification of individuals that are fuel poor before moving on to the collection of their data and accurate mapping. While some stakeholders noted that it was not just NGED's responsibility to reduce fuel poverty (naming the suppliers and the government as having the most responsibility), NGED could do a lot to help in this area, for example:

1. Improving customer insulation could not only reduce the demand for NGED's assets but also help reduce the costs for fuel-poor customers.
2. NGED should help customer's access cheap electricity through low-carbon sources (like community wind and solar projects).
3. Stakeholders wanted NGED to plan for future ways to help reduce fuel poverty, such as developing peer-to-peer trading and lobbying for better electricity tariffs.

In 2021, Covid-19 was felt to have exacerbated fuel poverty, pushing more people to it and therefore requiring enhanced efforts for identification and support from NGED. As a result, it was also thought that many targets need to become more ambitious to account for this increase in the number of customers struggling. A minority of stakeholders thought, however, that this was more the responsibility of the government or suppliers.

Reducing fuel poverty was thought to be a result of strong collaboration and data sharing across organisations and suppliers, especially healthcare providers and emergency services. In the second half of 2021, Stakeholders continued feeling that customers will face more significant financial challenges in RIIO-ED2 and that there has been a change in energy consumption patterns due to homeworking.

Summary of Phase 6 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 **36** pieces of feedback were collected for Fuel Poverty during phase 6 engagement, which adds to the **208** collected during previous phases.

Detailed feedback

Feedback for Fuel Poverty falls under three themes:

- General
- Fuel poverty reduction
- Funding and community energy groups, including
    - Fuel Poverty Fund:

General

3.4 Affordability was suggested as a new priority by stakeholders, along with social inclusion and climate change (E124).

3.5 When voting on these new priorities, affordability emerged as the most important for NGED's sustainability stakeholders, with 9.27 out of a possible 10. The second was stakeholder engagement, with 8.46, followed by change and risk management, with 7.73 (E125).

3.6 In June 2022, during a new vulnerability and affordability workshop, Stakeholders voted on the importance of these new priorities; affordability again scored the highest, with an average score of 9.21 /10, with a fair and just transition scoring 8.36 (E126).

3.7 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 (E126).

3.8 When asked which areas they would like to see NGED's next autumn/winter round of the Community Matters Fund target, fuel poverty was by far the most popular option, with a score of 5.67 / 6. This was followed by community conservation (such as woodland projects and improved recycling initiatives), which scored 4.12 / 6 (E126).

3.9 Affordability was a suggested by stakeholders as a priority at all three topic specific workshops held in June 2022." (E127).

3.10 Climate change remains a pressing concern, and a long-term strategy that focuses on sustainability is welcomed. However, despite the fieldwork happening at the hottest time on record, customers see this as less urgent than the economic crisis, which is personally biting (E128).

3.11 In terms of strategy and business planning, customers want NGED to be highly agile and flexible with the ability to focus funds on areas of changing need – the annual innovation fund and community fund are felt to be good ways to do this. Still, they are also looking for bigger strategic shifts in focus to be possible, e.g. lower investment in the network to offset support for fuel poverty (E128).

3.12 Across subject areas of sustainability and fuel poverty/ vulnerability, there was a desire for NGED to focus on a handful of important, relevant topics and make real progress vs a beauty parade of projects that might not make a difference (E128).

Fuel poverty reduction

3.13 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 (E116).

3.14 Stakeholders were keen to discuss the fuel price crisis, particularly with regards what the fuel poverty partners were doing in this area. Local area energy plans in Wales and the holiday hunger schemes previously held in Birmingham were also mentioned. (E118).

3.15 Attendees felt that subsidised insulation (for older homes, in particular) and debt support should be the main focus areas for the Energy Affordability Fund (E126).

3.16 Due to this threat to their safety, NGED was urged to consider the extent of the financial burden placed on consumers and, more generally, embed affordability more deeply into its thinking when rolling out its RIIO-ED2 Business Plan (E126).

3.17 With the workshop taking place against the escalating cost-of-living crisis, delegates unsurprisingly highlighted rising costs and a lack of household income as the key factors driving fuel poverty (E126).

3.18 The cost of living crisis and fuel poverty dominated discussions as customers focused on short-term issues (E128).

Funding and community energy groups

3.19 Charities assisting vulnerable people expressed a sense of hopelessness at the current situation, as the budgeting advice they give to their vulnerable clients isn't enough in the face of the current situation (E126).

3.20 Charities expressed concerns that the situation will only worsen when Ofgem raises the price cap again in October 2022. As a result, it was felt that NGED's range of support provisions should be widened to target young families that are being dragged into fuel poverty for the first time due to this crisis, as well as asset-rich but cash-poor pensioners (E126).

3.21 Attendees also cited other factors that they believed exacerbated the situation being faced by the fuel poor (E126).

3.22 It was stated that many remote areas have off-grid gas connections and cannot get cheaper dual-fuel plans. As a result, stakeholders felt there was a big opportunity for NGED to assist these remote areas by bringing their energy prices down through cheaper connections and support with insulating older homes (E126).

3.23 Based on the factors driving fuel poverty discussed, it was somewhat unsurprising that debt programmes were the most popular proposed focus for NGED's annual Fuel Poverty Innovation Fund (E126).

3.24 While the fuel-voucher programme in place for customers on pre-payment meters was largely praised, it was felt that this now needs to be expanded to include customers paying via direct debit and credit meters. This could be funded by the Innovation Fund and coupled with budgeting programmes to minimise the effects of rising bills as far as possible (E126).

3.25 Attendees felt that subsidised insulation (for older homes, in particular) and debt support should be the main areas of focus for the Energy Affordability Fund (E126).

3.26 During the discussions, stakeholders identified affordability, vulnerability and debt support as key future focus areas, which reflected the increasing concerns about rising costs of living (E126).

3.27 In addition to personal debt support, stakeholders felt NGED should use this fund to provide financial assistance to organisations and centres providing support to vulnerable people in local communities, such as those with mental health issues (E126).

3.28 In the short term, the annual innovation and community funds should focus on fuel poverty-related projects (E128).

Fuel Poverty Fund:

3.29 It was discussed that communications with both successful and unsuccessful fuel poverty fund applicants could raise the awareness of NGED's core PSR. As the funding programme is launched and shared, it was identified that there could be an opportunity to engage internally with NGED's mental health advisors, highlighting their services and the support offered to NGED employees. It was also proposed that the skills and experience used to determine the organisations to fund should be looked at (E117).

3.30 Projects will need to deliver support to families with children facing difficulties during the Summer school holidays; They should focus on activities that deliver both immediate interventions for families through items such as food parcels and long-term behaviour change support for families, such as cookery classes. NGED expects the fund to be popular with grassroots organisations (E117).

3.31 Suggested focus areas for projects included Food parcels; School holiday clubs, including a hot meal; Cookery classes and healthy eating advice; Food budgeting classes or advice; Holiday lunch clubs (E117).

3.32 The positive impact of projects could be increased by exploring opportunities to support NGED volunteers, in addition to financial support; and exploring opportunities for local NGED teams to 'adopt' a local charity/community group and further fundraise for their cause/activities (E117).

Sub-topic: Social contract

What we heard from 2019 to 2021:

In 2019, while over 75% of stakeholders in one preliminary engagement event agreed that a social contract was an essential requirement of the business plan, stakeholders in different events disagreed on whether it should take the form of a separate section in the business plan or be integrated throughout. Workforce efforts, diversity and pay, were all seen as initiatives that should be included as part of the contract. Stakeholders also stated that increasing the transparency of NGED's finances and social partners would improve customer trust in the company.

In 2020, while discussions with stakeholders in phase 1 focused on the location of the social contract and its overarching content, stakeholders in phase 2 focused on specific issues. First, stakeholders wanted NGED to consider the broader societal impact of their choice of the pension fund, specifically that they should not be funding any unsustainable companies such as fossil fuel producers. Second, stakeholders in Swansea also discussed the importance of aligning NGED's social contract and targeted the welsh government's well-being act and noted that several lessons could be learned from this when constructing NGED's social contract.

In 2021, in terms of outputs for the Social Contract, stakeholders in the South West focused on delivering environmental benefits and meeting Net Zero targets. Stakeholders suggested customer vulnerability and fuel poverty commitments. It was commonly felt the commitments need to have a local or regional focus, despite the scale of NGED's network area. It was noted that Covid-19 and its implications on affordability, the environmental crisis, and the increased need for workforce resilience are key drivers that bring the social contract to the centre of attention for stakeholders. Stakeholders categorised the core and 'over and above' elements for each category, Customer, Environment and Community. Partnering with local councils and social housing providers was suggested, while a missing area was unlocking opportunities for sharing surplus electricity through the smart energy network and microgrids.

Summary of Phase 6 feedback

4.1 The feedback for Social Contract focused on affordability, vulnerability and debt support. In addition, stakeholders highlighted the new application assessment scoring process developed by NGED and the Customer Panel members to award the most deserving local causes and meet the inclusivity commitment.

4.2 Regarding the Community Matters Fund, Stakeholders supported the Social Contract initiative around installing solar panels in schools, providing benefits to schools and communities.

4.3 A total of **21** pieces of feedback were collected for Social Contract during phase 6 engagement, which adds to the **489** collected during previous phases.

Detailed feedback

Feedback for Social contract can be divided into three themes:

- General
- The focus of the Social Contract
- Involvement and communication

General

4.4 A stakeholder supported the fund from shareholders and endorsed the work NGED does to support those writing applications (who may not be confident/skilled in the process). The group discussed other organisations and how NGED can reach them (E118).

4.5 On top of the Community Matters Fund, stakeholders wanted NGED to provide greater support around community resilience, particularly during extreme weather events (E126).

The focus of the Social Contract

4.6 Participants supported the initiative to install solar panels on school rooves but felt that it could be applied to other public buildings, such as community centres and care homes. Furthermore, they felt that 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 would deliver the greatest social benefit (E126).

4.7 Stakeholders thought that affordability, vulnerability and debt support should be the main future focus areas of the Community Matters Fund. In addition to the fund, 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 (E126).

4.8 These priorities were reflected in the Slido voting, where fuel poverty emerged as the most urgent area of focus for autumn/winter 2022, with a score of 5.67 / 6 (E126).

4.9 Attendees put forward several additional areas they would like to see covered by the Social Contract. These included traineeships with reduced academic requirements, assistance with retrofitting homes and funds for low-carbon heating targeted at less affluent customers (E126).

4.10 In addition, 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, too (E126).

4.11 Attendees largely supported the Social Contract initiative around installing solar panels in schools and put forward a range of approaches to ensure that it delivers wider benefits to schools and communities (E126).

4.12 The most popular of these approaches was using solar panels as a platform for wider educational pieces. Some delegates thought that educational initiatives around environmental efficiency and environmental protection delivered to school children would be most appropriate (E126).

4.13 However, others thought that the best way to deliver wider benefits would be assisting schools with running the solar panels themselves. This could support getting the best value from the panels and flexing demand to optimise generation (E126).

4.14 Another popular approach discussed was harnessing the energy generated and making it available to members of the local community (E126).

4.15 The point was made that the schools would not need the electricity generated from the panels during the school holidays. NGED was encouraged to negotiate deals with these schools to distribute it to vulnerable local customers for free (E126).

4.16 There was also an appetite to use these schools as batteries and utilise the stored generated energy for charging staff and pupils' electric bikes (E126).

4.17 When discussing which key community channels/groups NGED should involve and collaborate with on delivering its school solar panels initiative, the key message was that NGED should be liaising with local groups. This is because they are embedded within their communities, meaning they can outline community needs and play a vital role in improving local resilience (E126).

4.18 During the discussions, charities put themselves forwards as potential signposts for local issues within this process. In addition, local authorities expressed support for the spirit of the initiative, despite not being fully convinced about its effectiveness. Community energy groups and different school-run organisations were also pinpointed as good local channels for delivering this initiative (E126).

Involvement and communication

4.19 The point was also made that Wales's centralised school funding model could be useful for NGED in informing Welsh schools about this project. Under this funding model, the Welsh educational department could act as a single point for disseminating information about this initiative to all schools in Wales (E126).

Sub-topic: Vulnerable Customers

What we heard from 2019 to 2021:

In 2019, this was one of the highest priorities noted by stakeholders during the preliminary engagement phase, especially concerning the protection of vulnerable customers during power cuts and the transition to a smarter network. There were several strategies and initiatives mentioned during the engagement events, such as education of vulnerable customers (of services, the transition to a DSO and PSR), training staff to communicate effectively with vulnerable customers, and appropriate deployment of new technology to help vulnerable customers.

In 2020, Vulnerable customers were extensively discussed during phase 2 engagement events. The discussions covered various topics, from the role NGED plays in establishing customer resilience, identifying vulnerable customers, NGED's partnerships with organisations working in this sector, and the services NGED provide. Two key takeaways that were discussed extensively were the collaboration between NGED and other partner organisations, charities, and utilities on reducing vulnerability and how NGED would protect vulnerable customers in the smart network transition. The transition to a smart network does provide several opportunities along with potential challenges as vulnerable customers may have access to new technology and revenue streams (such as peer-to-peer trading or battery storage), but will also have to get to grips with the complex technology deployed in their homes, which could be challenging without substantial support from NGED.

In 2021, vulnerable customers were again discussed, with the Covid-19 pandemic having a significant effect on the number of people becoming vulnerable and on more and different vulnerabilities surfacing around digital services, loneliness, isolation, and mental health. This directly affected communication and support initiatives as volunteers revealed facing more difficulty getting in contact with people as well as some cases of abuse. Stakeholders agree that a robust identification process is essential, leveraging data sharing and a referral network across organisations and bodies. The 'one-stop-shop' service was extensively supported, although data and customer privacy issues were raised. It was noted that awareness of the PSR has become digital through social media rather than the word of mouth or personal interaction, which adds a challenge to identify and support the digitally non-native. NGED was urged to widen the scope of customer contact to include the provision of wider support at the same time. Voting revealed that stakeholders felt that NGED was showing a relatively high level of ambition in its proposals related to Ofgem's baseline expectations to provide a range of communication formats and meet a minimum standard of Accessibility AA, to provide a wide range of support concerning supply interruption and to provide dedicated lines.

Summary of Phase 6 feedback

5.1 The feedback for Vulnerable Customers focused on the themes of vulnerability, fuel poverty, network resilience and reliability. Stakeholders identified how the cost-of-living crisis affects vulnerable individuals and how a lack of resilience on the network would further exacerbate their situation, with discussions around NGED’s £1million fund (for local charities, community groups, hospitals and local councils to provide urgent support to 560,000 local families most affected during the pandemic) also taking place.

5.2 In terms of strategy, the approach to consumer vulnerability shifted from the 'write a cheque, walk away' method to a more active approach targeted at benefitting good causes directly at the grassroots level. Also, stakeholders supported the initiative to help disabled drivers with EV uptake, delivering NGED resources to help local authorities plan accessible charging infrastructure.

5.3 A total of **40** pieces of feedback were collected for Vulnerable Customers during phase 6 engagement, which adds to the **1,030** collected during previous phases.

Detailed feedback

Feedback for vulnerable customers can be divided into five themes:

- General
- Partnerships
- Affordability and the smart future
- Services and education

General

5.4 Stakeholders acknowledged that the Covid pandemic presented significant challenges to many of NGED's most vulnerable customers, from increasing poverty to illness and isolation (E117).

5.5 When voting on the importance of the current priorities, vulnerability and fuel poverty came out on top, with 9.32, network resilience and reliability with 9.23, and environment and sustainability with 8.84 (E126).

5.6 The most widely discussed priorities were vulnerability, fuel poverty, and network resilience and reliability. Stakeholders identified how the challenges posed by the cost-of-living crisis would particularly affect vulnerable individuals and how a lack of resilience on the network would exacerbate their situation further (E126).

5.7 Stakeholders were clear that many of the priorities were deeply connected and contingent on each other, urging NGED to find the challenges and opportunities in the places where they overlap (E126).

5.8 It is somewhat unsurprising that, as one of the event's themes, vulnerability and fuel poverty were the two main topics discussed, in addition to network resilience and reliability (E126).

5.9 It was also felt that NGED could further identify vulnerable care homes and their needs and ensure they can keep operating as normal during these extreme weather events (E126).

5.10 The four dominant priorities identified by stakeholders were vulnerability & fuel poverty, environmental & sustainability network resilience & reliability low carbon technologies (E126).

5.11 Members discussed sharing information on mental health and suicide, which NGED would be happy to receive (E131).

5.12 It has been noted a project for SSEN on disabled drivers of EVs. Projects are intended to benefit all DNOS, and details will be shared (E131).

Partnerships

5.13 Stakeholders identified leveraging community links and partnerships, making the PSR registration process more accessible and user-friendly, and simplifying the referral process as key approaches to increasing PSR reach (E126).

Affordability and the smart future

5.14 Stakeholders also felt that rising costs, budget struggles and exclusion from support in remote communities were key factors driving fuel poverty (E126).

5.15 When discussing efforts to increase the number of vulnerable and disabled people using EVs, initial concerns were expressed that these users would be priced out of the market. However, delegates supported the initiative at the same time and urged NGED to carefully consider where these people would most likely charge their vehicles before any infrastructure is rolled out (E126).

5.16 This feeling was reflected in the Slido voting, where dedicated resources to support local authorities to plan accessible charging infrastructure scored highest out of the potential options that NGED could deliver around increasing EV uptake among disabled people, with a score of 4.56 / 6 (E126).

5.17 Many raised the point that the cost-of-living crisis was dragging customers who had not previously been vulnerable into the vulnerability category and was driving higher foodbank usage (E126).

5.18 However, it was also felt that many of these people are not seeking support out of pride and are also cutting back on essential expenses, such as heating and cooking (E126).

5.19 With the crisis set to last a significant time, identifying people within this expanding vulnerable group and providing them with targeted support was considered essential (E126).

5.20 While stakeholders were entirely behind the aspirations of the push towards Net Zero, questions were raised about the capacity available on the network to support the electrification agenda. The point was made that one bad winter storm could negatively affect vast numbers of families and exacerbate the problematic situations faced by vulnerable people (E126).

5.21 Many examples were given of vulnerable people not using vital household appliances (such as heating and cookers) and becoming more vulnerable (E126).

5.22 Discussions generally revolved around the potential cost barriers posed by EVs, and questions were raised about whether disabled and vulnerable people could afford the vehicles themselves and the charging infrastructure for them (E126).

5.23 However, the point was made that not all disabled and vulnerable people are financially poor, so it was felt that targeted one-to-one support for these households could play a key role here (E126).

5.24 Others also suggested that NGED should partner with the DWP to help incentivise access to EVs for disabled people, as their Personal Independence Payments would have a Motability Scheme attached (E126).

Communication and support

5.25 Many participants recently identified the evolving nature of fuel poverty and customer vulnerability and commented on the challenges posed to customers and NGED's vulnerable customer support services (E126).

5.26 It was hoped that no customers that have recently become vulnerable would be missed. Building on this idea, there was an overarching message that NGED needs to go further in ensuring that PSR and support services are as accessible as possible (E126).

5.27 This could be achieved by providing support in a wide range of languages to assist people who do not speak English as their first language and by enhancing data-sharing to target customers that could qualify for support now (E126).

5.28 As a result, it was felt that NGED would be more likely to identify hard-to-reach customers or those unwilling to come forward to ask for support (E126).

5.29 Delegates urged NGED to focus on opening up access to vulnerable customers' data further and double down on its efforts to ensure that its PSR remains up-to-date (E126).

5.30 Utilities commented that opening up access to vulnerable customers' data further and doubling down on its efforts to ensure that its PSR remains up-to-date would be particularly useful during power cuts and storms, as they would be able to support customers more quickly and proactively (E126).

5.31 Discussions mainly focused on vulnerable communities potentially being excluded from support measures. One key reason for this was a poor internet connection and low levels of digital engagement. The point was generally made that remote areas have poorer internet connections and that vulnerable communities are less likely to use computers, meaning they cannot access the government support provided through online applications.

5.32 It was also argued that NGED could support these users to participate in the transition to electric vehicles by improving data mapping and considering where charging infrastructure would be best placed for the (E126).

5.33 Some challenged that these users would mainly be home-based and felt that special charging facilities should be provided in public parking bays, giving these groups greater independence (E126).

5.34 The conversation also touched upon the needs of their carers, as it was emphasised that they would need to be able to charge their vehicles too (E126).

5.35 When asked to identify which approach would be most appropriate for NGED to undertake and would deliver the greatest value to customers to support disabled drivers with the uptake of EVs, dedicated NGED resources to support local authorities to plan accessible charging infrastructure scored highest, with 4.56 / 6 (E126).

5.36 This was followed by a trial project combining data mapping, network expertise and local authority information to design a fully accessible EV infrastructure strategy, which scored 3.6 / 6. These scores reflected the strong desire among stakeholders in the discussions to see NGED help deliver the most accessible EV charging system possible (E126).

5.37 When discussing which support option would deliver the greatest value to customers, the acquisition was notably less popular than home charging and public charging, with stakeholders expressing that there were better-placed organisations to assist in that area (E126).

5.38 However, at the same time, NGED was urged to reassess what “vulnerability” looks like in its planning approach, as some participants believed that some of the people offered emergency support were not as vulnerable as others (E126).

5.39 It was felt contacting all PSR customers overnight was not good customer service and could even be very dangerous. During a previous engagement (a Customer Panel sub-group held specifically to discuss out-of-hours contact), the Panel felt customers should be able to opt out of 24-hour contact (129).

5.40 This was discussed again, and members still felt emphatic that, given most PSR customers would be back on supply following an overnight outage and could be injured answering a late-night call, customers should be able to opt out of 24-hour contact. NGED also confirmed that they fully comply with Ofgem’s licence position and have contacted customers to inform them of the changes (129).

High-level topic: Maintaining a safe and reliable network
Sub-topic: Cyber resilience

What we heard from 2019 to 2021:

In 2019, stakeholders were conscious of the potential implications of a cyber-attack on the network. They, therefore, viewed building resiliency towards this threat as a priority, ranking at an average of 4th across all sub-topics. Furthermore, considering that the threat in this area may grow in the future, stakeholders expect NGED to collaborate with government bodies and identify best practices from other industries to improve in this area.

In 2020, stakeholders discussed a range of issues linked to cyber resilience. For example, a cyber attack's effect on the system and society was discussed, particularly in the context of NGED's internal operations and the system's vulnerability during an attack. Also, the physical security of NGED assets from threats such as terrorism was addressed in multiple events, and stakeholders were fearful of the damage possible from harming physical and digital infrastructure.

Personal data security was a major topic of discussion within Cyber resilience, especially as stakeholders were sceptical of how new technologies – such as smart meters – and the involvement of third parties would increase customer vulnerability from cyber threats. Stakeholders were keen to access more information about NGED's incident recovery plans and question NGED's strategy in recognising and protecting its critical infrastructure. Finally, communication with stakeholders about NGED's activities in this space and improving stakeholders' awareness on this subject was mentioned multiple times.

In 2021, stakeholders felt that Covid-19 puts pressure on the company to have contingency plans in place to deal with unexpected scenarios and to ensure reliability for increased cyber resilience. There was agreement that the relevant outputs need to become more measurable, while there was also some concern for the level of security currently in place, for example, that aspects of the network currently remain unencrypted and vulnerable to potential attacks. While stakeholders were very concerned about cyber resilience and disaster recovery and wanted NGED to do more to address them, they did not necessarily have the knowledge or understanding with which to advise. Education and training of personnel were found to be important to avoid human errors. It was also thought that NGED could follow best practices from other industries and seek to become accredited. 96% of stakeholders agreed with the commitment to 'Continually assess emerging threats to enhance cyber security systems to ensure no loss of data or network interruption from a cyberattack and pushed for flexibility in design, while the same percentage also agreed with the commitment to 'Enhance the resilience of our IT network security by upgrading our disaster recovery capability to ensure continuity of our operations, with a comment that domestic local generation and smart housing systems

Summary of Phase 6 feedback

6.1 No feedback has been collected during this period. **241** pieces of feedback were collected during previous phases.

Sub-topic: Network performance

What we heard from 2019 to 2021:

In 2019, network performance (formerly labelled as reinforcement) was widely noted as the most important priority for a wide range of preliminary engagement stakeholder segments across several events. This was viewed as the fundamental role of NGED, reflected in the high priority scoring. Infrastructure upgrades, implementation of new technologies, and the ability to respond quickly to unforeseen events were the focal points that stakeholders pointed out to NGED to ensure the reliability of their network. The safety of NGED staff and the general public was also highlighted as critical.

In 2020, it was deemed very important to stakeholders that electricity flow was continuous and reliable and that NGED should endeavour to reduce the frequency of power cuts, power cut duration and the quality of supply. It was noted that any power cut or variation in power quality could substantially affect businesses and vulnerable customers, which is why NGED should continue to improve from their current strong performance. In addition, an ageing network was one of the primary concerns of stakeholders and how these assets may deal with the increasing strain when electricity demand increases are more variable. Finally, stakeholders wanted NGED to focus on asset monitoring and improving NGED's use of data, both internally and externally, sharing this data with others.

In 2021, network performance was regarded as extremely important, in response to almost the whole population working from home and relying on electricity. Stakeholders wanted NGED to be more ambitious with its power cut frequency and duration outputs, and they discussed having another output on education and engagement in black start situations. There was also agreement that average figures for the duration of power cuts vary significantly across regions; therefore, its reporting should be updated to reflect that. Maintaining a reliable network and improving supply quality was also seen as essential, with stakeholders showing support for initiatives to implement LIDAR to reduce tree-related faults and using asset condition data to target where the need for investment is greatest. Grid constraints and capacity issues were often raised in this regard, and NGED was called on to provide sufficient grid capacity for LCTs and support retrofits. Stakeholders urged NGED to improve the support and communication when power cuts and faults happen and to prioritise restoring vulnerable customers, which now very pressingly include those self-isolating.

Summary of Phase 6 feedback

7.1 When discussing Network performance, NGED sees big battery projects bringing up grid capacity and making it harder to connect. Also, stakeholders wondered about generator needs in case of running out of fuel. NGED has enough resources for restoration and can use third-party providers. However, National Grid informed about the prospect of interruptions in the winter due to gas shortages.

7.2 Stakeholders raised the importance of energy security to improve industry and NGED communications to address outages and constraints. Also, stakeholders felt that NGED could enhance its procedure for extreme weather events by providing more up-front information to help communities schedule better and become more resilient.

7.3 A total of **34** pieces of feedback were collected for Network Performance during phase 6 engagement, which adds to the **635** collected during previous phases.

Detailed feedback

Feedback for Network performance can be divided into five themes:

- General
- Asset health and network infrastructure
- Data access and sharing
- Communication

General

7.4 The changes for EHV reinforcement trigger points and how customers have received them was discussed. A stakeholder said they are well received - customers like having options, and there have already been uptake of the further capacity offered. Stakeholders were pleased to see the trigger point conversation improving the service and potential costs for customers (E118).

7.5 The group has been updated on the EV surgery recently attended by interested members. A stakeholder noted that in the event of an outage, V2G would be difficult as overhead lines may need repair and couldn't be live at the time (E118).

7.6 NGED is seeing big battery projects taking up grid capacity and making it harder to connect (121).

7.7 Stakeholders wondered whether work was needed to engage with businesses and talk about what they might need, and asked about generator needs in case we ran out of fuel. NGED explained that it has sufficient resources for reasonable restoration and can use third-party providers (129).

Asset health and network infrastructure

7.8 To improve industry and NGED communications to address outages and constraints, the importance of energy security was raised, along with an ongoing review by BEIS and Ofgem (E113).

7.9 The customer raised a point regarding the 11kV connected sites in the planned outage data and outage management system. NGED reminded customers that at this stage, the number of outages at 11kV and the different systems used to make this very difficult. In the long term, this may change, but in the meantime, the focus is on 33kV+ connected sites (E119).

7.10 The customer asked about the number of planned outages this year and how it compares to previous years. Planned outages are normally caused by new connections, asset replacement and scheduled maintenance, and network reinforcement. At present, this year is looking similar to last year. But this only relates to planned outage numbers (E119).

7.11 The importance of network resilience and reliability was framed within the wider societal push towards Net Zero and increased reliance on the electrical network within the discussions (126).

7.12 As a result, some stakeholders argued that NGED should prioritise its investment in vulnerable people on maintaining a resilient supply for them rather than focusing on transitioning them towards smart networks and technologies (126).

Data access and sharing

7.13 Stakeholders felt that NGED could improve its approach to extreme weather events by providing more up-front information to help communities prepare better and become more resilient. Stakeholders stressed that this community resilience was equally important for grid resilience for extreme events. Better data-sharing among key planning bodies and improved signposting to support resources were also identified as other ways NGED could improve here (E126).

7.14 It has been asked if there was statistical analysis available that reveals how possible it might be to achieve CI targets. The answer regards the different levels of analysis for different voltage levels (E129).

7.15 The industry is working on more comparable data for SIs. It has been explained that SIs could be worse for some industries when whole processes go down with a SI (129).

7.16 NGED is also working to reduce/stop them in the first place. A stakeholder asked if data includes all outages, e.g. the ones customers don't tell us about. NGED explained we know about HV faults, but LV relies on customers notifying us (129).

7.17 Stakeholders discussed the smart metering SMETS 2 last gasp function, which notifies us when the meter has lost power. NGED is still working on this last-gasp information and its technology and correlating that to the actual loss of supply data (129).

Communication

7.18 The customer raised an example where NGED did not provide clarification on whether an outage could be aligned with their maintenance schedule and did not give much advanced warning when an outage did occur. Furthermore, the NGED teams did not tell anyone to re-energise the site after they had finished, causing an increased impact in a windy period. NGED will follow up on the case in question (E113).

7.19 The customer asked how they can understand where they are in the NGED maintenance cycle for the network hardware on their site (e.g. switchgear). NGED suggested that you can email the regional email addresses to ask for more details (E113).

7.20 The customer raised a question regarding what factors impact the ability of NGED to move a planned outage following a customer request. NGED stated that they focus planned outages on low-demand periods and when they have resources available. However, national Grid outages and timeframes often drive planned outages at the 132kV level, so NGED have less control over these events and are, therefore, harder to move (E113).

7.21 A customer asked how they could add a 33kV isolation switch on a site and who to contact at NGED. (E113).

Sub-topic: Scenario planning

What we heard from 2019 to 2021:

In 2019, predicting the network's demands during extreme weather and flooding was considered an increasingly crucial future concern for preliminary engagement stakeholders. The consensus was that being proactive was better and potentially cheaper than being reactive, especially considering the increasing demands in certain areas of the network with local development plans. Contingency plans and enhanced network monitoring were mentioned alongside scenario planning around flooding and heatwaves as potential actions for NGED in this area.

In 2020, Stakeholders discussed the range of scenarios and potential risks to the network that NGED should plan for, including the increased frequency and magnitude of weather events due to climate change and terrorism. Developing and sharing a range of future scenarios was seen as a critical first step to helping NGED and the wider community prepare for potential future risks. It was also noted that NGED should consider the different vulnerabilities of each of its assets due to location and age. Flooding was one of the most frequently discussed topics, with stakeholders keen to see NGED move assets from floodplains and improve network resilience in high flood risk areas. Tree cutting was another area of high stakeholder interest as feedback suggests that stakeholders wanted NGED to reduce their rate of tree cutting and endeavour to replace the same number or more trees that are then cut. This was seen as important to help facilitate net zero and use natural barriers to protect assets from extreme climate change-related weather events. The physical security of assets and their vulnerability to terrorism was also discussed, with stakeholders encouraging NGED to consider increasing security and protection against these threats. Stakeholders also discussed the importance of coordinating and collaborating with others that work in the area to ensure that everybody is clear about any mitigation measures put in place, as well as the emergency response and recovery plans in place.

In 2021, Stakeholders discussed scenario planning as crucial for resilience and maintaining a safe network with minimal risks. Stakeholders were concerned about the increasing number of extreme weather and unpredictable events that affect the network. Flooding was a big issue, although stakeholders generally felt that NGED had successfully dealt with these situations. Collaboration with local agencies and authorities was key to employing a preventative approach based on historical data. Stakeholders expressed concerns about tree cutting and management, although they were supportive of undergrounding, insulating, or diverting overhead lines close to school playing areas. Later in 2021, extreme weather events were also raised as an issue that deserved to be high on the agenda and for NGED to understand their impact on its assets.

Summary of Phase 6 feedback

8.1 When discussing scenario planning, NGED confirmed to customers that to reduce outage impact, NGED performs studies internally for significant outages that will impact generation sites over 2 to 3 weeks. NGED advised that it is feasible to execute them for shorter outages over ten days or so, but there is a limitation on the existing resources available.

8.2 Stakeholders discussed the war in Ukraine, the cost-of-living crisis, and the greater intensity of weather events due to climate change, suggesting that NGED needs to incorporate new priority areas for focus in RIIO-ED2.

8.3 Stakeholders unanimously appreciated that calculating ETRs is a major challenge for NGED during fast-evolving storm situations, irrespective of whether a best-case or worst-case scenario is given. As a result, stakeholders were happy with NGED's timeframe as they were aware that NGED was doing whatever it could to restore their power as quickly as possible under challenging circumstances.

8.4 A total of **23** pieces of feedback were collected for Scenario Planning during phase 6 engagement, which adds to the **359** collected during previous phases.

Detailed feedback

Feedback for Scenario planning can be divided into three themes:

- General
- Extreme weather events
- Data analysis and scenario creation

General

8.5 The group discussed options and suggestions for how resilience in a blackout would be handled if the full fleet was electric and talked about maintenance and repair (E116).

8.6 A customer asked what factors cause NGED to do bespoke studies internally to reduce planned outage impact. NGED confirmed that these are normally done for significant outages (over 2 to 3 weeks) that will impact generation sites and that it is possible to do them for shorter outages over ten days or so, but there is a limit on current resources available (E119).

8.7 When factoring in the lack of training and expertise on electricity and engineering in these local government bodies, it was clear from some delegates that NGED needed to take some initiative in leading on strategic planning, or at least on providing a framework for LAEPs, and being very clear as to what information was required from them (E125).

8.8 However, conversely, other stakeholders felt that a body with statutory powers should lead the plans in close collaboration with local authorities and the networks to provide an independent analysis (E125).

8.9 Collaboration was seen as key, as well as a commitment to both strategic and district-level planning. Some pointed to a conflict between the LAEPS and the network's planning processes, which could be addressed by engaging stakeholders from the local authority areas in a systematic way (E125).

8.10 It was suggested that while focusing on the local area helped develop pilot models, it was vital to look out to the wider area to identify a shared need, places of overlap, and a wider connectivity picture to build a workable plan (E125).

8.11 A key comment on this point was: ‘It isn’t just about what we as local authorities want to do; it needs to be a stakeholder-driven plan that feeds into the wider strategy (E125).

8.12 The strategic plan for NGED and some other networks needs to be integrated across the areas around us and the wider network.’ (E125).

8.13 For those councils at the beginning of their net zero journeys or with limited capacity and experience, the proposition of NGED creating individual, bespoke data and plans for them were attractive, as they felt they were playing 'catch up' with bigger, more advanced councils, and needed extra support (E125).

8.14 For others, however, the second option of NGED working with councils to provide data that can be accessed by local authorities to build their own LAEPs was more appealing, as it was seen to provide more opportunity for local engagement and co-creation and stimulate knowledge-by-doing (E125).

8.15 It was also felt that creating individual, bespoke plans did not adequately address the need to look at a wider area and that connections, growth, and net zero plans cross boundaries (E125).

8.16 There was also a middle-ground option explored in the discussions, where combining the two might lead to a more holistic understanding of the localised area, the wider network, and the regional picture (E125).

8.17 Delivering better visibility on sites that will be difficult to deliver and early-stage discussions on capacity and key areas of constraint were all areas where delegates felt NGED could help (E125).

Extreme weather events

8.18 New evidence has shown that space weather events can impact distribution system hardware (E113).

8.19 A stakeholder updated the group on Dudley, Eunice and Franklin storms that hit NGED regions in February. The group discussed the benefit of analysing uprooted trees and the correlation between tree failures and power cuts. It has been explained helicopter units inspected trees when it was safe to do so, and in time we may be able to predict faults (E118).

8.20 A stakeholder wondered if there was any impact and learning from other utilities. It has been noted this was the 5th, 6th and 7th storm this year. Arwen meant an Ofgem investigation around whether licences have been met and a BEIS investigation to ensure the network is fit for the future. Also, 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 (E118).

8.21 Attendees considered whether events of the past year, such as the war in Ukraine, the cost-of-living crisis, and the greater intensity of weather events due to climate change, meant that NGED needed to include new priority areas for focus in RIIO-ED2 (E126).

Data analysis and scenario creation

8.22 Another important area where stakeholders felt NGED could improve its customer response was improved data mapping and planning prior to storms (E126).

8.23 Stakeholders pointed to sharing mapping data more extensively with local authorities as a quick win, as they could use this in planning their response more effectively (E126).

8.24 Stakeholders unanimously appreciated that calculating ETRs is a major challenge for NGED during fast-evolving storm situations, irrespective of whether a best-case scenario or worst-case scenario is given (E126).

8.25 As a result, some were happy with whatever timeframe NGED were going to give, as they trusted that NGED was doing whatever it could to restore their power as quickly as possible under challenging circumstances. They felt that being given a sense of reassurance about progress and realistic timeframes would be enough (E126).

8.26 The vast majority of attendees felt that the worst-case scenario would be the most appropriate ETR to provide during the group discussions, particularly if the power outage were to last more than 24 hours (E126).

8.27 While some were happy to receive worst-case scenario ETRs, they wished to accept them as part of a range of timeframes, starting from best-case scenarios. It was hoped that these suggestions would help individuals plan more effectively in a prolonged power cut (E126).

Sub-topic: Workforce resilience

What we heard from 2019 to 2021:

In 2019, despite the limited preliminary engagement on workforce planning, domestic customers answering a social media poll ranked it as the second-highest priority with a score of 8.87 out of 10.

In 2020, Stakeholders noted the importance of good workforce planning. NGED have adequate skills and internal staff to continue operating effectively and recruit and replace an ageing workforce. Also, they upskilled the workforce in an ever-increasingly technological environment where it has to deal with the DSO transition, the integration of AI, and expanded the workforce to deal with the increasing electricity demand from the electrification of heat and transport; as well as ensuring current staff are happy and have equal opportunity. Diversity and appreciation were two subjects that were discussed extensively with regards to current staff, alongside the career path development as employees gain experience and upskill.

In 2021, Stakeholders referred to workforce resilience as a pressing issue due to the Coronavirus pandemic, as people working from home makes communication more difficult. Stakeholders also felt that NGED must continue upskilling a specialised workforce in light of the smarter network and new technologies, such as installing three-phase connections. Diversity and inclusion were felt to be important so that NGED could reach a more diverse demographic. The safety of the workforce was also discussed, with stakeholders urging NGED to be more ambitious about reducing accident rates and ensuring there is enough education to make its workforce feel safe and capable of prioritising their safety while working.

Summary of Phase 6 feedback

9.1 No feedback has been collected during this period. **335** pieces of feedback were collected during previous phases.

High-level topic: Delivering an environmentally sustainable network
Sub-topic: Business carbon footprint

What we heard from 2019 to 2021:

In 2019, stakeholders in the preliminary engagement phase wanted NGED to be more responsive on environmental issues, particularly focusing on reducing emissions nationwide. In addition, it was evident that stakeholders were keen to see NGED set out a strategy to meet the government's net-zero target, especially around reducing NGED's carbon footprint. Suggestions for internal emission reductions were converting company vehicles to electric vehicles, increasing low-carbon electricity in buildings, and making all company buildings carbon neutral before the governmental targets.

In 2020, stakeholders were passionate about NGED reducing their carbon emissions, showing leadership in the industry and society and setting ambitious targets for improvement. There was a substantial proportion of feedback discussing the correct net-zero target for NGED, with several workshops suggesting 2030 and aligning with local authority targets. Despite the demand for NGED to announce a climate emergency, it was noted that making a statement was insufficient without a concrete plan for action to reduce emissions. A major focus for stakeholders was NGED's fleet, and the need to electrify, especially as so many other organisations have already managed this and NGED should be leading the way. Also, the point was raised that employee emissions should be reduced by promoting public transport, car-sharing and cycling, and offering more flexibility to work from home to remove the commute altogether. NGED's buildings were another topic of discussion with stakeholders keen to see energy efficiency improvements in current buildings, retrofitting solar panels and insulation, and having a high environmental specification for new buildings. Carbon offsetting was mentioned repeatedly, but stakeholders did not want NGED to use this as an excuse not to reduce emissions where possible and wanted NGED only to offset where unavoidable.

In 2021, the adoption of EVs, decarbonised buildings and depots were seen favourably, although various stakeholders noted that hydrogen and alternative technologies should be considered for larger vehicles. It was noted that procurement should be a responsible source and that the electrification of the fleet shall not come at the cost of the environment or produce waste. On the operational impact of NGED's network, some stakeholders felt they did not have the technical knowledge to comment and advise on outputs about harmful leaks, losses, and fluid-filled cables. However, greater ambition on all targets was deemed appropriate. The point was made that there should be a stronger link between the operational impact and NGED's innovation strategy.

Summary of Phase 6 feedback

10.1 The feedback for business carbon footprint focused on low carbon technologies, network resilience and reliability, and environment and sustainability. The aim of enabling 89% of the NGED LCV fleet to be EV by 2028 was highlighted. Also, stakeholders suggested other regenerative actions, such as carbon reduction through habitat-specific tree planting and restoration of peat bogs.

10.2 A total of **5** pieces of feedback were collected for Business Carbon Footprint during phase 6 engagement, which adds to the **486** collected during previous phases.

Detailed feedback

Feedback for Business Carbon Footprint fell under one theme:

- General

General

10.3 A stakeholder updated the Panel members on NGED's fleet plans and strategy to enable 89% of the NGED LCV fleet to be EV by 2028 (E116).

10.4 A stakeholder was interested to understand the decision path NGED company car users went down and how representative they are of wider EV consumers. It was noted fleet drivers get given EVs without a choice, but many company car users moved to EVs as the tax rate is low. It was also commented how people respond to Government incentives. NGED staff can pay for electricity at work (E116).

10.5 When voting on the importance of the existing priorities, low carbon technologies came out on top, with 9.00, network resilience and reliability with 8.79 and environment and sustainability with 8.75. Other high-scoring priorities included connections (8.73), safety and health (8.61) and a smart and flexible network (8.58) (E124).

10.6 On the environmental side, stakeholders suggested expanding into other regenerative actions, such as carbon reduction through habitat-specific tree planting and restoration of peat bogs (E125).

Sub-topic: Broader environmental impacts

What we heard from 2019 to 2021:

In 2019, during the preliminary engagement phase, stakeholders discussing the 'Delivering an environmentally sustainable network' topic focused mostly on reducing carbon emissions. However, there was some discussion of the broader environmental impacts, including biodiversity and waste, with the desire to see broader environmental impacts and sustainability as focal parts of the RIIO-ED2 business plan. Overall, this was seen as a higher priority than workforce resilience, industry collaboration and connecting new customers.

In 2020, the natural environment was important to many stakeholders during the six regional workshops, and many wanted NGED to analyse and evaluate their impact throughout their supply chain. The first subject of discussion was reducing leaks, particularly in SF6. The key points noted here were the need for extensive and transparent asset monitoring work and investing in innovative technologies to try and find an alternative to SF6. Stakeholders were also concerned about the effect of operations on biodiversity and wildlife, with discussions around the planting of trees, rewilding, and sustainable land-use practices. Improving NGED's natural capital and the biodiversity on their land could also help reach carbon neutrality and the net-zero target. It was also briefly discussed that NGED should aim to connect new buildings in an environmentally sustainable way and try to limit visual pollution. Waste was another theme discussed, particularly the reduction of waste in landfills and the reduction of plastic use and waste. This led to conversations on NGED's entire supply chain – the responsibility to ensure that all its suppliers align with NGED's high environmental goals – and establishing a policy for a circular economy.

In 2021, stakeholders were passionate about the broader environment and supported measures to reduce carbon emissions, plastics, and waste. They were particularly interested in minimising the effect of the network on biodiversity, such as the effects of tree trimming on nesting. Although they resonated with the initiative to remove overhead lines in Areas of Outstanding Natural Beauty, they were concerned that underground lines would be more disruptive.

Summary of Phase 6 feedback

11.1 When discussing broader environmental impacts, the three United Nations (UN) Sustainable Development Goals (SDGs)that NGED is proposing to focus on are: sustainable cities and communities (SDG 11), responsible consumption and production (SDG 12), and climate action (SDG 13) (E125). Stakeholders highlighted an interest towards the no-poverty goal (SDG 1), the affordable and clean energy goal (SDG 7) and the industry, innovation and infrastructure goal (SDG 9) in terms of driving innovative efficiencies that will result in cheaper, cleaner energy for all.

11.2 Delegates agreed that NGED should share their learnings on biodiversity and net gain, given that NGED's experience was priceless in supporting others achieve their biodiversity targets. Heat maps that display area where biodiversity has increased and a tally that displays the species and flora that have returned were suggested.

11.3 A total of **25** pieces of feedback were collected for Broader Environmental Impacts during phase 6 engagement, which adds to the **528** collected during previous phases.

Detailed feedback

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

- General
- Biodiversity

General

11.4 Stakeholders considered whether NGED should focus on business-as-usual activities by opting solely for the three most appropriate of the 17 United Nations Sustainable Development Goals (SDGs), expand the number of targeted goals to include any more that are appropriate or include all of the goals in their plan (E125).

11.5 The three SDGs that NGED is proposing to focus on are: sustainable cities and communities (SDG 11), responsible consumption and production (SDG 12), and climate action (SDG 13) (E125).

11.6 For many delegates supporting the responsible consumption and production (SDG 12), another key goal was wasaffordable and clean energy (SDG 7). Many expressed surprise that this was not already a focus for NGED (E125).

11.7 For others, the goals felt more personal, as female delegates working in the energy industry cited the critical importance of the gender equality goal (SDG 5) and, stemming from this, the quality education goal (SDG 4) (E125).

11.8 The rising costs of energy, and affordability, were raised as important to address through the no poverty goal (SDG 1), but also by looking at the affordable and clean energy goal (SDG 7) and industry, innovation and infrastructure goal (SDG 9) in terms of driving innovative efficiencies that will result in cheaper, cleaner energy for all (E125).

11.9 For those stakeholders who supported the last option to include all the goals (16%), the imperative was to see how they were all interlinked and where there were trade-offs and gains to be made in the maximum number of areas (E125).

11.10 Some felt that by only focusing on a few goals, there was a tendency to work on things in silos, and by expanding the reach, NGED might affect transformational change (E125).

11.11 In much the same way that NGED had been challenged to increase biodiversity gain and found itself surprised at the magnitude of success, delegates suggested the same principle could apply here, with the scale of the challenge producing unexpected gains (E125).

11.12 Delegates urged NGED not to be too conservative and gave examples of how all 17 SDGs goals could be aligned with NGED's overarching Sustainability Strategy, telling a straightforward story and bringing about real, lasting change (E125).

Biodiversity

11.13 A clear majority of delegates agreed that NGED should share their learnings on biodiversity and net gain, with many pointing out that as this was a relatively new challenge for stakeholders across the board, NGED's experience was invaluable in helping others reach their biodiversity targets (E125).

11.14 Stakeholders suggested sharing learnings via heat maps that display areas where biodiversity has increased, newsletters, local case studies, online forums, workshops, and display boards to educate the wider public, generate conversations and raise awareness (E125).

11.15 Most delegates agreed that NGED should share their learnings on biodiversity and net gain (E125).

11.16 For many, whether they represented local authorities, EV charge point manufacturers or utilities, rewilding and enhancing biodiversity were relatively new challenges for their organisations, particularly with the significant change in development planning, which will see the requirement to set aside 10% of budgets for biodiversity (E125).

11.17 Stakeholders carefully pointed out the pitfalls of 'greenwashing' and emphasised that any biodiversity projects needed to be backed up by education, communication and targeted commitments (E125).

11.18 Heat maps that display areas where biodiversity has increased were suggested, along with a tally that displays the species and flora that have returned due to the programme. As this is a relatively new concept, there was concern that people might think that NGED had simply cut back on costs by letting the grass grow back around substations. Here, there were suggestions to use boards or other low-impact signage to educate and inform the public about the rewilding work taking place (E125).

11.19 This would, in turn, start conversations around biodiversity and rewilding and build a feeling of common purpose. Getting that message across was key, with some stakeholders citing their biodiversity programmes being mown down by maintenance due to a lack of awareness (E125).

11.20 Local examples and case studies, seen as more powerful than evidence of a project from somewhere remote, were advocated, as well as best practices shared with businesses, local authorities, schools, and other stakeholders like universities (E125).

11.21 Stakeholders also wanted to see NGED partner with local nature partnerships, such as LNPs, and groups and members like Natural England and the Wildlife Trust (E125).

11.22 Linking back to the award that NGED won from the Financial Times (which was widely praised), some suggested creating regional rewards for external stakeholders for participating in and expanding the biodiversity initiative, thereby creating buy-in and enthusiasm at a local level (E125).

11.23 Delegates discussed how NGED could expand their learnings into other areas. To make learnings concrete and adaptable, it was agreed that NGED first needs to analyse how the programme on biodiversity has worked, examining the non-technical conditions for its success, including buy-in from internal staff and external stakeholders, before rolling it out to other areas (E125).

High-level topic: Delivering future energy networks
Sub-topic: Connections

What we heard from 2019 to 2021:

In 2019, while stakeholders felt that NGED's proposed actions under connections were appropriate during the preliminary engagement, there were several concerns and proposed changes to the application process and charging methodologies. The main issues with the application process were the lack of clarity of the process and its cost, the lack of consistency in the process between geographical areas, and the lack of communication between NGED and the prospective connections customer. Suggestions such as digitalisation, providing a single point of contact and simplification of the process were suggested improvements. In addition, the lack of clarity with changes in the charging methodology and the embedded benefits review process were the key areas of issue in this sub-topic.

In 2020, connections were an important topic for stakeholders, gathering a significant volume of feedback. First, changes to the speed, simplicity and availability of the application process were discussed, with most people asking for more information. This was also true once NGED had offered customers, especially for those who may not have a complete engineering understanding. The future options for connections were also discussed, particularly around smart connections and the importance of three-phase connections. The cost and lack of understanding were the main barriers to uptake. There was substantial discussion around the allocation of capacity, the cost, competition for connection and the prioritisation of projects. Finally, low carbon technology connections received a lot of feedback, especially around the cost of these connections, the need to incentivise developers to have these connections, and the potentially massive demand for EV charging point connections in the future.

In 2021, connections were an important topic for stakeholders, gathering a significant volume of feedback. Firstly, in terms of the application process, there was an appetite for early engagement and support, especially with community energy groups, more information on the process itself, and most prominently on capacity. Secondly, stakeholders felt that prioritising community energy groups when power exists is important to motivate them to participate; otherwise, they lack expertise in the connections area and tend to lack funding at the beginning of projects, making it harder for them to secure the connections. Stakeholders called for a joint-up approach, more collaboration, and early planning for connections, including strategic investment and promoting competition. Thirdly, stakeholders had extensive discussions on different connections, including three-phase connections, with some stakeholders agreeing with their benefits and contribution to facilitating net zero and others expressing concerns over practical limitations and the increased costs to customers and developers. Alternative connections were also discussed, stressing the importance of flexibility.

Low carbon connections were also a big theme, although stakeholders discussed that capacity constraints limit them. Local authority stakeholders submitted their plans for industrial, commercial, and domestic developments and discussed to what extent Covid-19 has affected those.

Summary of Phase 6 feedback

12.1 When discussing connections, NGED shared the investment of £60 million in network reinforcement over the next two years using the green recovery scheme from Ofgem. However, the capacity will be only available for new connections.

12.2 Regarding NGED's heat pump and electric vehicle strategies, it concentrates on the innovation around en-route charging, letting parties ramp up capacity annually within a connections agreement. Delegates were supportive of extending NGED's en-route charging initiative. The other focus area under the connections priority is increasing grid capacity and speed and faster connections timeframes.

12.3 A total of 30 pieces of feedback were collected for Connections during previous phase 6 engagement, which adds to the 905 collected during phases.

Detailed feedback

Feedback for Connections can be divided into six themes:

- General
- Stakeholders' future plans
- Allocation of capacity
- Communication, collaboration and support
- Application process
- NGED's new Connections Principles

General

12.4 It's important for NGED to engage with the major connections stakeholder's expert panel on their connections strategy whilst endorsing the ICE incentive, LCT EV update, the Trigger point for EV hubs and 33kV and above and budget estimate charging (E112).

12.5 Reactions to the upcoming connection boundary and access rights reforms varied among stakeholders. For some, demand was so high that getting their place in the connections queue was the main driver, whereas others felt they could afford to wait and see if a cheaper deal would become available next year (E124).

12.6 When asked how they felt about the statement: "I am likely to defer any new applications I make until after the implementation of the new charging structure", the majority (51%) said they didn't know or couldn't say. However, of those who provided a definitive response, 46% of stakeholders disagreed, and 43% agreed that they would defer new applications (E124).

Stakeholders' future plans

12.7 NGED is investing £60 million in network reinforcement over the next two years using the green recovery scheme from Ofgem. They are focused on works that add demand and generation capacity to key areas ahead of need. The works will unlock extra network capacity in specific areas, which will be available for new customers connecting to the network. However, customers questioned whether the extra network capacity was available to existing sites. NGED confirmed that the capacity is available for new connections only (E113).

Allocation of capacity

12.8 A shareholder noted that NGED is seeing big battery projects taking up grid capacity and making it harder to connect (E121).

12.9 A key priority for NGED to address in its Connections Strategy lay in managing and communicating on constraint and capacity, with stakeholders conveying the message that NGED's plan was missing this as a focus area (E124).

12.10 Delegates were supportive of extending NGED's en-route charging initiative, with 81% agreeing that the principle of capacity ramping should be extended to other customer types (E124).

12.11 Delegates were asked whether the upcoming connection boundary and access rights reforms would change their approach to connection applications. There was a mixed response, with most identifying the careful balance in play – that is, weighing up the risk of paying more now but taking advantage of existing capacity against waiting and saving on costs next year but perhaps finding capacity curtailed (E124).

12.12 Given that some of the upfront costs for the connection will be socialised, stakeholders considered whether this was the right approach for fair treatment of future needs while minimising the capacity charge impact. Some felt it was fair and sensible to cater to future needs using this method (E124).

12.13 The additional focus area under the connections priority revolved around increasing grid capacity and speed and faster connections timeframes. These were particularly key for major projects, as delays could have negative financial effects on the companies involved (E126).

12.14 Many attendees also wanted to see more comprehensive data sharing around spare network capacity for grid connections and potential alternative locations (E126).

Communication, collaboration and support

12.15 Users liked the improvements made to the new connections website (E122).

12.16 Comments were made about the complexities around the new budget estimate tool, with stakeholders feeling that it is easy to use until you reach the map where you are asked to draw your connection on it (E122).

12.17 Stakeholders said that they found the connections website journey and the language used too complex (E122).

12.18 A key comment for those representing EV charge point manufacturers and installers was that 'demand is so high that the main concern is connection time, not costs'. Others concurred that securing a place in the connections queue was the key issue, over and above cost. However, some felt that the reduced costs for the customer of reinforcement next year would be a huge driver, and they anticipated a potential 'barrage' of applications next year once the reforms come into place (E124).

12.19 When delegates considered whether they would be likely to defer their applications until after the implementation of the changes, the picture was again mixed, with some feeling they would be best placed to move quickly now to secure existing capacity, particularly for those who had substations nearing capacity limits and agreed on capacity constraints with the DNOs. Others felt inclined to wait and see if they would get a more favourable offer once the changes had been implemented (E124).

12.20 Given the complexities around the connection boundary and access rights reforms and connections in general, delegates said it was important for this information to be provided online (E124).

12.21 A suggestion was made to create a straightforward spreadsheet showing the current picture and what the changes will be post-April. Stakeholders also advocated for a social media campaign running in tandem, backed up by face-to-face contact through surgeries and workshops (E124).

12.22 It was clear from the discussions that there was an appetite for more engagement around connections. Delegates of all types said they grappled with ensuring the flow of reliable, accurate and useful information on connections through their teams and organisations (E124).

12.23 Stakeholders from parish councils wanted to see regular, grassroots-level interaction with NGED, which was urged to translate some of the more technical elements of the connections process into simple, plain language. Linking back to the previous conversations around the connections principles, some wanted a better steer on the end-to-end process, from the distribution connection to the metering connection. Connecting these dots for customers – particularly those in local authorities, who often lacked experience in the energy industry – in the form of road maps or progression milestones was a key priority (E124).

12.24 Another key group for targeted engagement was off-gas customers to understand better and share information about new connections and the changes coming down the pipeline due to the energy transition. Others suggested a forum for interactive online engagement, where those involved in a connections project can post questions and receive answers so that all relevant parties can share and retrieve information (E124).

Application process

12.25 The will is to engage with the major connections stakeholder’s expert panel on the significant code review (SCR) whilst endorsing our ICE incentive (E123).

12.26 The Significant Code Review (SCR) is moving forward and needs to be in place by April 2023 so that customers can benefit from it (E123).

12.27 NGED are always good at communicating new Ofgem-led processes and procedures in the connections arena (E123).

12.28 The most widely discussed priority was connections, with the timeliness of the connections process post-offer most frequently cited needing more attention (E124).

12.29 Given the attention on the priority of the connection, delegates were keen to suggest additional focus areas here whereby NGED could improve the process as a whole (E124).

12.30 Some delegates suggested innovative connections agreements to speed up the process, software to provide estimates in seconds rather than days, and the facilitation of self-serve connections (E124).

Sub-topic: Network flexibility

What we heard from 2019 to 2021:

In 2019, this sub-topic had the most pieces of feedback under 'Delivering future energy networks' during the preliminary engagement phase. There was a range of appetite for participating in flexibility services between events and stakeholders, with domestic customers more likely to join than businesses. The proportion of the average bill saving required to increase participation varied from 10% to 40% between events. The key barrier to participation was the trust of NGED and the loss of control of their devices (e.g. EVs and heating). There was also a mix of responses among stakeholders regarding the uptake of new flexible technologies, with EVs being much more popular than renewable heating devices. Once again, domestic customers were more likely to buy these technologies than businesses.

In 2020, increasing the amount of variable renewable electricity generation and the transition to a DSO requires NGED to substantially increase its network's flexibility. Stakeholders generally understood the benefits of flexibility, but the amount of information and educational resources available for domestic and commercial customers was limited, ultimately limiting the uptake of flexible technologies and services. Tariffs were discussed as a key mechanism to encourage a change in behaviour, as people tend to react better to financial benefits rather than intangible environmental benefits. Domestic customers tended to be limited regarding their smaller demand and lack of understanding. Still, automation and the deployment of new technologies (such as smart meters and batteries) could be a great facilitator for these customers to participate. On the other hand, there was significant debate about whether commercial customers would be more or less favourable to target for flexibility as they tended to have much larger energy demands but maybe less flexibility in their demand profiles. It was clear that both commercial and domestic customers required clear, simple steps to allow them to become more flexible, and it was also mentioned that commercial customers would likely require a well-established proposition to entice uptake.

In 2021, Covid-19, once again, challenged the performance of the network and highlighted the need for upgrades to facilitate the decarbonisation and electrification agenda. It was thought that policy and regulation developments, education, cooperation within different sectors of the smart charging value stream, and residential flexibility from electric vehicles would be key drivers of domestic flexibility adoption. Community groups were thought to need to play an important role, but they require more support and guidance, especially on the technical side. NGED needs to ensure they are not disadvantaged in terms of capacity allocation. Stakeholders were also interested in battery storage and getting NGED's input on strategic investment. One stakeholder wanted NGED to lobby Ofgem to get regulations changed around setting up community battery storage and having access to operate it.

However, it was also acknowledged that, at present, the rules and processes for procuring DSO flexibility services are complex, and there is currently a lack of standardisation, which should be addressed. Overall, it was commented that investment in a smarter, digitalised energy network should not happen at the expense of delivering capacity improvements to alleviate the current constraints.

Summary of Phase 6 feedback

13.1 When discussing connections, NGED planned to further support domestic flexibility by introducing a new flexibility product, ‘Sustain’, a simple 'turn-down-to' service to bypass EV charging peaks, with consumers on these tariffs awarded for network investment deferral.

13.2 Most delegates considered the use of smart meter data reasonable to check consumer compliance in delivering domestic flexibility services. The electronic voting reported that 73% agreed with this proposition. However, the unanimity view on a fixed or fluctuating price for flexibility was to offer each customer the option between the two.

13.3 A total of **36** pieces of feedback were collected for Network Flexibility during previous phase 6 engagement, which adds to the **437** collected during phases.

Detailed feedback

Feedback for network flexibility can be divided into two themes:

- Flexibility services
- DSO transition

Flexibility services

13.4 Stakeholders were clear that many of the priorities were deeply connected and contingent on each other, urging NGED to find the challenges and opportunities in the areas where they overlap (E124).

13.5 For these stakeholders, NGED needed to look beyond laying the cables and consider more agile flexibility models, which might work to reduce fuel poverty and reach Net Zero (E125).

13.6 Following an update on the RIIO-ED2 Business Plan, it was noted that customers with smart appliances, Electric Vehicles and heat pumps are generally more affluent, and those on low incomes may struggle to access flexible services (E131).

13.7 NGED was the first DNO to offer flexibility to domestic customers. Their Community Energy (CE) projects reach social housing by focusing on relevant areas; but they know there’s more to do (E131).

DSO transition

13.8 DSO Manager at NGED explained that customers were becoming more engaged than ever with their energy usage and that a key priority was supporting this engagement even further (E124).

13.9 He showed how NGED was planning to better support domestic flexibility by introducing a new flexibility product, Sustain, a simple ‘turn-down-to’ service to avoid EV charging peaks, with consumers on these tariffs rewarded for network investment deferral and asked for feedback on whether it was reasonable to use customers’ smart meter data to deliver this more effectively - and who the DSO should interact with to facilitate and build trust (E124).

13.10 Most delegates felt it was reasonable for NGED to use smart meter data to check consumer compliance in delivering domestic flexibility services. This was reflected in the electronic voting, where 73% agreed with this proposition (E124).

13.11 The consensus view on a fixed or fluctuating price for flexibility was that NGED’s priority should be to offer each customer the choice between the two, as preference would inevitably vary between customer types (E124).

13.12 Voting electronically, 54% agreed that customers should have a fluctuating market price, 25% disagreed, and 20% were neutral (E124).

13.13 Delegates discussed who the DSO should interact with in building trust and making domestic flexibility simple and viable for customers. While many pointed out that suppliers were the prominent partner, there was considerable reluctance to go down this route, as stakeholders reported poor communication and customer service in these organisations (E124).

13.14 Those from local authorities recommended interaction with aggregators to pool flexible customers into one large customer base (E124).

13.15 Developers and energy consultants confirmed that the picture was complex, stating that a range of parties was needed to make such a project work, and welcomed more engagement with NGED on higher-level strategies to learn more about customers’ needs and energy demand (E124).

13.16 Some felt that NGED, as a trusted authority, would be best placed to manage the flexibility market piece. Still, others disagreed, feeling that NGED’s status as a neutral market facilitator and educator was more important to maintain (E124).

13.17 In other words, NGED should prioritise making it as simple as possible for consumers. A community energy specialist tailored to different locations and regions could be a useful bridge here. A key point was made when a delegate switched the question on its head, stating that the more important issue was who the consumer should interact with: ‘It’s about keeping the consumer informed. It needs to be simple, and the data flow should support whatever commercial arrangement’ (E124).

13.18 There was a good deal of discussion on this question, with most stakeholders agreeing that different customers will have different needs and ambitions for their energy usage and management. Therefore, the consensus was that the priority should be to offer each customer the choice between a price that fluctuates and a fixed price, with clear signposting of how each model works (E124).

13.19 For those on the fixed price side, it was felt that some customers would inevitably prefer to budget ahead, particularly in light of the steep rise in energy prices. n the other hand, others might prefer this option as they lack the skills, means or time to manage their energy usage in a way that might see them get the best price for energy each day (E124).

13.20 Those from charities and parish councils, while acknowledging that their clients, particularly those in fuel poverty, might be inclined to opt for a fixed price, wanted to ensure that the fixed price was not driven up by more customers opting for the variable rate, tying into a deeper point about a just and fair energy transition (E124).

13.21 Others reported that, conversely, a fluctuating price could be beneficial to vulnerable and fuel-poor customers, encouraging them to use their energy at certain periods during the day, with the time-of-use trials they had conducted demonstrating this to be the case (E124).

13.22 Many saw that it was inevitable that the more tech-savvy would opt for a volatile pricing model and that NGED's role was to make sure that everyone could benefit, regardless of their competency, by working with community energy groups to share information and learning (E124).

13.23 Other stakeholder types who favoured the flexible pricing model felt that rather than relying on the individual consumer to manage their usage, more automation was required to optimise the kit that customers have in their homes, thus opening up flexibility services to a wider pool of potential participants (E124).

Sub-topic: Facilitating net-zero

What we heard from 2019 to 2021:

In 2019, during the preliminary engagement phase, stakeholders wanted NGED to be more responsive to the environmental issue, particularly focusing on reducing emissions nationwide. In addition, it was evident that stakeholders were keen to see NGED set out a strategy to meet the government's net-zero target, particularly in terms of policies and incentives that NGED could implement to encourage consumers to reduce their emissions. Suggestions varied from increasing incentives for low carbon technology deployment (e.g. EV chargers) to educating consumers about ways to reduce their emissions and lobbying Ofgem to change emission rules and regulations.

In 2020, facilitating net-zero was the most discussed topic during phase 2 of engagement, with the highest volume of feedback and priorities. Electric vehicles were the largest discussion point within net-zero, especially concerning how NGED can help facilitate the deployment of more electric cars on the road and the facilitation of the charging network to support this new fleet. Collaboration was discussed as a key action for NGED, from working with local planning stakeholders on charging network locations to car manufacturers on the standardization of technologies and with the government to implement better incentives for EV uptake and network improvements. There were discussions on the prioritization of home charging or charging when away from home and topics including fast charging, charging hubs and inductive charging. There was a general understanding that the network would require substantial reinforcement to deal with the substantial increase in demand for EV charging. Despite being important to facilitate the decarbonisation of transport, stakeholders were also conscious of the huge potential cost of reinforcement and charging infrastructure, affordability of charging and affordability of consumer bills were mentioned as important considerations, especially not to put vulnerable or fuel-poor customers at a disadvantage. Vehicle-to-grid technology was also discussed as a potentially important technology for NGED to develop and deploy, both to help make EVs more attractive to consumers and to help them provide grid flexibility. Stakeholders also discussed the facilitation of low carbon technology in terms of renewable energy generation, storage, carbon capture and heat decarbonisation. Stakeholders also discussed the importance of facilitating other organizations' net-zero targets, particularly local community groups and local authorities. It was suggested that this could be done with a set plan or for NGED to provide a trial village or case study for others to follow. It was also mentioned that some climate change effects are inevitable; thus, NGED should have an adaptation plan in place.

In 2021, facilitating net zero was the topic that received the most feedback. Overall, stakeholders were very keen on decarbonisation and supported initiatives that would speed up their achievement of net-zero targets. However, there was a lot of discussion around the technical barriers, capacity and grid constrain, unbalancing of the network due to excess demand, costs, and lack of education and awareness. Apart from heat pumps and electric vehicles, stakeholders were interested in the circular economy and other technologies that can provide renewable heat.

Summary of Phase 6 feedback

14.1 The feedback for facilitating net-zero focused on low carbon technologies, environment and sustainability, and vulnerability and fuel poverty as the most important priorities for NGED to address. When ranking the elements that would present challenges when decarbonising heat in buildings, housing stock, lack of distribution network operators, libraries, schools and local authority-owned buildings were seen as the biggest challenges.

14.2 Regarding facilitating other low-carbon technologies, when stakeholders were asked to rank alternative technologies in order of priority for NGED to include in its system design, district heating came out top, followed by direct electric heating and solar thermal.

14.3 Stakeholders ranked heat pumps the highest, followed by district heating and heat networks and thermal storage as the low-carbon heat sources that would form part of the UK's decarbonisation of heat strategy in the future. Also, stakeholders reported a positive response from customers to greater use of automation and smart technology in home heating, seeing it as a user-friendly approach that kept systems as simple and automated as possible.

14.4 Stakeholders felt hydrogen was an effective alternative fuel source for vehicles over 3.5 tonnes. They urged NGED to work closely with big demand centres, which are well placed to provide mass fuelling. The aim is to include affordable and clean energy, industry, innovation and infrastructure.

14.5 A total of **74** pieces of feedback were collected for Facilitating Net-Zero during previous phase 6 engagement, which adds to the **1,697** collected during phases.

Detailed feedback

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

- General
- Facilitating other low-carbon technologies
- Growth plans
- Electric Vehicles - Charging network
- Help local communities to achieve their net-zero emissions targets

General

14.6 Stakeholders representing independent distribution network operators (IDNOs), energy consultants, and estates managers pointed to a similar race for decarbonisation in the commercial sector, with the pressures here lying in timescales and the supply chain, due to the reinforcement works needed to secure the required power and a shortage of heat pumps and components compounded by Brexit, the pandemic and the war in Ukraine (E115).

14.7 When stakeholders ranked elements that would present challenges when decarbonising heat in buildings, housing stock emerged as the biggest challenge, with 3.32 out of 3.35. This was followed by a lack of distribution network operator (DNO) data, with 2.35, and then libraries, schools and local authority-owned buildings, with 2.2 (E115).

14.8 Low carbon technologies, environment and sustainability, and vulnerability and fuel poverty were felt to be the most important of the current priorities for NGED to address, and this was echoed in the electronic voting, where they scored an average of 9.32, 9.21, and 9.00, respectively, out of 10 (E125).

14.9 Stakeholders considered whether NGED should expand on the number of SDGs it was currently focusing on, and 53% agreed with this proposition (E125).

14.10 Others felt that capacity and constraint were missing as a focus area under LCTs, with better, more transparent communication on areas of constraint and the sharing of data and information seen as key (E125).

14.11 Storage was also felt to be missing as a focus area here, with stakeholders feeling that a focus on enabling clean energy storage would work to solve problems across other priorities, such as a smart and flexible network, community energy, and even fuel poverty (E125).

14.12 Local authorities suggested that more engagement with NGED was needed to facilitate community energy projects in their areas. Given that community groups are not electrical engineers, the need for simple, light-touch information, education and support in clear and digestible language was seen to be critical to enabling more community energy projects onto the grid (E125).

14.13 Many local councils stressed that their capacity, workforce, and budgets were extremely stretched, with some citing a lack of dedicated staff working on climate change and Net Zero (E125).

14.14 Better access to user-friendly information written in plain English would engage a majority in the push for Net Zero and enable a wider scope of stakeholders to engage and feed into the planning process (E125).

14.15 It was also felt that NGED had a role to play in being transparent about the costs of the transition to Net Zero and could employ a social value engine within its forecasts (E125).

14.16 NGED played a role in being transparent about the costs of the transition to Net Zero, employing a social value engine within its forecasts. This social value engine might help explain to stakeholders that while economic prices might rise, there were other non-economic benefits, such as improved health (which would also have an economic benefit in terms of reduced health spending) and environmental improvements associated with getting to Net Zero (E125).

14.17 There was a call for data that distinguished between generation from renewable and fossil fuels and a wider picture that shows the trajectory of Net Zero and specific places where local energy plans and community energy can feed into and contribute to the clean (E125).

14.18 There was a real sense that 'we're all in this together' and that for Net Zero and sustainability to be an achievable reality, we all have to pull together as one, ensuring that all learning is a two-way process (E125).

14.19 Despite the significant focus on fuel poverty and network resilience, stakeholders recognised that each priority area was interlinked and presented challenges and opportunities as a result. For example, it was suggested that efforts to introduce low carbon technologies (LCTs) into the network during RIIO-ED2 could deliver benefits around customer vulnerability and resilience, as this would decrease grid reliance and potential outages, which adversely affect vulnerable customers (E126).

14.20 Charities noted their concerns that vulnerable customers in rural areas may be unable to reap the benefits of the green technological revolution (E126).

14.21 This scenario covers the smart and flexible network, innovation and digitalisation, low carbon technologies, connections and just and fair transition scenarios, and is evidence of how interconnected NGED's priorities are (E126).

Facilitating other low-carbon technologies

14.22 When asked to rank in order of importance the low carbon heat sources that they thought would form part of the UK's decarbonisation of heat strategy in the future, stakeholders ranked heat pumps highest, with an average score of 6.55 out of 7, followed by district heating and heat networks with 4.80, and thermal storage with 3.89 (E115).

14.23 There was support for the iDentify App during the discussions and the electronic voting, where 60% agreed or strongly agreed that moving from a paper-based system to the iDentify App would be helpful to them in their role (E115).

14.24 There was broad support for the Welsh Government's proposed approach to optimised retrofit, with 72% agreeing or strongly agreeing that it is appropriate (E115).

14.25 Delegates were adamant that any successful retrofitting project, rolled out at scale, would need to involve a drive to upskill and train the workforce. The workforce required to advise on, install, monitor and service low-carbon heating systems and insulation, along with an education piece for customers introducing them to new approaches to domestic heating, such as maintaining ambient temperatures throughout the day, sharing usage data, using setback controls and surrendering some individual control via district heating (E115).

14.26 Stakeholders reported a positive response from customers to greater use of automation and smart technology in home heating. It was felt that a user-friendly approach that kept systems as simple and automated as possible would be widely accepted (E115).

14.27 Throughout the discussions, it was clear that a wide network and package of support are necessary to drive decarbonisation. This was reflected in the electronic voting, where 75% agreed or strongly agreed that their organisation would welcome assistance with retrofitting in the future (E115).

14.28 There was consensus that the affordability of heat pumps was a pressing concern across all sectors, exacerbated by the cost-of-living crisis and the spiralling price of energy. Many felt that central government should take a leading role by introducing tax breaks or deductibles on heat pumps; scrapping VAT on energy efficiency payments and refurbishing existing buildings with decarbonised heating; and implementing incentives by, for example, reducing the stamp duty on houses with good efficiency and energy performance certificates (EPCs) (E115).

14.29 When stakeholders were asked to rank alternative technologies in order of priority for NGED to include in its system design, district heating came out top, with 4.19 out of 5. In second place was direct electric heating, with 3.11, and third was solar thermal, with 2.53 (E115).

14.30 District heating was favoured because while it is expensive and disruptive to install, it was felt that it delivers better outcomes, lends itself to new technologies, and can be combined with air and ground source heat pumps (E115).

14.31 The idea of direct electric heating engendered some debate: while some saw that it was relatively cheap to install and replace and very low carbon, others argued that it is punitively expensive to run and uses excessive grid capacity at the expense of capacity needed for electric vehicle (EV) roll-out and heat decarbonisation (E115).

14.32 Delegates made it clear that no emergent technology should be excluded at this stage, with a key comment: “you need your plans and available technology to be flexible for a home-by-home, project-by-project basis. You shouldn’t take anything off the table.” (E115).

14.33 A stakeholder asked about the issue with the safety of hydrogen. It was explained that legislation is in place, and policy around hydrogen vehicles (e.g. can’t travel through the Eurotunnel) restricts use in certain environments. This policy may remain in place for the safety of operators (E116).

14.34 For many delegates, particularly those representing local authorities and large energy users, strict carbon reduction and energy reduction targets in their organisations signalled that more support and focus from NGED could be given under this priority. For many, it was essential to understand whether the power they were connecting and purchasing was generated from renewable sources. More transparency and greater access to this information were key to their sustainability programmes (E124).

14.35 Delegates supported extending NGED’s en-route charging initiative, particularly as it addresses the question of investment ahead of need and will reduce reinforcement works and costs. Others, however, pointed out that not everyone will drive cars or get EVs and therefore questioned whether it was fair for these customers to subsidise others (E124).

14.36 While stakeholders were careful to say that the scheme should proceed on a case-by-case basis to ensure that equipment and capacity will be fully utilised over time, suggestions for facilitating en-route charging for other customer types included engaging with industrial customers and establishing charging hubs for mass transport and domestic EVs using existing sites such as leisure centres and retail parks (E124).

14.37 In this sense, many stakeholders felt hydrogen might be a more effective alternative fuel source for vehicles over 3.5 tonnes. They urged NGED to work closely with big demand centres, which are well placed to provide mass fuelling. It was felt that a key driver of success here would be an interaction between the logistics and the electricity sectors to plan for both battery-powered and hydrogen-fuelled HGVs (E124).

14.38 The key goals to include in the expanded list were affordable and clean energy, industry, innovation and infrastructure (E125).

14.39 The majority of stakeholders felt quite far off the EV purchase/Heat Pump consideration mind-set - as well as ease of connections; there was felt to be a role for NGED in explaining, educating and encouraging people to transition; similarly, with community energy, this feels like an interesting topic but one that feels future-focused (E128).

Growth plans

14.40 During the electronic vote on appropriate mechanisms for enabling decarbonised heat, government grants came out top, with a score of 3 out of 4, followed by government subsidies (2.46) and government loans (2.28) (E115).

14.41 It was felt that providing long-term loans to owner-occupiers to fund the decarbonisation of their homes is an appropriate option for mitigating the high upfront costs associated with installation, so long as the loans are long-term, interest-free and government-backed (E115).

14.42 Delegates were clear that the priority for any mechanism has to be a certainty, which enables the greatest number of sectors to implement plans for the long term and avoids subjecting consumers, manufacturers, installers and local government to cliff edges. Certainty would also give manufacturers the confidence to step up the production of heat pumps, which would bring costs down over time (E115).

14.43 A particular theme from attendees was a need to find sources of grants and funding (E120). They are keen on finding local support, advice and funding (E120).

14.44 There was a desire to see case studies and examples of how other SMEs had achieved carbon reduction and energy efficiency measures (E120).

Electric Vehicles - Charging network

14.45 A stakeholder talked to the group about the uplift in EV car use and NGED's response – changing how they design and allow connections to the network and their ambition for charge point solutions (E116).

14.46 The group discussed charging options and scenarios, and a stakeholder mentioned specific locations such as Trowell Services (E116).

14.47 A stakeholder was surprised LAs focused on town centre charge points and asked where households without off-street parking (around 30%) go. Another stakeholder confirmed LA feedback: they were starting with car parks and hubs (not just the town centre, but also looking to add chargers in supermarkets, leisure centres, etc.), and we are urging them to talk to us early (E116).

14.48 There was consensus that one of the biggest barriers facing the electrification of HGVs was the demand for these vehicles in terms of capacity, particularly for rapid charging on the motorway. Another barrier was battery technology and its capability to power large vehicles over a long period. A key comment here is: 'Drivers don't want to charge every five minutes. They want something that suits their needs rather than the needs of the battery on-board (E124).

14.49 Delegates, particularly those representing local authorities and parish and community councils, discussed their experiences connecting large volumes of EV chargers to the network, suggesting additional areas of exploration and focus (E125).

14.50 Some felt that NGED needed to prioritise EV car sharing, especially for urban areas, as this would drive down costs for consumers, carbon emissions in production, and lessen the demand on the network (E125).

14.51 Delegates identified the key challenge interlinking the different priority areas as the huge task of rolling out technology to help customers achieve Net Zero, focusing on electric vehicle (EV) chargers (E126).

14.52 Local authorities discussed their struggles with connecting to the grid for public EV charging hubs due to a lack of capacity (E126).

14.53 In addition, some stakeholders expressed doubts about the effectiveness of this kind of strategy, particularly in built-up towns and city centres with lots of terrace housing. While some saw home charging as the most appropriate option, the general view was that NGED was best placed to support public charging (E126).

14.54 There was a general feeling that NGED could effectively establish and improve EV charging infrastructure, creating greater confidence among potential EV purchasers. As a result, more of them would be inclined to purchase one (E126).

14.55 The other potential support measure discussed was assistance in bridging the charging access gap between rural and urban communities to ensure that rural communities can also benefit from the LCT revolution (E126).

Help local communities to achieve their net-zero emissions targets

14.56 When discussing the realisation, scope and ambition of their plans to decarbonise heat, local authorities noted that the decarbonisation of heat was at the top of their agenda. Still, the funding and roll-out of heat pumps were facing setbacks owing to a lack of knowledge and expertise and a fear of installing obsolete technology that is expensive to run (E115).

14.57 The webinar discusses ways for SMEs to significantly save energy bills as NGED transitions to a Net Zero carbon economy (E120).

14.58 The ZCB Partnership is developing a free advice module focused on energy efficiency to help SMEs make immediate and longer-term changes to reduce costs, enhance business resilience and reduce emissions. Presentations from ZCB Partnership representatives give an early road test of the module (E120).

14.59 The webinar also discussed plans for the future development of the ZCB Portal, with stakeholders able to participate in Q&As and voting (E120).

14.60 SMEs are concerned with rising energy costs and seek support in identifying ways to save energy (E120).

14.61 A stakeholder noted an interesting cross-over with the work of the Third Sector but also a sense of fragmentation in the funding approach and would like to see a business model approach where the economic and social values (that can sometimes be monetised) can be normalised and deployed (E121).

14.62 A stakeholder talked about barriers to planning applications, and noted that CE projects tend to exist mostly in affluent areas (E121).

14.63 A stakeholder mentioned the solar PV on schools project, and the group talked about Battery Energy Storage and consequent ANM opportunities (E121).

14.64 A stakeholder, , talked about the positive impact of CE despite it being a small percentage of the UK energy mix. examples of local CE co-operatives were given, e.g. community-owned solar on over 30 school and community building roofs (E121).

14.65 A stakeholder talked about grid-related challenges and the factors affecting the CE renewable sector. It has been asked if there are obvious solutions NGED can help with. Communities are always left behind by commercial developers. NGED is stuck and should lobby the government (E121).

14.66 It has been asked whether there were additional priorities that NGED should consider. Stakeholders suggested climate change which scored the highest in terms of importance with an average score of 8.94 /10. Affordability and value scored 8.42 and inclusivity 6.60 (E124).

14.67 NGED’s approach to enabling the electrification of long-haul transport (HGVs) was explained, and stakeholders were asked what they see as the main barriers to transitioning to battery or hybrid-electric for HGVs (E124).

14.68 In response to the issue of fairness, delegates from the charity sector suggested a more forensic look at the governance and ownership of assets that benefited from the en-route charging scheme and suggested prioritising those that are community-owned (E124).

14.69 Stakeholders were enthusiastic about community energy, particularly as a public-facing mechanism for showcasing and supporting positive behavioural changes around energy use, and 55% felt that NGED's plans for community energy went far enough (E124).

14.70 However, 27% were neutral, and 18% disagreed, feeling that there was more to be done to promote and support this work and the potential value it could bring. Some delegates felt that, given the current climate, the potential for communities to lower their energy bills needed to be emphasised, which would, in turn, lead to greater participation in community energy schemes (E124).

14.71 Workshops, community champion training and targeted partnerships with organisations such as the Energy Saving Trust were advocated to spread the word, boost learning and create inclusivity (E124).

14.72 As a concrete enabling action, there was a suggestion for NGED to audit the proposals for community energy schemes to make sure that community groups have everything covered and are aware of the costs, giving them the maximum chance of having their plan accepted and realised (E124).

14.73 A further target was for NGED to link into or promote flexibility schemes. Another suggestion was to use existing projects, such as installing PV at schools, to link in with other interested parties, share learning and encourage cross-regional partnerships. For these delegates, 'the name of the game' is developing a model you can then roll out across NGED's three regions (E124).

14.74 Other stakeholders wanted to see NGED engage in more innovative work, such as developing proximity tariffs and private wiring to incentivise the installation of onshore wind turbines, which could deliver huge benefits to their communities (E124).

14.75 There was consensus that leveraging funding was critically important for community energy schemes to be viable. Delegates suggested further assistance, such as creating a sinking fund, ring-fenced for community connections projects, or providing support in the form of workshops and surgeries on the types of funding available and on the process of applying (E124).

14.76 Some stakeholders reported seeing other community energy projects, such as onshore wind turbines in Scotland, and asking themselves, 'how did they do it?' They felt that it was vitally important for NGED to provide and signpost this kind of information – perhaps in the form of case studies – with community energy groups already active and successful in their schemes to encourage more projects and close the confidence and knowledge gap (E124).

Sub-topic: Supply-demand forecasting

What we heard from 2019 to 2021:

In 2019, the increasing penetration of variable renewable generators led to a network with more variable demand and generation curves. During preliminary engagement, stakeholders highlighted the need to predict these fluctuations as NGED transitions into a DSO accurately. Future network capacity was mentioned in multiple events as a concern in light of new renewable generation and new housing developments. It was also suggested that pressure should be placed on Ofgem to change the rules to allow DSOs to reinforce the network ahead of the need to integrate more renewable generation better and achieve the net-zero target by 2050.

In 2020, Stakeholders were very conscious of the monumental changes in the network shortly and strongly recommended that NGED adopt a policy of investing ahead of need. This was seen as critical due to the speed of new technology uptake and how this may exceed NGED's ability to reinforce the grid. In addition, it was recommended that NGED coordinate and collaborate with planning authorities and developers to ensure new developments are built with net-zero compliance. Lobbying the government for changes in technology deployment targets and incentives was seen as an important step for the gradual uptake of technology rather than a rapid demand change – such as an increase in electric heating when new houses cannot be connected to the gas network after 2025. The investment was seen as a crucial element in balancing future supply-demand, but it was highlighted that investment should be transformative and not just to reinforce the network. Stakeholders believed that more investment in the present would significantly reduce the cost of net zero in the future. However, this does have to be balanced with affordability for customers.

In 2021, supply-demand forecasting was seen as a pressing matter due to the changes in energy profiles brought upon by the Covid-19 pandemic. Energy usage was seen to have shifted from business to personal use as people were working from home, creating an excess of electricity demand. Moreover, electrification was again raised as a point to plan for, with stakeholders stressing the need to future-proof the network to maintain reliability. Stakeholders were also keen to see the excess demand being met through flexibility with initiatives. There was very little feedback for the supply-demand forecasting topic in this engagement phase. Stakeholders discussed the effect of the Covid-19 pandemic on shifting energy demand and consumption patterns. Although seen as a challenge to the network's reliability, it was also seen as an opportunity to stimulate the uptake of domestic low-carbon technologies through incentives. Areas missing from NGED's proposal were mentioned, such as increased demand due to home working and EVs, behavioural change, and more dynamic interaction with industry bodies on how the energy and power infrastructure needs to service future growth. A 'highly anticipatory investment' approach was also recommended.

Summary of Phase 6 feedback

15.1 When discussing supply-demand forecasting, stakeholders highlighted vehicle-to-grid options and costs and the standards and methods in place, marking the importance of considering transport policy and car-sharing schemes.

15.2 NGED pointed out the role of the DSO in planning and network development to facilitate the transition to Net Zero through the Distributed Future Energy Scenarios (DFES) to plan for future growth and the interaction with Local Area Energy Plans (LAEPs).

15.3 A small majority (54%) agreed that NGED should work with councils to build their LAEPs, with holistic, broader network planning, co-creation strategies, and the interrelationships between different regions and authorities highlighted as critical benefits.

15.4 A total of 11 pieces of feedback were collected for Supply-demand Forecasting during phase 6 engagement, which adds to the 241 collected during previous phases.

Detailed feedback

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

- Demand and consumption patterns shift
- Future-proof the network and investment ahead of need

Demand-supply balancing

15.5 One stakeholder asked if projections for heat pumps and EVs align with government projections. NGED explained that they prepared a company best view along with National Grid and the Climate Change Committee, so they have aimed their best view to be aligned with those projections and scenarios. Engagement with all 130 Local Authorities has fed into this (E116).

15.6 A stakeholder asked about the underlying factors driving these demands, e.g. behaviours and technologies available. It was explained that customer behaviour (the ability for people to insulate their homes and reduce consumption) has a fundamental impact on the network and allows NGED to examine critical and demand peaks. Using a scenario model gives a single view of the business. Still, NGED can also look at various options and engage with/include the views of various sectors (including local authorities and developers). NGED is also trying to shape consumer demand by developing flexible markets (E116).

15.7 A stakeholder was pleased to hear about consumer protection if demand doesn’t materialise. A parish councillor identified a challenge around the loss of parking spaces, and noted that their EV charger hasn’t been widely utilised. It was also noted that NGED needs a local transport plan as well as a local area plan (E116).

15.8 NGED data is shared on their portal, and regional needs from other sectors are mapped (e.g. gas and oil). It was discussed how the DECC tool/resource allowed users to play with a slider to assess wind/nuclear etc. A stakeholder confirmed that NGED takes the whole system view and helps LAs and stakeholders to consider the region (E116).

Future-proof the network and investment ahead of need

15.9 A stakeholder stated that all transport authorities are required to complete a transport plan. However, no individual area funding has been available, and only £1.25bn is available in total, so lots of areas will get small amounts, or small areas will get large amounts, and rural areas will struggle (E116).

15.10 There were discussions around vehicle to grid options and costs and the standards and methods in place. It was noted that wider transport policy and car sharing schemes also need to be taken into account but whilst policy/drivers and engagement with stakeholders can give NGED volumes, behaviours still need predicting (E118).

15.11 Delegates considered whether NGED should work with councils to provide data that can be accessed by local authorities to build their own LAEPs, or develop individual, bespoke data and plans for each local authority, and the response varied according to the size, experience, and capacity of each local authority (E125).

15.12 Voting electronically, a small majority (54%) agreed that NGED working with councils to build their own LAEPs was the better option, with holistic, broader network planning, co-creation strategies, and the interrelationships between different regions and authorities highlighted as key benefits (E125).

High-level topic: Enabling factors
Sub-topic: Collaboration and whole system approach

What we heard from 2019 to 2021:

In 2019, stakeholders in several preliminary engagement events mentioned the importance of intra- and inter-sectoral Collaboration in a range of services, from vulnerable customers to EV charging points. Stakeholders desired NGED to become a facilitator between the multitude of parties involved in a certain sector or service, possibly through establishing local hubs (as they have in Fuel Poverty), to improve the ease and cost of final delivery to the customer.

In 2020, Collaboration was discussed in all the workshops in a whole range of different contexts. Stakeholders noted the importance of utilising NGED's partners inside and outside the electricity industry to provide the best service to their customers. Planning, both in the context of new housing developments and in the context of low-carbon energy plans, was discussed extensively and was the two most important subjects under this topic area. First, stakeholders believed that NGED should be more involved in crafting planning regulations and planning applications due to their effect on future network demand and the new electricity-operated technologies that will be integrated into new buildings. NGED also have a crucial role to play in helping other organisation to develop their low carbon plans for the future. It was noted that most organisations are now constructing net-zero plans, but they do not always align, which can be counterproductive and waste resources. Alternatively, NGED should facilitate the discussion between all partner organisations and establish complete transparency about their strategy and future scenarios. This was especially important around heat, transport and connections. Other topics discussed were the need for NGED to be a leader in this collaboration process, for it to lobby the government and Ofgem for policies around decarbonisation, and for NGED to establish partnerships with a whole range of organisations to ensure all voices are heard and everyone can work together.

In 2021, Stakeholders supported the proactive and open discussions allowed for by the DFES and stressed that engagement and Collaboration are key to creating local and accurate future energy scenarios. Collaboration and frequent engagement were considered the driving factor for a whole system approach so that NGED and local authorities are up to date on council plans and transparent between them. There was also support for Collaboration between DNOs and within the industry and for easy and accessible data sharing with interested parties. Local authorities gave specific details on further stakeholders suggested for engagement and data sharing for a whole system approach, which has been summarised in a table.

Summary of Phase 6 feedback

16.1 When discussing collaboration and a whole systems approach, stakeholders were asked to vote on the best form of data sharing in terms of usefulness. with Interactive maps ranking the highest, followed by tailored reports and data at local geographies, and then raw data available on the NGED Connected Data Portal.

16.2 Regarding future energy plans, delegates proposed workshops, community champion training and targeted partnerships with organisations such as the Energy Saving Trust to encourage community energy schemes. Also, there was a call for more transparency when applying for the same load, feeling it was a critical factor in opening existing capacity for new projects.

16.3 A total of **17** pieces of feedback were collected for Collaboration and Whole Systems Approach during phase 6 engagement, which adds to the **687** collected during previous phases.

Detailed feedback

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

- Partnerships and collaboration
- Future energy plans

Partnerships and collaboration

16.4 Areas where joint learning were discussed to be of benefit were the prompt payment of GS payments, communication and resilience of the telecoms infrastructure (E118).

16.5 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 (E118).

16.6 Stakeholders asked if there was anything online (e.g. forums) where groups could connect and discuss barriers encountered. In response, forums providing networking opportunities were discussed such as the community energy practitioners forum, with regional examples given (e.g. Devon community energy network) (E121).

16.7 A stakeholder asked if NGED can look at areas with capacity and go out to LA/parish councils to advertise and encourage CE groups to act. The group discussed grid-related challenges and the need for national and government drivers as NGED must not differentiate between ‘customers’. They cannot invest in reinforcement ahead of the need to mitigate the risk of ‘stranded assets’ (E121).

16.8 NGED is partnering with National Grid on superconducting cables on the transmission network (E131).

16.9 Stakeholders were asked whether they were aware of NGED’s existing data offering, and 73% replied ‘No,’ indicating that more work needed to be done to publicise the data that NGED are generating and sharing (E125).

16.10 A smart and flexible network also scored highly in the voting, earning a score of 8.97, putting it fourth in the most important of the existing priorities for NGED to address. Delegates urged NGED to enable and facilitate energy distribution between generators and consumers outside the classic DNO infrastructure model. (E125).

16.11 It was felt that many online resources, such as heat and capacity maps, were not marketed or signposted enough, meaning that this important and useful data is being missed (E125).

16.12 Delegates were keen to see more capacity maps, particularly at the secondary level and down to LV, as more and more LCTs connect to the network. Voting on which forms of data were most useful to delegates in their roles, interactive maps ranked the highest, followed by tailored reports and data at local geographies, and then raw data available on the NGED Connected Data Portal (E125).

16.13 It was felt critical for NGED to support and share their experiences to give them the best chance of meeting their own targets (E125).

Future energy plans

16.14 To enable community energy schemes, delegates suggested workshops, community champion training and targeted partnerships with organisations such as the Energy Saving Trust. They also suggested that NGED could audit the proposals for community energy schemes to maximise the chances of community energy groups having their plans accepted and implemented (E124).

16.15 Similarly, there was a call for more transparency about who is applying for the same load and how it will be shared. This was considered key in unlocking existing capacity for new projects (E124).

16.16 Others felt that NGED should work towards a consistent approach across its licence areas, with delegates reporting differences in design schemes across its patches, adding unnecessary complexity and confusion (E124).

16.17 Communication was stressed as a focus area, with delegates from local authorities keen to access clear and simple information, particularly regarding capacity, and for greater opportunity to unlock unused, or earmarked, capacity (E124).

16.18 Stakeholders suggested that earlier engagement with local authorities and communities would be a useful focus area and a renewed focus on designing NGED's assets, particularly in light of resilience issues over the last decade. Learning from the past was, therefore, a key focus area. Others felt that a missing element here was energy storage, which could be built into local resilience plans as part of the demand side management piece (E124).

16.19 There was a call for NGED to link with plans already in existence at these organisations to share resources and create larger, more effective networks. Landlords were also suggested as potential large landowners, who would all be keen to engage and commit to joint working, as, in their words, 'it ticks a box for us' (E125).

Sub-topic: Innovation

What we heard from 2019 to 2021:

In 2019, Stakeholders during the preliminary engagement were keen to see NGED integrate technical and non-technical Innovation into their services to improve their offering. Several good examples were mentioned from other industries, and stakeholders were keen for NGED to learn from best practices at other companies, regardless of the sector.

In 2020, Innovation was a key part of improving NGED's operations in the future and helping DNOs to adapt to drastic changes in demand and supply patterns. Stakeholders discussed the importance of community energy projects as a base for Innovation extensively, especially as it was felt that this could benefit many people and help share knowledge and information. Education was noted as a key barrier to community project success; however, it was also discussed as one of the potential major benefits of focusing on Innovation here. New technology deployment was also a well-covered topic, with discussions in numerous workshops on NGED's role in the roll-out of smart meters, heat pumps, battery storage, inductive EV charging, and three-phase connections. Stakeholders noted the key role that NGED plays in lobbying the government and working with suppliers to increase the clarity and range of tariffs available to consumers to improve involvement in flexibility services and reduce their costs. Finally, feedback noted that NGED should be proactive and lead the way with Innovation in the sector through establishing a national innovation strategy, an innovation fund, and helping partner organisations establish innovation strategies.

In 2021, there was praise for NGED's focus on Innovation, which is seen to be unique across DNOs. The call for innovative ideas based on stakeholder engagement and feeding the learnings back to the business operations was highly supported, with further suggestions to include broader eligibility criteria and projects that will enable collaboration with councils and social housing providers. Community energy-specific innovation projects were seen as facilitators to overcome capacity issues and constraints, but these should primarily support existing initiatives to make the most out of the existing progress community energy groups have made. Stakeholders also widely supported having a dedicated community engineer to ease communications and support communities in a tailored way. Digitalisation and leadership in publishing data were also seen as central to a forward-looking approach, with extensive interest in the ideas portal and mapping services. However, some stakeholders pointed out best practices implemented by other DNOs as learning points.

Summary of Phase 6 feedback

17.1 When discussing innovation, conversations were focussed around developing a telecommunications plan to enable greater automation of network assets. Stakeholders also debated on the NIA-funded and SSEN-led Equal EV project, investigating enablers and barriers to people with disabilities and other vulnerabilities adopting and using EVs.

17.2 Under innovation, delegates saw NGED as a neutral market facilitator, enabling flexibility and focusing on data transparency. This priority was given a score of 8.20 / 10 in the electronic voting.

17.3 In terms of digitalisation strategy, NGED aims to have an innovation contact in every business area with a buddy in the innovation team, strengthening the business-wide culture of innovation. One of the projects to pursue is the Digital Twin project, focussing on data challenges and domestic flexibility.

17.4 A total of **13** pieces of feedback were collected for Broad Customer Experience during phase 6 engagement, which adds to the **944** collected during previous phases.

Detailed feedback

Feedback for innovation can be divided into four themes:

- General
- EVs
- Support community energy projects
- Digitalisation strategy

General

17.5 Industry, innovation, and infrastructure were mentioned as things NGED should be driving towards as standard practice (E125).

17.6 Another focus area was seen to be developing a telecommunications plan to enable greater automation of network assets (E125).

17.7 The group talked about LCTs, demand on the network, asset replacement, increasing load on the network and fault detection technology. Value of Loss Load was mentioned– looking at the impact of power going off to reward or penalise us against those targets (E129).

EVs

17.8 A stakeholder updated the group on the NIA-funded and SSEN-led Equal EV project, which explored enablers and barriers to people with disabilities and/or other vulnerabilities adopting and using EVs (E116).

17.9 A stakeholder noted this was a valuable project for behavioural economics in the wider transition. Members discussed EVs being used as batteries and the potential of using them as a backup power supply in the event of a power cut. NGED commented that storms saw some customers use cars to boil kettles or work medical equipment (E116).

17.10 Another stakeholder mentioned the Vehicle to Grid project, with NGED confirming that Electric nation is currently modelling the effect on substations (E116).

Support community energy projects

17.11 A stakeholder asked how innovation projects can serve local communities. Examples provided included 'OpenCV' and access to substation data to model income from flexibility to help CE groups benefit from the funding. Innovation projects test new ways/models for CE groups to generate income in an intelligent energy system. NGED has learned that flexibility is viable for community energy schemes to participate in, but not necessarily a business case on its own (E121).

17.12 A stakeholder suggested aggregating schemes to help reduce risks, with another mentioning actively managed virtual microgrids, which could be almost invisible to transmission. It was felt that a planning/modelling capacity was needed to explore the impact of these complex problems and the impact of governing policy measures (E121).

17.13 Under innovation, delegates wanted to see NGED acting as a neutral market facilitator in enabling flexibility, thus focusing on data transparency as the element demonstrating this neutrality. This priority was given a score of 8.20 / 10 in the electronic voting. Stakeholders also wanted to see a greater focus on innovation programmes that work with low-carbon technologies and social housing to allow vulnerable and fuel-poor customers to capture the benefits of low-carbon technologies, thereby solving part of the affordability picture as contributing to Net Zero (E124).

Digitalisation strategy

17.14 Delegates urged NGED to enable and facilitate energy distribution between generators and a consumer outside of the classic DNO infrastructure model. In this sense, they wanted to see NGED focusing on becoming a 'social enabler' that uses peer-to-peer technology to facilitate this exchange, with tech companies such as Facebook as an example (E125).

17.15 NGED plans to have an innovation contact in every business area with a buddy in the innovation team (E131).

17.16 Stakeholders were presented with NGED's innovation strategy and ambition, explaining how to strengthen the business-wide culture of innovation. One of the projects to pursue is the Digital Twin project, focussing on data challenges and domestic flexibility (E131).

17.17 Ofgem's CIF (Innovation Fund) was discussed, which will replace the NIA and projects (partnering with other networks) (E131).

High-level topic: Business Planning
Sub-topic: Acceptability

What we heard in 2021:

In terms of the layout and structure of the business plan, some found it very comprehensive with little jargon, while others disagreed and thought the plan was too long and difficult to follow, and suggested an executive summary.

In general voting about the content of the business plan, 22% did have some caveats or comments to make on the feedback included so far, while a staggering 73% felt priorities had changed or new issues had emerged, primarily as a result of the Covid-19 pandemic, but also due to Brexit and the green agenda. There were also comments that the presentation of the content is over-complicated, and one wanted to see commitments presented as SMART targets.

In terms of customer bills, there was general support that bills will need to increase to achieve net zero and the commitments presented, however it was also commented that as costs have not been shared until this final stage in the consultation, it has been difficult to assess and consider the balance of these issues in relation to the costs.

In terms of engagement to determine the best view, some praised it, while others felt the ‘best view’ was a little ‘conservative' and that NGED needs to ensure that this view will enables the country to achieve its Net Zero targets.

Summary of Phase 6 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)	Attendees
Jan-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	BC LEP – Energy Steering Group	E111	On 13 January 2022, Western Power Distribution (NGED) hosted a virtual event with the Steering Group that undertakes and advises on various Energy Related projects on behalf of the Local Enterprise Partnership. The main objective is to encourage more business in the Black Country Area through Energy Related initiatives and, ultimately, devolution.	NGED	1) Local Enterprise Partnership (45%) 2) Energy Consultant (27%) 3) Local Authorities (18%) 4) Other (9%)	11
Feb-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Connections Customer Steering Group (CCSG)	E112	On 3 February 2022, Western Power Distribution (NGED) hosted a virtual event to engage with the major connections stakeholder's expert panel, on our connections strategy whilst endorsing our ICE incentive, LCT EV update, Trigger point for EV hubs and 33kV and above and budget estimate charging.	NGED	1) Business Customers (8%) 2) Consumer Interest Bodies (8%) 3) Energy Consultant (8%) 4) Utilities (8%) 5) IDNO (8%)	12
Feb-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Distributed Generation Owner/Operator Forum – meeting notes	E113	NGED forum held online on February 10th with 14 stakeholders in attendance.	NGED	1) Developers (55%) 2) Storage / renewables providers and installers (10%) 3) Charities (5%) 4) Energy Consultant (5%) 5) Energy Constructor (5%)	20
Mar-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Distribution Flexibility Services Consultation Outcomes	E114	NGED hosted the Distribution Flexibility Services Consultation, which ran in January and February 2022. This document summarises the key feedback and outcomes collected. It has been synthesised to high-level points to maintain the anonymity of respondents. It highlights the tangible actions we are taking in response to that feedback. Many of these	NGED	1) Local Authorities (100%)	1

				will feed into their Distribution Flexibility Service Procurement Statements and Reports to be published later this year. These include actions such as: • Reviewing our Fixed Pricing to ensure it remains competitive and attractive • Publishing the methodology behind the value calculator • Publishing all Flexibility data on our Connected Data Portal • Continuing to push for standardisation (across a number of topics) through Open Networks and the Flexible Power collaboration.			
Mar-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Low Carbon Heat Workshop: In-Person and Online	E115	On 2 March 2022, Western Power Distribution (NGED) hosted a hybrid in-person and virtual workshop on the decarbonisation of heat. The workshop was designed to seek feedback from stakeholders on the following topics: connecting to the NGED network; retrofitting for net zero; the development of heat pumps; and alternative, low carbon heating technologies.	NGED	1) Energy Consultant (13%) 2) Domestic Customers (6%)_ 3) Academic Institutions (6%) 4) Charities (6%) 5) Community Energy Groups (6%)	16
Mar-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	NGED CUSTOMER PANEL – Electric Vehicle Surgery	E116	NGED Customer panel held online on March 3rd with 15 stakeholders in attendance.	NGED	1) Charities (36%) 2) Government (18%) 3) Parish Council (18%) 4) IDNO (9%) 5) Energy Consultant (9%)	11
Mar-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Community Matters Fund	E117	On the 7th of March 2022, Western Power Distribution (NGED) hosted an event with six representatives from the Customer Panel to present how they responded to the Covid-19 crisis by building a sustainable fund, "Community Matters Fund". They discussed and debated following the below agenda: • Supporting our communities – How we started	NGED	1) Charities (33%) 2) IDNO (17%) 3) Local Authorities (17%) 4) Parish Council (17%) 5) Utilities (17%)	6

				• Building a sustainable fund • Community Matters Fund 2021 - 2028 • Community Matters priorities • Community Matters phase 1 – Fuel poverty • Community Matters phase 2 – Mental wellbeing and loneliness • Community Matters phase 3 – Holiday hunger • Future phases • Thoughts and discussion			
Mar-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	NGED CUSTOMER PANEL	E118	On 28 March 2022, Western Power Distribution (NGED) hosted a meeting in which members of the customer panel and NGED participated. The group discussed storms Dudley, Eunice and Franklin that hit the NGED regions in February. Also, they went through the benefit of analysing uprooted trees and the correlation between tree failures and power cuts. AS explained helicopter units inspected trees when it was safe to do so, and in time we may be able to predict faults.	NGED	1) Charities (20%) 2) Parish Council (20%) 3) Utilities (20%) 4) Energy Consultant (10%) 5) Government (10%)	10
May-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Distributed Generation Owner/Operator Forum – meeting notes	E119	NGED forum held online on May 10th with 17 stakeholders in attendance.	NGED	1) Developers (36%) 2) Energy Consultant (18%) 3) Storage / Renewables Providers and Installers (18%) 4) Parish Council (9%) 5) Charites (9%)	11
May-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Zero Carbon Business Partnership Webinar	E120	On 10 May 2022, Western Power Distribution (NGED) hosted a webinar discussing ways for SMEs to save their energy bills significantly as we transition to a Net Zero carbon economy. The ZCB Partnership is developing a free advice module focused on energy efficiency to help SMEs make immediate and longer-term changes to reduce costs, enhance	NGED	1) Other (25%) 2) Academic Institutions (13%) 3) Energy Consultant (13%) 4) Government (13%) 5) IDNO (13%)	8

				business resilience and reduce emissions. Presentations from ZCB Partnership representatives give an early road-test of the module.			
May-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	NGED CUSTOMER PANEL: Community Energy Surgery	E121	On 12 May 2022, Western Power Distribution (NGED) hosted a meeting in which participated guests and members of the customer panel and NGED. The history of Community Energy (CE) at NGED was covered by Ky Hoare and Regen, who also detailed previous work on community energy, DFES and innovation projects. KH explained what community energy is; Communities were taking collective action to address climate change, including energy-saving/efficiency advice, fuel poverty action, community net zero action, local energy resilience, flexibility and community-owned renewables. KH also talked about policies which have both increased and hindered community energy and recent progress and plans, such as • 2022 Net Zero Communities Strategy published • Forum attended by 68 community energy stakeholders • Four YouTube videos • In-person Net Zero communities forums • Quarterly community energy newsletter • Supporting groups to partner for the network innovation allowance	NGED	1) Charities (38%) 2) Utilities (25%) 3) Energy Consultant (13%) 4) IDNO (13%) 5) Other (13%)	8
May-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Website stakeholder workshop	E122	On 25 May 2022, Western Power Distribution (NGED) held a customer workshop to gather feedback on some ongoing website developments and future phases of work planned.	NGED	1) Business Customers (100%)	1
Jun-22	Synthesis report 6:	Connections Customer	E123	On 8 June 2022, Western Power Distribution (NGED) hosted a virtual event to engage with the major connections	NGED	1) Energy Consultant (25%) 2) IDNO (25%) 3) Major Energy Users (25%)	4

	Phase 6 – Q1/Q2 2022	Steering Group (CCSG)		stakeholder's expert panel, on the significant code review (SCR), whilst endorsing our ICE incentive. Also, we had a presentation on management of requested capacity. Alison opened the CCSG with a director's update.		4) Other (25%)	
Jul-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Connectability Workshop: Online	E124	The webinar also discussed plans for the future development of the ZCB Portal, with stakeholders able to participate in Q&As and voting.	NGED	1) Energy Consultant (10%) 2) Government (5%) 3) Utilities (5%) 4) Academic institutions (5%) 5) Developers (5%)	21
Jun-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Sustainability Workshop: Online	E125	On 24 June 2022, Western Power Distribution (NGED) hosted a virtual workshop, focused on sustainability. The workshop was designed to seek feedback from stakeholders on the following topics: NGED's current priorities; DSO and getting our customers to Net Zero; and getting NGED to Net Zero and meeting stakeholder expectations.	NGED	1) Energy Consultant (7%) 2) Government (7%) 3) Parish Council (7%) 4) Charities (7%) 5) IDNO (7%)	15
Jun-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Vulnerability and Affordability Workshop: Online	E126	On 28 June 2022, Western Power Distribution (NGED) hosted a virtual workshop, focused on vulnerability and affordability. The workshop was designed to seek feedback from stakeholders on the following topics: background context and stakeholder priorities; customer vulnerability and the Social Contract; and customer service during severe weather events.	NGED	1) Domestic customers (8%) 2) Charities (8%) 3) Academic Institutions (8%) 4) Local Authorities (8%)	12
Jun-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	NGED - JUNE WORKSHOPS SUMMARY REPORT	E127	On 23, 24 and 28 June 2022, Western Power Distribution (NGED) hosted three virtual workshops, focused on: Connectability; Sustainability; and Vulnerability and Affordability. Each workshop was designed to seek feedback from stakeholders on a discrete topic. However, the first session of each workshop had the same focus, NGED's	NGED	1) Energy Consultant (9%) 2) Government (4%) 3) Healthcare (4%) 4) Housing Association (4%) 5) IDNO (4%)	23

				priorities. This report seeks to compile the feedback received during this first session across all three workshops.			
Jul-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	Panel Research Insights	E128	In July 2022, Western Power Distribution (NGED) hosted a virtual workshop to seek feedback from its stakeholders to discuss and debate NGED strategy with the other panel members in a virtual group setting. A series of homework tasks have been designed before the workshop to share and prepare materials with participants via Liveminds. The objectives of the research were: • To check in with the NGED Community panel and understand what they feel are the key events affecting NGED • To understand whether the existing priorities are still relevant or whether there have been shifts in focus • To explore responses to: • Sustainability • Vulnerability • Connectability Also, the study has involved: • Engagement with the NGED 'expert' consumer and business panel • 18 Qualitative Discussion Groups	Accent	1) Business Customers (50%) 2) Domestic Customers (50%)	2
Jul-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	NGED CUSTOMER PANEL - Minutes	E129	On 6 June 2022, Western Power Distribution (NGED) hosted a meeting with the Customer Panel. The group talked about the draft determinations, and Ofgem's challenges on their business plan proposals as Ofgem tries to recognise the cost of living challenge.	NGED	1) Utilities (33%) 2) Charities (22%) 3) Government (11%) 4) IDNO (11%) 5) Parish Council (11%)	9
Jul-22	Synthesis report 6: Phase 6 – Q1/Q2 2022	NGED Distribution Future Energy Scenarios	E130	On 05, 07 and 14 July 2022, Western Power Distribution (NGED) hosted a webinar to collect feedback about the speed and location of uptake of DFES technologies (including emerging	NGED	1) Other (29%) 2) Energy Aggregators (12%) 3) Government (12%) 4) Local Enterprise Partnership (12%)	17

				technologies) in our licence areas, which we will incorporate into our analysis and will shape the forecasts in DFES.		5) Utilities (12%)	
Dec-21	Synthesis report 6: Phase 6 – Q1/Q2 2022	NGED Customer Panel	E131	NGED Customer panel held online on December 16th with 14 stakeholders in attendance.	NGED	1) Utilities (33%) 2) Charities (17%) 3) Government (17%) 4) Local Authorities (8%) 5) DNO (8%)	12

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