Appendix 8: Our Vulnerability strategy

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Executive Summary

This document presents our strategy and plans to ensure that our customers in vulnerable situations are supported. Within it, we present a set of specific, and time bound commitments designed with customers and stakeholders to address the current and future needs of people and businesses in situations of vulnerability.

Vulnerability and our role in addressing it

We are responsible for the safe and reliable distribution of electricity to a population of over 20 million in the South East of England, East of England, and London. As providers of an essential service, we are aware of the impact electricity has on our customers' wellbeing, especially those in situations of vulnerability.

We define 'vulnerability' as a situation that can arise when aspects of the energy market combine with someone's personal circumstances or the characteristics of their environment to create conditions where they are more likely to suffer detriment. This means that anyone, including commercial customers, can experience vulnerability in given circumstances. Our longstanding engagement with customers, stakeholders and expert partners tell us that vulnerability is complex, multidimensional, and ever-changing.

Currently, we estimate that across our three networks there are:

- 3.5m households in vulnerable circumstances eligible for our Priority Services, of which approx. 56% are registered on our PSR.
- 981,080 households in fuel poverty.
- 1.58m disadvantaged customers at risk of behind left behind on average in the energy system by 2030.

We recognise and embrace our public duty to ensure that electricity is accessible, safe, and available to every customer and are proud of the role we play in safeguarding our vulnerable customers and ensuring that they have fair and equitable access to the energy market.

Driven by our business-wide vision to be a respected and trusted corporate citizen, we have defined with our customers and stakeholders a set of outcomes that we will strive to achieve for our customers in vulnerable circumstances. These outcomes define our role in addressing consumer vulnerability:

- **Fair and appropriate access** to the opportunities presented by the energy market.
- **Affordability of the energy supply** above and beyond our impact on bills.
- **Protection and safeguarding** from detriment stemming from aspects of the energy market.
- **Wider social value** beyond electricity through supporting customers in fuel poverty and ensuring no one is left behind in the energy transition.

We have introduced, developed and refined our approach to vulnerability during RIIO-ED1 and are proud of the way we have supported individuals in our communities. For example, we have:

- Proactively contacted all registered vulnerable customers to offer support if they are without power, resulting in customers scoring our service on average 91.5% over six years and 93% or more from 2018 onwards.
- Almost quadrupled the number of customers on our Priority Services Register in six years.
- Operated a community fund that has invested £300,000 per annum in customers and communities, leveraging the expertise and local capabilities of an industry-leading network of more than 600 partners (of which 223 active in 2020/21 alone).

Developing a strategy to meet the current and future needs of customers

However, we cannot be complacent. The ongoing transition to Net Zero, characterised by the decentralisation, decarbonisation, democratisation, and digitalisation of the energy system, is causing aspects of the energy market to evolve. Considering these changes, along with ongoing social and demographic shifts, we see new ways for our customers to experience detriment and, with these, new and changing situations of vulnerability.

Working with customers and stakeholders in the development of this strategy, we identified four broad types of barriers that will prevent our customers from enjoying the outcomes we set out to deliver.

These include typical risk factors, such as life situations and socio-economic drivers, as well as new factors driven by the changing dynamics of the energy market: our customers' ability to engage and their access to the network and different technologies.

Addressing the rising challenges that our customers in vulnerable situations will face in coming years requires a comprehensive yet flexible strategy. In developing this strategy, we worked closely with customers and stakeholders and leveraged new and existing approaches to vulnerability data to ensure that the actions we will take in their interest remove the blockers identified and deliver lasting impact. A bespoke engagement programme involving stakeholders and thousands of customers fuelled every step of the strategy development process and ensured that customer needs lie firmly at the heart of our RIIO-ED2 Vulnerability Strategy.

Our RIIO-ED2 Vulnerability Strategy

Driven by our customers and stakeholders and reflecting our business-wide vision, the ambition of our RIIO-ED2 Vulnerability Strategy is to deliver industry-leading support that maximises the value delivered to our customers in vulnerable circumstances. We will achieve this ambition by focusing on our core role as a Distribution Network Operator, defined by these three strategic goals:

- Supporting our customers in vulnerable circumstances (on the PSR) through all our service journeys.
- Delivering greater support to our people and communities in need by.
  - Delivering in-depth support to a significantly higher number of people in or at risk of fuel poverty.
  - Ensuring no one is left behind in the changing energy world by providing targeted support.
- Unlocking additional value through innovation.

Figure 1: Overview of our ambitious RIIO-ED2 Vulnerability Strategy
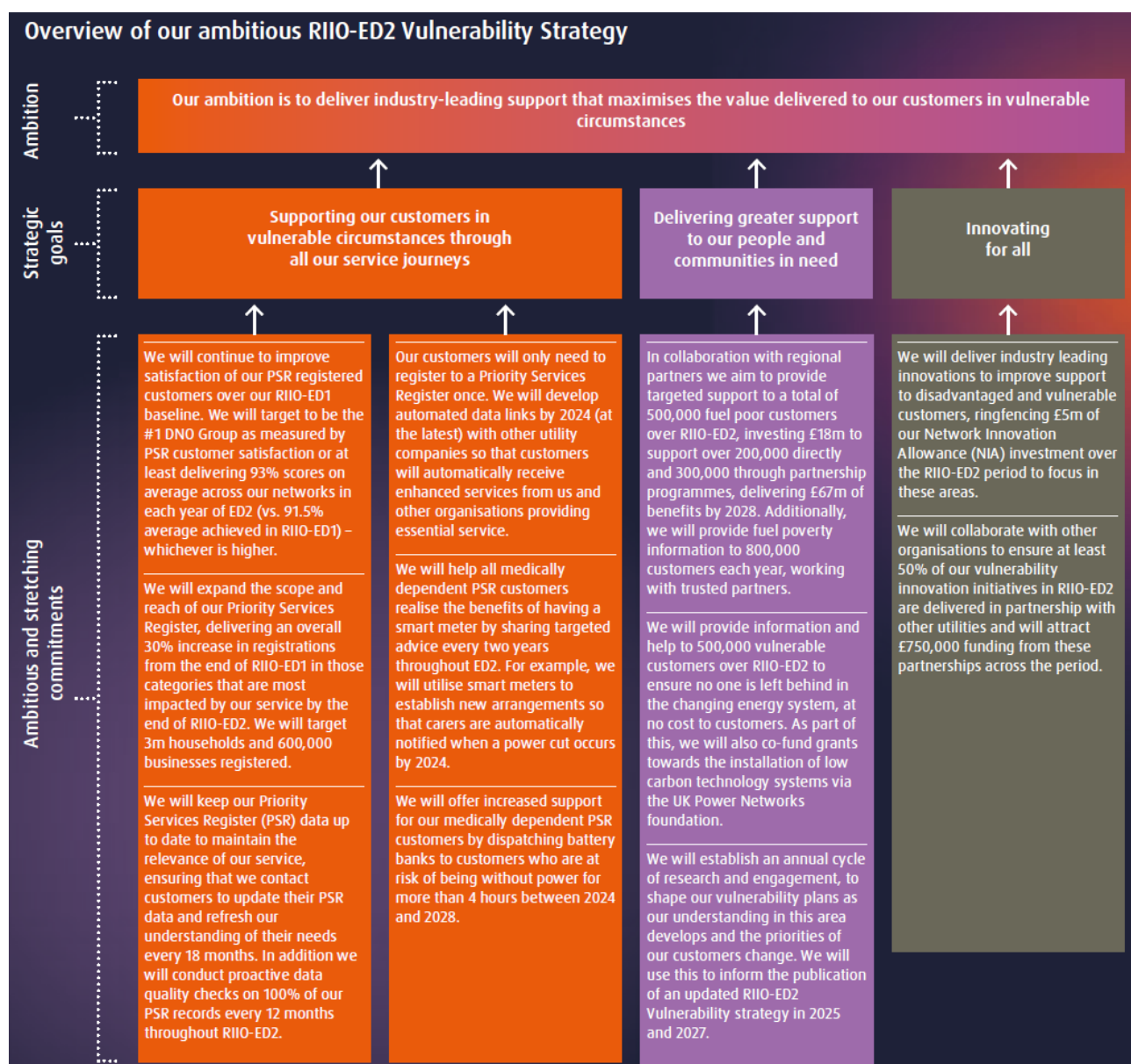
The RIIO-ED2 Vulnerability Strategy is brought to life through time-bound and specific commitments, designed to meet the existing and future needs of our vulnerable customers and aligned to the three strategic goals.

Funding an ambitious strategy to deliver large societal benefits

The commitments and targets that we propose to deliver in RIIO-ED2 demonstrate our ambition to proactively support and empower our vulnerable customers throughout the energy system transition and, we believe, set us apart from any other network.

This ambition stems from our vision to be a respected corporate citizen while also clearly reflecting the mandate from our customers and stakeholders to promote an affordable and just Net Zero transition.

To deliver this ambitious strategy, we will:

- Compile a £11m social fund, *fully covered by our shareholder at no cost to customers*, to facilitate the transition to Net Zero and increase participation in the changing energy system for those customers at risk of being left behind. We will additionally setup a UK Power Networks Foundation to independently manage the majority of this fund.
- Invest £9m *directly from our shareholders, in addition to the £9m support funding proposed under a Consumer Value Proposition*, totalling £18m investment focused on addressing fuel poverty in the communities we serve.
- Ring-fence 20%, equivalent to £5m, of our Network Innovation Allowance for projects which will benefit vulnerable customers.

Invest around £40m over the RIIO-ED2 period (over and above the Network Innovation Allowance) – a fourfold increase compared to our investment in RIIO-ED1. Responding to diverging views from customers and stakeholders as to who should fund this much needed support and reflecting our own ambition, we propose to invest £20m in shareholder funding (out of the total £40m) to deliver this strategy.

Recognising the impact we have on the finances of over 20m people, our RIIO-ED2 Vulnerability Strategy strikes the right balance between ambition and cost. To ensure that our plans represent value for money to our customers, we have taken a conservative, calculated, and transparent approach in forecasting the benefits of our RIIO-ED2 commitments. We estimate that this Vulnerability Strategy will deliver a <u>net</u> benefit to society of £50.1m between 2023 and 2028 (gross benefits are expected to be £105.7m), demonstrating the immediate impact that we can deliver by leveraging a mature and sophisticated approach to consumer vulnerability.

The initiatives we propose to deliver in RIIO-ED2 will continue to positively impact the lives of our customers and communities long after 2028; excluding our commitments to innovate in the consumer vulnerability space, we estimate that by 2048 our commitments will have delivered a total net benefit of £202m.

Social Sustainability is embedded across the RIIO-ED2 Business Plan

Our focus on consumer vulnerability stretches far beyond this strategy and the commitments we have made as part of it. A profound awareness of our social role in ensuring a fair and just transition to Net Zero while addressing the needs of those in vulnerable situations is embedded across UK Power Networks.

Reflecting this awareness and in response to our expert stakeholders' guidance, we have embedded social sustainability across our RIIO- Business Plan. Doing so will ensure that the lessons we have learned in addressing consumer vulnerability align every part of the business towards achieving comprehensive outcomes that benefit our vulnerable customers.

Moving forward, we will embed the following social sustainability principles in all our governance processes to ensure that we ask ourselves the right questions upfront and that we understand and measure the social impact of every choice and intervention we make.

Figure 2: Vulnerability embedded across the Business Plan

# 1 – Vulnerability and our role in addressing it

What is vulnerability?

At UK Power Networks we are responsible for the safe and reliable transport of electricity to more than 20 million people in the South East of England, the East of England and London.

As providers of an essential service, we understand electricity is essential to every aspect of modern life. From powering our kettles and phones to fuelling public services, business and industrial centres, electricity is the lifeblood of our society.

Because of its importance, it is crucial that every person and business has equitable access to the electricity market. Someone's inability to fully engage with this market can cause a vast range of issues that include overpaying on energy bills and missing out on the benefits that a low carbon future could bring. In more serious cases, as a result of the circumstances they face, improper use or lack of electricity can put people in life-threatening situations; this is the case, for example, where access to an electricity-power respirator is vital to one's wellbeing.

As a Distribution Network Operator (DNO), we have a moral duty and an important role to play in ensuring that electricity is accessible, safe, and continuously available to everyone, and especially those in situations of vulnerability.

Figure 3: The communities we serve
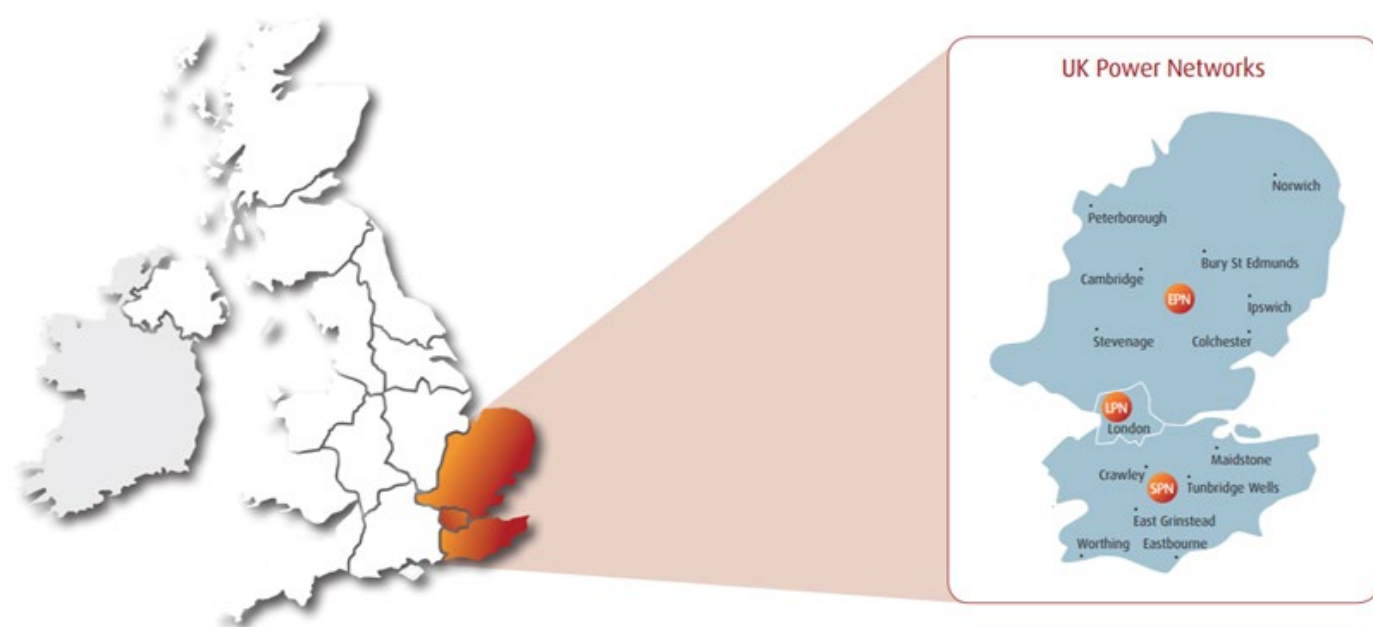
We define 'vulnerability' as a situation that can arise when aspects of the energy market combine with someone's personal circumstances or the characteristics of their environment to create conditions where they are more likely to suffer detriment. This definition builds on Ofgem's definition to also consider businesses and communities and has been shaped by engagement with hundreds of partners and key stakeholders over recent years.

Vulnerability can arise for a variety of reasons. Anyone can be vulnerable in certain contexts, such as when making important decisions while facing complex information or when going through a life-changing event. Vulnerability can also arise from an individual's personal circumstances like a temporary health issue and long term physical or mental disability. As a result, no single and prescribed definition of vulnerability can exist – vulnerability is multidimensional, context-specific, and continuously changing as society evolves.

Please note that in this document we use the terms 'people and communities in vulnerable situations', 'vulnerable people' and 'vulnerable consumers' interchangeably to refer to the same group of individuals and organisations. We understand and empathise with the sensitivities of labelling individuals as 'vulnerable' and only do so in this strategy for the sake of clarity of presentation.

Our role in addressing consumer vulnerability

Our business-wide vision sets the direction and guides all decisions taken within the business. Our vision is to be a leading performer in the electricity distribution industry through being:

Figure 4: UK Power Networks' Vision

An employer of choice	A respected and trusted corporate citizen	Sustainably cost-efficient	Enabling the Net Zero transition for all
• The safest – with an exemplary record • An organisation that employees are proud to work for • Embracing diversity • Having a highly skilled and healthy workforce for both today and the long term	• Ensuring the most reliable networks • Delivering the best customer satisfaction • Being the most innovative in our sector • Being the most socially and environmentally responsible in our sector – through our social contract • Meeting the needs of our customers in vulnerable circumstances, both now and in the future • Ensuring our supply chain is efficient, sustainable and ethical	• Delivering at the lowest possible cost for our customers • Deliver on our commitments in a collaborative way • Deliver profitable growth in our Services and Connections businesses	• Investing responsibly to enable Net Zero • Working with local authorities and stakeholders to unlock regional decarbonisation plans • Having the most open and liquid DSO flexibility markets • Having the most advanced smart grid capabilities in our sector • Establishing an independent DSO ensuring transparency of investment decisions

To be consistently the best-performing Distribution Network and System Operator in the UK within an agreed set of values

Meeting the needs of our vulnerable customers, both now and in the future, is a core value that sits at the heart of our business. As a regional network, we are proud to support customers in the communities we represent and come from.

The multidimensional nature of vulnerability means that those affected by particular circumstances will have needs that go far beyond what we, as a distribution network operator, as best placed to address.

Because we play an important but not exclusive role in supporting and empowering vulnerable customers, it is essential that we define a clear role in addressing consumer vulnerability. Driven by our company-wide vision, our values and the guidance of our customers and stakeholders[1], we believe that our role is to achieve the following outcomes for all customers:

*   **Fair and appropriate access** to the opportunities presented by the energy market;

*   **Affordability of the energy supply** above and beyond our impact on bills;

*   **Protection and safeguarding** from detriment stemming from aspects of the energy market;

*   **Wider social value** beyond electricity through supporting customers in fuel poverty and ensuring no one is left behind in the energy transition.

Achieving these outcomes for people and business who face situations of vulnerability presents complex challenges, further exacerbated by a fast-evolving energy landscape, as the UK takes leaps towards its Net Zero future.

This document presents our customer and stakeholder-driven vision, strategy and plans to achieve these outcomes for our customers in vulnerable situations today, and throughout the energy system transition.

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[1] We define stakeholders as any individual or organisations that is impacted by our business and is engaged to provide independent, informed or expert views on a matter that does not involve their opinion as a connected customer of UK Power Networks or any other distribution network. Stakeholders are defined separately from customers throughout the document.

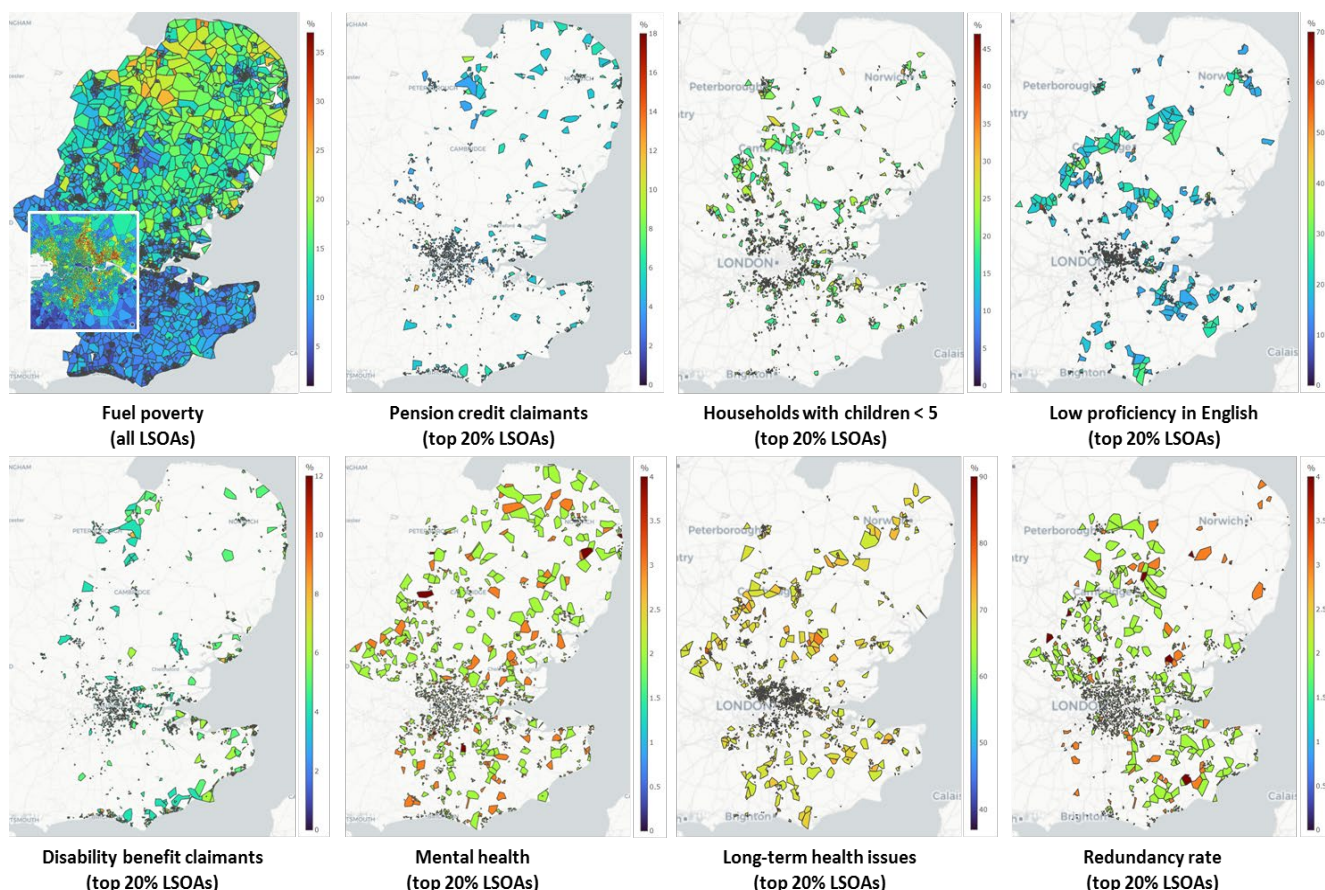# 2 – Vulnerability issues faced by our customers today

Geographical dynamics of consumer vulnerability today

Currently, we estimate that across our three networks there are:

- 3.5m households in vulnerable circumstances eligible for our Priority Services, of which approx. 56% are registered on our PSR against one or more of our 30 needs codes, including three temporary categories.
- 981,080households in fuel poverty[2].
- 1.58m disadvantaged customers at risk of behind left behind on average in the energy system by 2030.

The figure below illustrates some examples of the geographical distribution of factors that drive vulnerability in our areas. The evolving socio-economic drivers, external factors such as COVID-19 and the ongoing changes the energy sector is subject to mean that these figures are in continuous evolution (see Section 4 for our expected trends of vulnerability in RIIO-ED2).

Figure 5: Overview of the situations of vulnerability that impact our customers. The fuel poverty indicator is mapped for all Lower-layer Super Output Areas (LSOAs) in our regions. For the other indicators we have filtered the top 20% "most vulnerable LSOAs" to illustrate the geographical distribution of the most affected areas.

Fuel poverty (all LSOAs) — **Pension credit claimants (top 20% LSOAs)** — **Households with children < 5 (top 20% LSOAs)** — **Low proficiency in English (top 20% LSOAs)**

Disability benefit claimants (top 20% LSOAs) — **Mental health (top 20% LSOAs)** — **Long-term health issues (top 20% LSOAs)** — **Redundancy rate (top 20% LSOAs)**

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[2] According to the 2019 fuel poverty sub-regional statistics, published in April 2021 (https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-2021). As of April 2021, Fuel poverty in England is measured using the Low Income Low Energy Efficiency (LILEE) indicator rather than the old Low Income High Costs (LIHC) indicator. Under the LILEE indicator, a household is considered to be fuel poor if: (1) they are living in a property with a fuel poverty energy efficiency rating of band D or below and (2) when they spend the required amount to heat their home, they are left with a residual income below the official poverty line. The new estimate of fuel poor households across our area is based on the new LILEE indicator.

The critical role of data in understanding and identifying vulnerability issues

Serving a population of over 20 million people in areas ranging from a global metropolis to costal and rural areas, means that we find a range of socio-demographic circumstances among our communities that is representative of society.

The fluid and multidimensional nature of vulnerability make it impossible to have a comprehensive and precise picture of all situations of vulnerability across all customers at any point in time.

However, our experience in serving and engaging those in vulnerability situations, has led us to develop and refine a sophisticated approach to data that gives us an up to date and granular picture of the vulnerability issues that affect our customers.

Good data doesn't only guide our day-to-day work in supporting vulnerable customers, it also fundamentally shapes our strategy and future plans. Our approach to data revolves around two types of vulnerability data:

The Priority Services Register

The Priority Services Register (PSR) is a free database provided by energy suppliers, network operators and water companies. Each energy supplier and network operator maintain its register.

Any customer who is in a vulnerable situation[3], whether permanently or temporarily, can be added to the PSR. By registering a customer, we record their contact details and the situation of vulnerability that impacts them.

Growing and maintaining the PSR is one of our key priorities – we do so by registering customers ourselves through eight different channels or on the doorstep, as well as through our extensive network of over 500 referral partners[4] (of which 83 active over the last year). Since 2019, we have also held data-sharing agreements with local water companies in addition to our automated data share with all energy suppliers, enabling a single sign-up process for our customers and widening our reach.

The PSR has critical importance in our approach to vulnerability because it tells us who needs extra help and the circumstances that affect this individual. This information allows us to proactively deliver the right support, at the right time, to the right customer.

We now have 1.97m households on our Priority Services Register[5] (as of end of March 2021), 24.4% of all households served– this number changes daily. As a testament to the material importance of the PSR in facilitating better and targeted support to our vulnerable customers, over 2020/2021, we have had over 4m specific interactions with customers registered on the PSR.

We recognise, however, that the PSR is only as useful as the quality of data it holds. Recognising the importance of up-to-date information on our customers' ever-changing circumstances, we were the first DNO to contact all our PSR customers to update their information on an 18-month cycle. Our partners and stakeholders guided us, throughout RIIO-ED1, in refining this industry-leading approach. For example, the NHS shared with us the Making Every Contact Count (MECC) principle and our Inclusive Customer Panel worked with us to co-design key messages.

Finally, data is key to target and tailor our PSR campaigns where needed the most. Over RIIO-ED1 we developed an eligibility framework that allows us to calculate how many households are eligible for Priority Services in each one of the districts we serve. In 2020/21 we conducted a thorough review of our methodology, of the assumptions behind and the data sets used as reference. As a result, we corrected key factors leading to overestimation of eligibility, we refreshed the data using updated data sets and removed double counting across different needs codes and age bands.

Combining ten data sets from trusted publicly available sources (such as Census, Office for National Statistics and Disability Living Allowance data) we are able to estimate eligibility for PSR across 77% of all needs codes. According to our refined eligibility framework there are approximately 3.5m households eligible for PSR across our areas. Eligibility can be a subjective measure, therefore we also report PSR uptake versus the total number of households served, which provides a more consistent and comparable metric across the industry.

Targeted vulnerability datasets

The value of the PSR also comes from its standardisation across the utility industry. In practice, customers can be added to the register against 30 codes, each covering a different situation of vulnerability. While this level of standardisation makes PSR data sharable across networks serving the same areas, on the other hand, it restricts the range of circumstances that can be recorded – fuel poverty, for instance, is not one of the 30 vulnerability codes.

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[3] https://www.ukpowernetworks.co.uk/power-cut/priority-services-register

[4] Referral Partners are third party organisations who closely collaborate with UK Power Networks to identify and refer customers to the PSR. These partners are instrumental to the success of our register because they are trusted, local organisations that regularly interact and support vulnerable customers.

[5] As of the end of March 2021.

The multidimensional and complex nature of vulnerability, however, means we are not always able to map every circumstance to one of 30 codes – vulnerability is broader and ever-changing.

To close gaps in our understanding of vulnerability issues, we gather and regularly update multiple vulnerability datasets, including information ranging from unemployment to indices of multiple deprivation (IMD) data.

We unlock an in-depth understanding of the situations of vulnerability that affect our customers by combining all these datasets with our extensive PSR data. These datasets come together in our vulnerability mapping tool first introduced in 2014, in partnership with National Energy Action (NEA).

From asset planners identifying investment in areas where communities are less resilient to customer service teams planning workload to minimise disruption of our customers, the interactive map, used by many colleagues every day, empowers us to base all decisions on an understanding of our vulnerable customers' needs.

When combined, these datasets provide a rich picture of how customer needs vary across the diverse communities we serve. Examples of how a granular understanding of customer needs shapes our actions include:

- **Regional PSR data and performance** shaped our approach to data acquisition and promotion of the PSR. We strive to register a minimum of 40% of all households eligible for the PSR across all 124 districts we serve to ensure there are no areas left behind. Our data pointed to areas where groups of vulnerable customers were underrepresented and required greater effort, investment and innovative solutions, resulting in 95% of our districts with more than 40% of the eligible households registered on the PSR in 2021.
  Data also highlighted that London is particularly under-represented compared to our East and South East regions. Therefore in 2020/21 we launched a dedicated initiative to develop a bespoke data-driven approach to identify and address London-specific challenges. Data showed that London has a different demographic mix compared to the other two regions and age-related needs codes are predominantly under-represented compared to others followed by low proficiency in English and mental health problems. Building on these insights we are tailoring our approach to PSR awareness and messaging to the London demographics. For example, we established a new partnership with the Young Mums Support Network that helps us reach and engage with the under-represented group of families with children under the age of five. We aim to broadly align our London region to the East and South East of England by the end of RIIO-ED1.

Table 1: Regional PSR Data and Performance

	East	South East	London
Households registered on PSR (Mar 2021)	815,556	481,347	669,900
Eligible households represented on PSR	59%	63%	50%
Total households served in each area registered on PSR	27%	29%	20%

- **Regional fuel poverty statistics**, on the other hand, allow us to prioritise community initiatives in the areas most affected by fuel poverty and deprivation. A detailed picture of fuel poverty shaped our partnership strategy and the local partnerships across our regions. These were tailored to the characteristics of each local community. For example, Rural Coffee Caravan was chosen to engage and support rural and isolated communities in or at high risk of fuel poverty in our Eastern Network.

Table 2: Regional Fuel Poverty Statistics

	East	South East	London
Households in fuel poverty (% out of total)	345,399 (13.2%)	148,511 (7.8%)	487,170 (15.2%)
# LSOAs above fuel poverty national average (>13.4%)	44.3%	7%	58.4%
% of fuel poverty in such LSOAs	13.5-37.5%	13.5-22.4%	13.5-37.2%

Bespoke research to understand evolving regional vulnerabilities

In addition to our data-driven approach described above, we regularly conduct bespoke research to complement our understanding of the dynamics of vulnerability across the different demographic groups and communities we serve.

For example, our London region is the most ethnically diverse in England and Wales, with 40.2% of residents identified with either Asian, Black, Mixed or Other ethnic group compared to less than 10% in the East and South East. Eight out of the ten most ethnically diverse local authorities in England and Wales are in London and the city has also the highest proportion of population whose main language is not English, approximately three times of the national average. Newham in London is the local authority where people from the White ethnic group made up the lowest percentage of the population (at 29.0%), followed by Brent (36.3%) and Harrow (42.4%), with Newham and Brent being also amongst our top four fuel poor districts (16.1% and 13.7% households in fuel poverty respectively). We quickly reflected these regional differences by translating our PSR application form in 13 different languages, and by providing our front-line staff with a translation app for common phrases and a 24/7 translation service in 170 languages to have a three-way conversation with both the customer and an interpreter. We also conducted customer research of hard-to-reach and seldom heard groups in ethnic minority communities to better understand how to engage with them on energy and money saving opportunities and on the benefits of free services such as PSR and of smart meters. The learning we have gathered through research like 'Faith and Power' and our innovation project 'energywise'[6] has informed our fuel poverty support schemes tailored to reach ethnic minority groups in areas like East London, Brent, Lambeth, Enfield, Luton, and across mosques in the South East.

In 2020/21 we formed a partnership with South East Water to assess the impact of COVID-19 in our regions, mapping the related vulnerabilities at Middle Layer Super Output Area level. Through this research project done in collaboration with Centre for Sustainable Energy and Sustainability First, we identified new kinds of vulnerability risk factors (e.g. long-COVID related illness, clinically extremely vulnerable, mental health issues, furlough, unemployment and business sectors at risk impacting local communities) and specific regional challenges emerging as a result of COVID-19 through the analysis of 35 datasets.

The pandemic has increased the overall number of consumers in pre-COVID vulnerable situations in our regions, in some instances disproportionately highly compared to the rest of England. For example, the region has seen a disproportionately high increase in those claiming unemployment benefits (average increase of 160% across the East, South East and London compared to an average of 115% in England, with London being worse hit with the numbers almost trebling). Similarly the number of people now claiming Universal Credit has increased disproportionately in the East, South East and London (134%) compared to England as a whole (108%), with London being the most affected region again as shown in Figure 6. The data analysis has also shown that our regions have suffered from higher death rates from COVID-19 than the country as a whole; a higher proportion of younger people and ethnic minorities, particularly in London, compared to the national proportion, who have been disproportionately impacted by COVID and by the impacts of the pandemic; and a higher proportion of job sectors which have been furloughed than the national sector profile.

Understanding the pandemic-driven changing needs and associated geographical distribution helped us to channel our partnerships in the areas of most need. We will continue to monitor the identified risk factors to understand how regional vulnerabilities and our customer needs are evolving in the short and long term.

Figure 6: Universal Credit Claimants increase post-COVID compared to pre-COVID
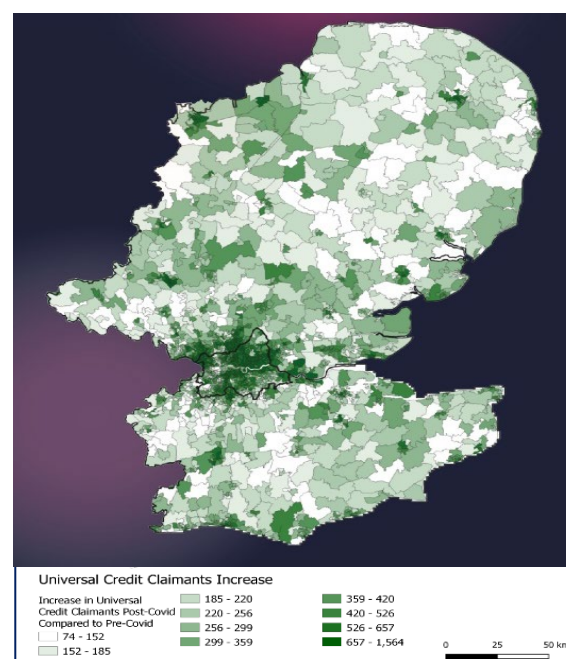
Source: Research in collaboration with South East Water, Centre for Sustainable Energy and Sustainability First

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[6] https://innovation.ukpowernetworks.co.uk/projects/energywise/

3 – What we delivered for vulnerable customers in RIIO-ED1

Guided by our vision to be a respected and trusted corporate citizen, the ambition of our board and the expert insight provided by our partners and stakeholders, we built an industry-leading approach to consumer vulnerability during the RIIO-ED1 period. While we recognise that more needs to be done to improve our support on the backdrop of a quickly evolving energy market, we are confident that we are building on solid foundations.

The commitments we made in RIIO-ED1 and how we performed against them

In our RIIO-ED1 Business Plan, we agreed with Ofgem and our stakeholders sixteen commitments that set out our ambition to better identify and support our customers in vulnerable situations. These ranged from increasing the number of customers on the PSR to providing specific support services to groups of customers. We are proud to have met all sixteen commitments in 2018, 5 years ahead of the price controls' end.

As a performance-driven business, we are committed to setting ourselves challenging targets for the remainder of the current price control. The continued renewal of our PSR targets, introduced above, is one example of how we continue going above and beyond our RIIO-ED1 commitments.

The commitments we made and our performance against these are shown on the following figure:

Figure 7: Our RIIO-ED1 commitments on Consumer Vulnerability

Eight year RIIO-ED1 Output Commitment	2020/21 update	2020/21 status	2019/20 status
Double the number of customers on our priority service register.	We now have in excess of 1.97 million registered households on our Priority Services Register, which is an increase of more than 420% since we made this commitment in 2013/14 when we had 378,614. This means we have already achieved our goal, and we continue to work hard to ensure all customers with additional needs are identified and receive the care they need during power cuts.	●	●
Proactively contact all registered vulnerable customers to offer support if they are without power.	When power cuts occur and we are made aware of the outage, we call all medically dependent customers, and contact all registered vulnerable customers via our automated SMS and Voice message service. This service is offered 24 hours a day, seven days a week.	●	●
Extend our local authority joint response pilot across our geographical footprint and standardise triggers.	This is now part of our business-as-usual operations. We alert the local authority at the outset of more significant power cuts and work with them through to restoration of power supplies, keeping our customers informed. An example of this is our work in response to the first COVID-19 lockdown where we supported the local resilience forums.	●	●
Provide every vulnerable customer an alternative high priority dedicated number.	Customers in vulnerable circumstances on our Priority Services Register have a dedicated Freephone number to call in case of a power cut.	●	●
Distribute welcome packs to all new customers on the Priority Services Register.	Welcome packs are provided to all new customers on the Priority Services Register. The packs include the information these customers require to ensure that they can receive the additional support they need if they experience a power cut.	●	●
Host two subject-specific priority issue focus groups on vulnerable customers and fuel poverty every year.	In 2020/21 we held three focus groups with relevant stakeholders regarding activities to relieve fuel poverty and support our most vulnerable customers.	●	●
Maintain our community fund investing £300,000 per annum.	Through Matched Funding, Team Sport Awards, Community funding and charity partnership donations we have provided £344,643.48 funding for local community schemes and charities in 2020/21.	●	●
Work with National Energy Action (NEA) to map and profile fuel poor customers within our footprint.	We worked with NEA to understand the variation of vulnerability across our region. We did this by mapping levels of unemployment, fuel poverty, customers on the PSR and other indices. This data is updated annually to ensure it is accurate. This mapping allows us to target energy efficiency advice and customer care to the most deprived areas.	●	●
Publish information to targeted customers on how energy efficiency and demand-side activity can be used to manage energy consumption.	Our work through Power Partners sent out over 841,000 energy efficiency advice notices and reached over 13,800 customers with in-depth tailored support. We have posted information about smart metering directing customers to the Ofgem website.	●	●
Deliver a series of targeted consumer surgeries for vulnerable residents designed to raise awareness of energy efficiency and how to manage energy bills.	We have developed further face-to-face energy café and energy efficiency workshops through trusted partners, helping customers across our three regions. We have reached more than 841,000 customers with information to save through our energy efficiency advice, with an additional 13,800 customers saving more than £2.7 million through face to face personalised support.	●	●
Publish a strategy to explain how smart meters can be used to reduce fuel poverty.	Our innovative project, energywise, researched how smart meters can benefit customers who are in fuel poverty. The findings from this project have been used to inform our strategy. We created bespoke supplier and customer satisfaction frameworks specifically for smart meter interventions so that we can measure and monitor our service. We refreshed our annual PSR campaign with the benefits of a smart meter in mind.	●	●
Create a group of UK Power Networks local community energy champions.	We have partnered with Community Energy South, London Sustainability Exchange, Rural Coffee Caravan, Repowering, and Carers Trust to create a group of local energy champions. These energy champions advise customers face-to-face about energy savings, renewable energy and finding the right tariffs.	●	●
Develop a project with NEA to educate young carers about energy efficiency.	In 2020 we launched several energy efficiency programmes for young people across south London and Brighton and Hove to educate and support – reaching over 193,593 young people with energy efficiency advice.	●	●
Organise and deliver school activity days to encourage safe, efficient use of energy.	Due to the pandemic, all face-to-face engagements with young people were cancelled, therefore we maximised our engagements through PowerUp and the Scout Association. UK Power Networks supports young peoples' safety through the PowerUp website and as well as partnering with The Scouts association to sponsor the Local Knowledge Badge. The activities we undertake across our network area are designed to teach young people (aged 10 and 11 years) about the dangers of electricity and the network. In 2020/21 we engaged with over 363,000 young people, online and through digital activities through the Scouts about safety.	●	●
Measure ourselves against other companies and seek inter and intra sector recognition/accreditation by participating in external benchmarking such as achieving membership of the Sunday Times 100 Best Big Companies to Work For.	We improved our position on the "Best Big Companies to Work For" list in 2021. We were placed 6th, our highest ever position on the list. We also appear at a highest ever position of 3rd on the UK's Inclusive Employers Top 50 list. We achieved National Equality Standard reaccreditation and are the only DNO to hold this accreditation.	●	●
Recruit and train over 1,000 staff as well as up-skill and develop existing employees to ensure that we maintain a suitably skilled and motivated workforce.	As the workforce ages, skilled staff retire and new skills are required. We have an effective pipeline that supplies us with trained staff so that we can keep the lights on. This has resulted in the recruitment and training of 1,838 staff so far in RIIO-ED1.	●	●

Outcomes we delivered for customers and stakeholders so far in RIIO-ED1

Our approach to consumer vulnerability has continuously evolved throughout RIIO RIIO-ED1. This evolution has led us to outperform our commitments and to expand our focus beyond these.

Figure 8: RIIO-ED1 vulnerability, areas of focus

Specifically, our stakeholders and partners led us to focus on four key areas:

- **Maximising our partnerships and training our staff** - Our partners played a critical role in the design and delivery of our fuel poverty programme and our broader approach to consumer vulnerability. As some of our closest stakeholders, they helped us understand customers' needs, identify those in need of extra help and deliver tailored services. In RIIO-ED1, we introduced our partnerships strategy and supported it with tools and processes that helped us identify the best partners and review their effectiveness. As a result of our focus on partnerships, we can now count on an industry-leading network of partners, counting more than 600 organisations (of which 223 active in 2020/21 alone), to help us deliver tailored and lasting value for our vulnerable customers.

- **Managing and developing our Priority Services Register** - For RIIO-ED1, we set a target of doubling the 530k households on the PSR; we achieved this in 2016/17. We then reset the PSR target in 2017 to register 1.7m (40%) of the identified eligible households, which we achieved in 2019. Stakeholders then advised us to strive for 40% of households registered at a district level across all 124 districts, which we have now met in 95% of the districts we serve (118 out of 124). Over the past year[7], we have achieved a new high of 1.97m household customers registered on the PSR, 56.4% of eligible households and over 24.4% of the total households we serve. We arrived at the total households by taking all MPAN numbers from our income management database and removing all Industrial & Commercial MPANs.

- **Tackling fuel poverty** – We co-designed a fuel poverty programme with our stakeholders during the course of RIIO-ED1. The resulting guiding principles and the initiatives we have delivered allowed us to maximise positive impact on our customers' lives while keeping costs low for the wider customer base. Since 2016, we have delivered in-depth support to over 40,000 customers, saving them an estimated total of £8.8m with an additional £19.5m expected to be realised over the coming years (as the savings from energy efficiency measures, increased income, grants and lower energy costs continue to cumulate). We have also delivered fuel poverty information and advice to 2.51m people since 2015, generating estimated savings of £51.4m.

- **Providing inclusive services to ensure no-one is left behind in a changing world** – As the energy system transforms, a new dimension of vulnerability arises. We recognise the scale of the problem and have started to take steps aimed at ensuring that no customer is left behind in the energy system transition to a Net Zero future. In 2019, we have worked with the Energy Saving Trust to identify the barriers that our customers face in engaging with a changing energy market and have started to roll-out initiatives aimed at removing them. Building on this model, in 2020 we have enhanced our understanding of who may be at risk of being left behind today and in the future and we developed a spatial and temporal mapping tool that allows us to forecast where and where our customers will face various barriers, driving our future engagement and services.

The table below presents an overview of the services we currently offer to customers in vulnerable situations. The services are categorised in to three groups, each focusing on a different outcome that we aim to achieve for our customers. Please note that the table presents a non-exhaustive list of services.

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[7] As of end of March 2021.

Figure 9 - The services we currently offer as part of our consumer vulnerability programme

Supporting our customers in vulnerable circumstances	Supporting households in or at risk of fuel poverty	Providing inclusive services to ensure no-one is left behind
9 different channels to register for PSR with PSR form available in 13 foreign languages, Easy Read, Large Print, Braille and audio format	'Ways to keep you safe and save you money' booklet	Discount for supply alterations
Language Line, Video Relay, Text Relay & Browse Aloud services	Community grants fund	Community grants fund
24/7 dedicated priority number/line & PSR dedicated email	Energy efficiency and fuel poverty advice (incl. behavioural change)	Personalised energy consultations and home energy audits
Calls answered within 4.8 seconds on average	Bill and tariff checking services (incl. tariff switching & Time of Use Tariff awareness)	Accessible support to remove digital barriers
PSR FastTrack across all channels	Debt support and income maximization	Scope "Disability Energy Support with water advice" Service
Average PSR contact rate of 3.76 interactions per incident	Energy efficiency improvements and heating upgrades	Entry threshold of 10kW for both LV and HV flexibility products to maximise residential customer participation
Community support team and vehicles	Support to apply for Warm Home Discount and other grants	Smart Meter Benefit information in tailored formats
Field staff customer app	Intervention referrals to other support services	Fuse upgrades for all domestic customers free of charge
Paid hotel rooms and transport	Home visits by community partners	
Hot meals and refreshments (large scale catering for major events)	Community events	
Powercut emergency kit (e.g. torches, corded telephones, solar power chargers)	Fuel poverty training for frontline workers	
Refrigerated medication cool bags	Dedicated team managing support services	
Mobile Wi-Fi		
Proactive planned and unplanned outage information in a wide range of tailored formats		
Generators for use during a power cut		
Automatic smart meter checks for on/off power integrated in the customer journey		
Dedicated fuel poverty advice and support line for PSR customers struggling with their energy bills and to keep their home warm		
18-month contact cycle		

In addition to our portfolio of vulnerability services for domestic customers, we also offer a series of priority services to our business customers registered on the Extra Care Register, as described in Section 7.

Innovating for customers in vulnerable situations throughout RIIO-ED1

Innovation has played an important role in our efforts to support vulnerable customers throughout RIIO-ED1. Many of the outcomes presented above were enabled through innovation projects that targeted the needs of fuel poor customers and those who risked being left behind in the energy system transition. Our innovation efforts focused on:

- Supporting those in fuel poverty to participate in energy savings and Demand Side Response (DSR) opportunities. We were the first DNO to investigate innovative approaches to support customers in fuel poverty through our flagship project, 'energwise'. Our learnings have inspired other networks to deliver similar projects.

- Increasing access and participation of domestic customers to domestic Demand Side Response. We are involved in a range of projects that aim to remove barriers that specific groups of customers may face in engaging with the low voltage flexibility market. One of these projects, the 'Urban Energy Club' creates opportunities for customers living high-density urban areas through virtual ownership of shared energy storage assets and 'club-type' commercial models.

- Ensuring fair access to EV charging for those who wish to transition to an EV. We are working in collaboration with partners and local councils on a range of projects to find suitable solutions that will increase access to public EV changing infrastructure for both domestic and commercial customers, including potential disabled EV drivers.

- Enabling the transition to Net Zero carbon for off-gas communities. Our project CommuniHeat is exploring the most appropriate, cost-effective and future-proof solutions to decarbonise heat for off-gas grid communities who do not have access to the existing gas infrastructure and may face significant barriers in terms of technology investment and electricity network capacity.

4 – The changing needs of customers in vulnerable circumstances

The energy system transition

Notwithstanding the progress in addressing consumer vulnerability during RIIO-ED1, new challenges, and ways for our customers to experience detriment, continue to arise. These challenges emerge from a combination of customers' personal circumstances and the changing energy market. The personal circumstances of customers are often fluid and our approach to consumer vulnerability, described above, accounts for this by providing flexible solutions that adapt to their evolving needs.

Many of the new challenges facing our vulnerable customers today arise from the ongoing transformation of the energy industry. This transformation, also referred to as the 'energy system transition', can be broadly summarised by describing four fundamental shifts:

- **Decarbonisation**: In 2019, the UK became the first major economy in the world to pledge Net Zero carbon emissions by 2050 as a necessary and fundamental measure to end its contribution to global warming and fight climate change. Meeting the Net Zero target requires fundamental changes in the way we generate, use and store energy. Lowering the emissions of key sectors such as power, transport, heat and industry will shift customers towards more renewable energy, electric vehicles and low carbon heating solutions.

- **Decentralisation**: The closure of large fossil-fuelled generating stations coupled with a large increase in small scale renewable generation and more homes and businesses generating more self-consumed electricity means that a significant proportion of the generating capacity is now connected to the distribution networks. Local networks and individual homes will increasingly play a vital role in running future electricity networks.

- **Digitalisation**: The introduction of smart meters at scale of low carbon technology equipped with modern sensors and smart digital appliances will vastly increase the amount of data available. This gives rise to new services and products for the use of customers, networks and industry participants.

- **Democratisation**: The uptake of low carbon technologies, the rise in small scale renewable generation and the new products and services built on the wealth of the data being generated, give individual customers the ability to become "prosumers": active participants in the energy market. This is a fundamental shift away from the current model where the interaction with electricity is vastly passive and taken as a given.

Figure 10: Overview of the future energy system

How the energy system transition impacts vulnerable customers

As the energy system evolves, our customers will experience new obstacles in engaging with the energy market. Our engagement with customers and stakeholders to date, as well as our experience in working with partners to understand the needs of those in vulnerable situations, shed light on how the needs of our customers will evolve. We now foresee two new primary sources of detriment arising from this transition:

- Our customers' **ability to engage** with a more complex market. New technologies, skills and capabilities will be required to understand, assess and engage with the evolving energy market. Those who do not possess these capabilities or cannot access new technologies because of their circumstances may not benefit from the opportunities presented and, as a result, face detriment.

- The **degree of access** to the opportunities arising from the energy system transition may vary significantly across the communities we serve. Many factors will impact the ability of people to take up low carbon technologies or engage with new services, such as flexibility. These include one's living arrangements and the nature of the energy infrastructure that serves them.

The new barriers that people and communities in vulnerable situations will face

Our experience tells us that no two situations are alike. The uniqueness of our customers' situations is defined by how different circumstances overlap with aspects of the energy industry to create different needs and requirements. Informed by our datasets (introduced in Section 2), state of the art consumer research, millions of touchpoints with vulnerable customers and engagement with our expert partners and stakeholders we identified four broad types of barriers that will prevent our customers from enjoying the outcomes (presented in Section 1) we aim to deliver for all customers over the coming years:

- **Life situations** – these include both permanent and temporary health issues as well as significant life events that may make someone less able to engage with the energy market or more susceptible to detriment in interacting with it. Examples include mental and physical disabilities, recovering from hospitalisation, and bereavement.

- **Socio-economic drivers** – Broad societal factors that impact a customers' wellbeing with implications reaching far beyond the energy market. An increasingly ageing population, higher rates of disability, the rise of single-person households are key drivers of circumstances that impact the ability of our customers to engage with the energy market.

- **Ability to engage with the market** – Includes a variety of obstacles that customers may face in engaging with the energy industry, including the willingness to engage and the ability to interact with the required technology. This issue is exacerbated by the increasing complexity of information and interactions required to adopt new products and technologies. Examples include physical inability to interact with smart devices and not being able to understand complex options and information.

- **Access** – Includes all obstacles that customers may face in engaging with the energy market due to the solutions available to them. The lack of specific network solutions means that fewer options and potentially benefits, are available to customers in these situations. This includes, for example, off-gas grid communities and high-rise buildings.

Figure 11: Forward-looking vulnerability risk factors
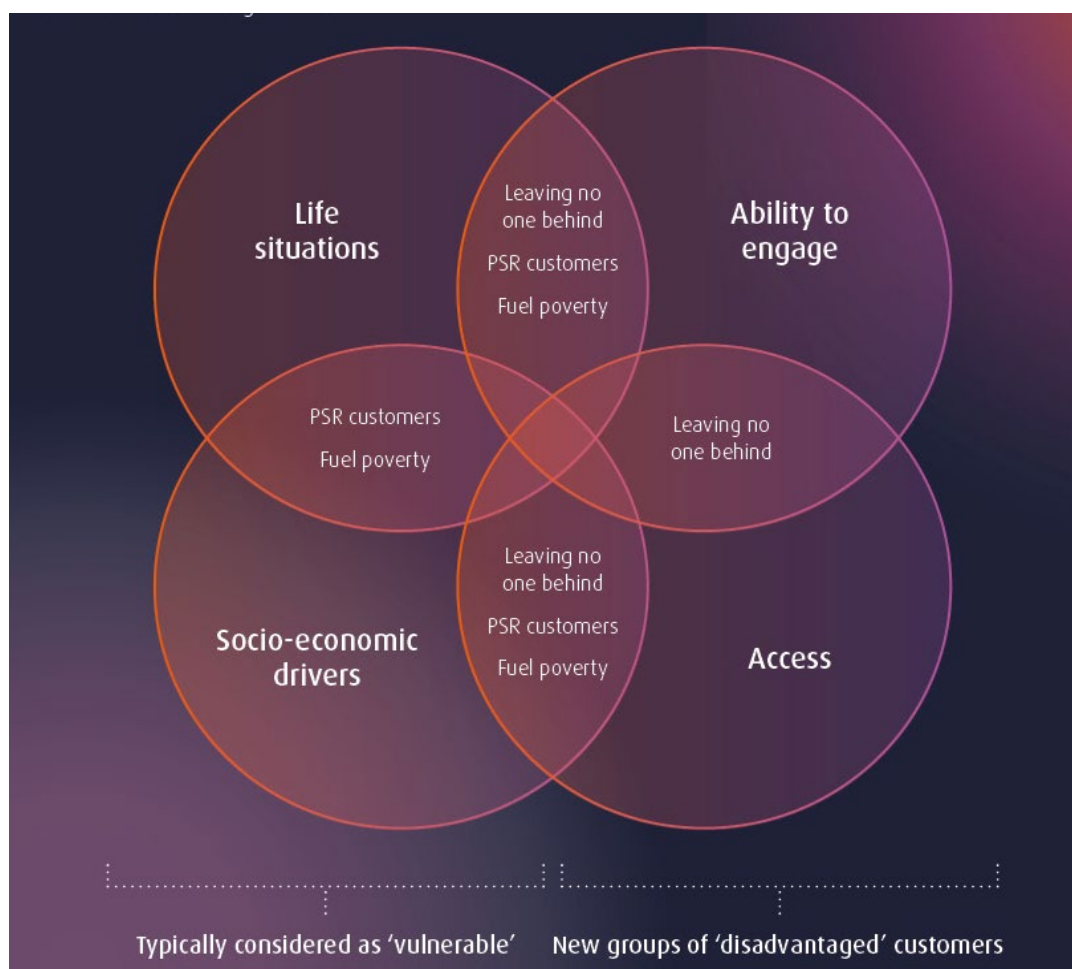
Practical examples of how these vulnerability risk factors prevent customers from enjoying the outcomes we want to achieve for all customers and communities are presented below:

Table 3: Examples of how vulnerability risk factors prevent customers from enjoying the outcomes we want to achieve

	Examples	Outcomes we want to achieve for the people and communities we serve			
		Protection and safeguarding	Affordability of the electricity supply	Fair and appropriate access	Wider social value
Vulnerability risk factors	**Life situations**	e.g. people may be more at risk during a power cut due to temporary or chronic conditions.	e.g. people relying on electrical medical equipment for health conditions may experience higher electricity consumption and costs.	e.g. people with disabilities may not be able to benefit from education materials or offerings if not accessible.	e.g. personal circumstances may exclude people from local community resilience opportunities.
	Socio-economic drivers	e.g. social isolation may put people more at risk during a power cut because they cannot rely on their social network.	e.g. low income households may not be able to afford the cost of any changes required to their electricity supply.	e.g. cultural barriers may prevent certain communities from participating in emerging opportunities of the energy market.	e.g. low income households may experience financial challenges in opting for greener options.
	Ability to engage	e.g. lack of digital skills may be a barrier for people to get the support they need if support is not available via multiple accessible channels.	e.g. lack of energy market understanding may limit the ability of people to benefit from the cheapest offerings.	e.g. lack of digital skills may be a barrier for people to sign up to app-based flexibility offerings.	e.g. lack of knowledge of green solutions may result in communities missing out on environmental benefits
	Access	e.g. people off gas grid may be more at risk during a power cut if they fully rely on electricity as their only source of energy.	e.g. people living in private rented properties may not be able to receive appropriate advice and financial support to get out of fuel poverty.	e.g. people living in blocks of flats cannot access the flexibility market if they cannot install their own technologies (batteries, solar panels, charge points).	e.g. living in a rural community without EV charging infrastructure may result in worse air quality compared to other areas in the future.

Our efforts over recent years, presented in the previous section, have mostly focused on addressing vulnerability arising from our customers' life situations and socio-economic drivers. This is because the very nature of the energy market up until today meant that domestic customers were mostly passive in dealing with their electricity supply.

With the 'democratisation' of the energy system, this is changing. The opportunities provided by new solutions such as low carbon technologies and flexibility services, increasingly attractive to domestic customers, mean that the way our vulnerable customers interact with the energy market is evolving. At the same time, the situations of vulnerability that affect our customers can prevent them from taking these new opportunities.

These new obstacles, 'access' to markets and our customers' ability to engage, are new sources of detriment that work together with traditional factors to put people and communities at risk of being left behind in the energy system transition. As illustrated by the intersections of the diagram, some may experience more than one type of vulnerability, which can make them both vulnerable in the most traditional sense (e.g. eligible to the PSR or for fuel poverty support) and at risk of being left behind in the energy transition.

A well-defined and risk-based understanding of vulnerability risk factors directly shapes our RIIO-ED2 Vulnerability Strategy and our upcoming plans.

Expected volumes and geographical dynamics in RIIO-ED2

As the world around us is moving at pace, we have transitioned from assessing vulnerability through a static lens to understanding exclusion as a transitory, complex, multi-dimensional and dynamic concept. To understand the complexity of how our customers' needs will change in the future, we have co-created a two-stage customer segmentation framework with expert stakeholders from electricity, gas and water sectors based on todays and tomorrow's drivers of exclusion in the

energy system[8]. Informed by our stakeholders, the second stage is focused on what is missing in the energy system to ensure no one is left behind, while the first stage is focused on the consumer.

Figure 12: Two stage customer segmentation framework
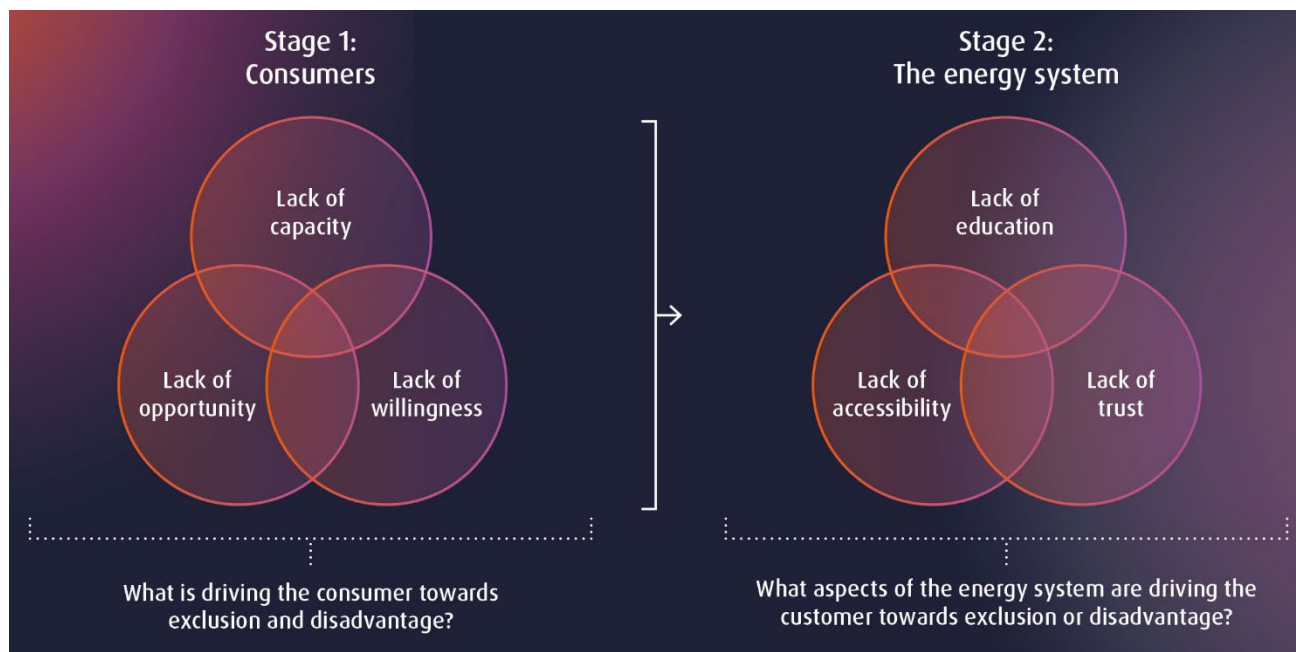
We have translated this theoretical framework into a spatial and temporal mapping tool that helps us forecast where and when our customers will face various barriers, driving our future strategies, engagement and service offerings. By modelling the future trends of 43 social indicators (mainly publicly available data sets) into 27 long-term and temporary circumstances that are likely to result in exclusion, we have forecasted at LSOA level how many customers are at risk of being left behind due to one or a combination of exclusion drivers between now and 2050. This has provided us with the best possible view to date of the geographical dynamics of existing and new forms of vulnerabilities in RIIO-ED2, including barriers to participating in a smart flexible energy system and in the Net Zero Transition. This tool is part of a broader focus on vulnerability data that will play a critical role in our ability to support the right people in the right ways as we journey to Net Zero. Along with our other datasets, including an extensive PSR database, data on situations of fuel poverty, stakeholders' and customers' feedback, we used this new customer segmentation framework to shape the commitments proposed within this vulnerability strategy.

We will regularly update the model as more data becomes available to drive our annual interventions, for example, on the long-term impact of COVID-19 on physical, mental health and financial circumstances. An example of our spatial and temporal forecasting for 'Lack of opportunity' is illustrated in figure 11 below.

We appreciate 2028 is seven years off from today and that the profile of consumer vulnerability could change in that time, that is why we have developed an approach which allows us to be agile and respond to change in a dynamic and effective manner. This approach consists of the following three steps:

- **Detailed understanding of changing vulnerability -** Using granular (at a district level) data and information from traditional and innovative sources to deliver better actionable insights to guide our interventions.
- **Robust impact measurement of our support programmes -** We will use a mix of research, engagement and social measurement tools to triangulate the true impact of various interventions ahead of progressing with any initiatives- selecting the most impactful to continue with.
- **Taking a learning through doing approach -** We will progress and pilot initiatives for a period to ensure they are as impactful as thought, and scale them into business as usual if successful.

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[8] This framework, developed by our project Socially Green, is built on our previous research, "Mind the Gap: Energy 2.0", developed with the Energy Savings Trust in 2018, combined with a comprehensive literature review across 40 sources summarising latest thinking on vulnerability. It has been informed by the Centre for Sustainable Energy's "Smart and Fair?" project (2020); Assist2gether's Vulnerable Consumer Market Segmentation Report (2018); DMA's "The vulnerable consumer, recognising vulnerability and taking a customer-centric approach" (2016); Savakool et al. Energy Policy, Volume 128, May 2019, pp. 495-504; UKRN's "Making better use of data: identifying customers in vulnerable situations, A report for water and energy companies" (2017).

Figure 13: Example of our spatial and temporal forecasting for 'Lack of opportunity'. The image on the left represents the 'lack of opportunity' vulnerability level in 2020, the image on the right the difference in 'lack of opportunity' between 2020 and 2030
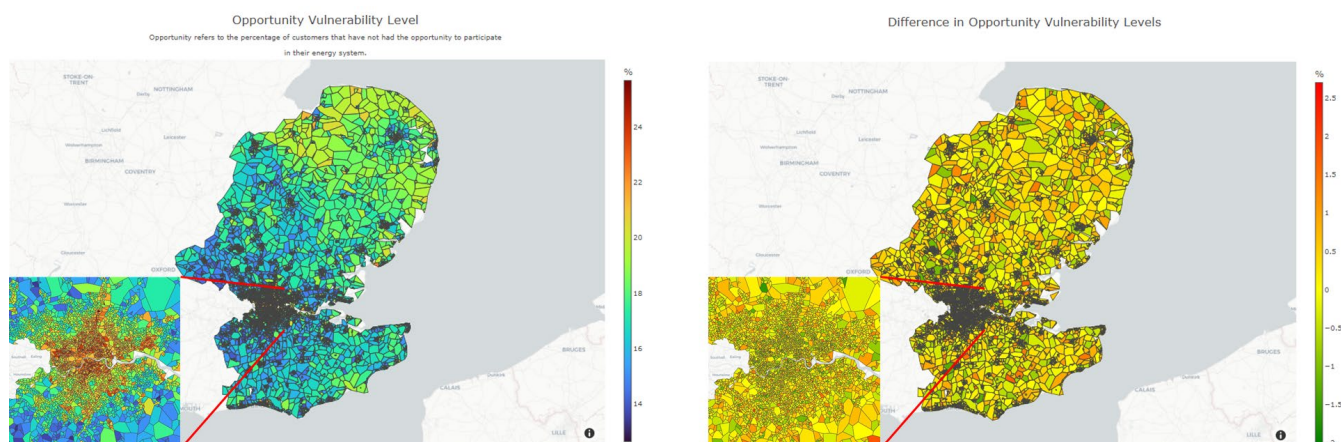
The image on the left shows the estimated level of vulnerability in 2020 for the selected barrier 'Lack of opportunity', while the image on the right shows the positive and negative trends (or difference in opportunity levels) between 2020 and 2030. The level of vulnerability is normalised by the population of each LSOA. The tool allows us to visualise any of the 43 social indicators, 27 long-term and temporary circumstances and 10 different exclusion segments every 5 years between 2020 and 2050, and the expected differences/trends over the selected time period.

Our model accounts for an expected increase in the population in UK Power Networks' regions of approximately 3.5-3.6% from 2020 to 2025, and from 2025 to 2030. Most of the social indicators and circumstances that may drive exclusion are expected to increase in line with the general population or at higher rate, however a few indicators are increasing at slightly lower rate between 2020 and 2030, which suggest a slightly improvement by less than 1% by 2030. This is the case of geographic constraints associated with limited personal mobility due to the lack of a private car/van, to barriers to housing and to the living environment.

Those vulnerability circumstances that could be associated with the pandemic (e.g. bankruptcy, excess deaths and insolvency) are showing extremely high increase rates despite they are associated with only a very small proportion of the population (up to 1.1% in 2030). This indicates that they will require close monitoring and potential corrections as soon as there is more certainty around future trends.

When focusing on social indicators and vulnerability circumstances that are particularly relevant to understand who may be at risk of being left behind in the Net Zero Transition or may not be able to participate in a smart flexible energy system, we expect an increase in the population experiencing mental health issues from 0.9% in 2020 to 1.4% in 2030. However, the percentages of those with no/limited access to internet (25%) and of adults that do not use internet (12.5%) are predicted to remain the same, which suggests that these groups will still experience barriers in accessing digital and online services.

The percentage of people living in cold, energy-inefficient homes is predicted remain around 4% over the decade, fuel poverty around 13% and those on low income seem to increase slightly from 34.3 to 34.4%%. Those with no or limited flexibility (as they have dependants that affect their flexibility) are expected to remain at around 31.3% and those with non-peaky demand profiles at around 18.6%.

By combining different indicators and circumstances, we estimate that, on average, per segment of exclusion:

- 1.52m households are at risk of behind left behind in the energy system across London, East and the South East by 2025
- 1.58m households are at risk of behind left behind in the energy system across London, East and the South East by 2030

Compared to 1.46m households in 2020. However, the average proportion of the total population at risk per segment of exclusion remains constant at 19% over the next decade.

Table 4: Proportion and total number of households at risk of behind left behind in the energy system for each segment of exclusion across London, East and the South East in 2020, 2025 and 2030

Segments of exclusion	Description	At risk of behind left behind						Increase over period		
		2020		**2025**		**2030**				
		% total population	Number of households	% total population	Number of households	% total population	Number of households	2020-2025	2025-2030	2020-2030
Lack of capacity	Customers are willing to participate and have had the opportunity but are not capable	21%	1.57m	21%	1.64m	21%	1.71m	4%	4%	9%
Lack of opportunity	Customers are willing to participate and capable of doing so but have not had the opportunity	19%	1.41m	19%	1.47m	19%	1.52m	4%	4%	8%
Lack of willingness	Customers are both capable and have the opportunity to participate but are not willing	15%	1.14m	15%	1.20m	16%	1.26m	5%	5%	10%
Lack of capacity & opportunity	Customers are willing to participate, but do not have the capacity and opportunity to do so.	16%	1.19m	16%	1.24m	16%	1.30m	4%	4%	8%
Lack of capacity & willingness	Customers have the opportunity to participate but lack capacity and the willingness	21%	1.59m	21%	1.66m	21%	1.73m	4%	4%	9%
Lack of opportunity & willingness	Customers have the capacity to participate but lack the opportunity and willingness	14%	1.04m	14%	1.09m	14%	1.14m	4%	5%	9%
Lack of opportunity & capacity & willingness	Customers lack the opportunity, capability and willingness to participate	14%	1.04m	14%	1.09m	14%	1.14m	4%	5%	9%
Lack of education	Customers are not aware of benefits or services available to them due to a lack of communications from the energy sector	42%	3.19m	42%	3.31m	42%	3.42m	4%	4%	7%
Lack of accessibility	The energy sector does not have adequate (quality or quantity) channels or platforms for customers to engage sufficiently	16%	1.22m	16%	1.28m	16%	1.35m	5%	5%	10%
Lack of trust	The energy sector has not built enough of a relationship with the customer so they are not prepared to share personal information or work collaboratively	15%	1.14m	15%	1.20m	16%	1.26m	5%	5%	10%
Average per segment of exclusion		**19%**	**1.46m**	**19%**	**1.52m**	**19%**	**1.58m**	**4%**	**4%**	**9%**

We have mapped how our RIIO-ED2 proposals are addressing the main risks and segments of exclusions to ensure consumers are not left behind in the energy transition.

In terms of geographical variations of vulnerability and exclusion factors across our areas, overall higher levels of vulnerability across multiple factors seems to be clustered in East London, parts of North London, Peterborough, Norwich and coastal towns. Significant geographical variations are associated with the following:

- Fuel poverty is concentrated in London, the coastal areas of East of England and some coastal towns in the South East. The drivers for fuel poverty in London are often a combination of people on low incomes and high housing costs, and a high proportion of households living in inefficient housing. Fuel poverty in the more rural and coastal areas is also typically driven by the use of more expensive off-gas heating. Compared to 2020, the top 20% LSOAs in fuel poverty seem to spread slightly more evenly across the East with an increase in the number of LSOAs in the South East regions falling in the worst 20% by 2030.
- Financial uncertainty and poverty seem to get worse by 2030 particularly in coastal towns and urban areas outside London. The majority of the areas are predicted to remain stable or get worse. However, some areas that are being renewed recently seem to have a positive trend in terms of levels of vulnerability, especially in London.

- While lack of capacity seems to have a higher geographical correlation with the poverty indicators, lack of opportunity remains particularly clustered in London and lack of accessibility remains spread in the East and South East over the next decade. Lack of trust and willingness seem to be clustered in London and around other urban areas, whereas lack of education is more evenly spread apart from the northern part of the South East region and some areas of London.

The results of these new tools and analysis have directly driven many of our initiatives and commitments in this strategy, and we will continue to invest in refining these tools, expanding the users of these tools and insights across our teams, including for example our capital investment teams to understand the impact of their works on communities and our DSO to understand the community needs ahead of launching any flexibility procurements. We will also make these tools and insights available to our regional utilities and Local Authorities should they wish to use them.

Building on our existing data mapping capabilities, we are in the process of developing a detailed intersectionality framework which will guide the use of these rich data sets to:
1. identify in a systematic way where the overlapping of multiple vulnerability indicators or socio-economic circumstances may result in an amplifying effect of individual factors and of the overall vulnerability level;
2. prioritise our efforts and interventions to target where they are needed the most to maximise the impact delivered to our customers.

Our data-driven approach to vulnerability and intersectionality will be instrumental to deliver our RIIO-ED2 Vulnerability Commitments.

5 – Developing a strategy to meet the needs of our customers
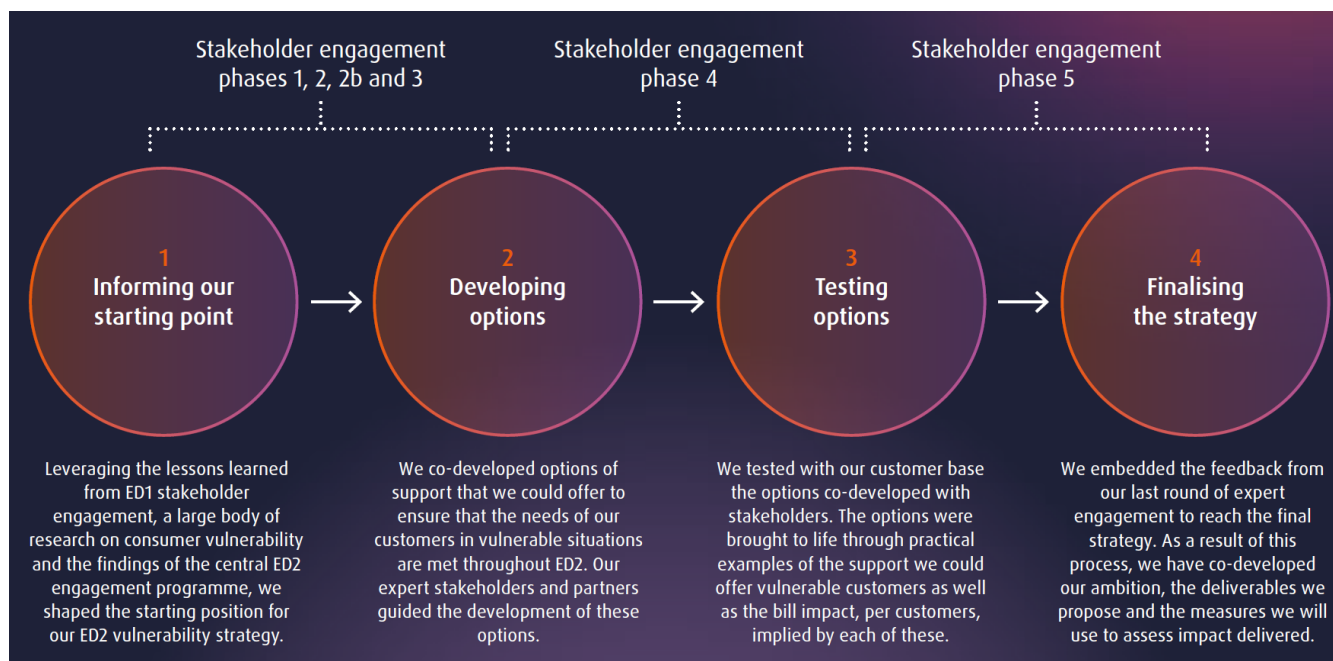
High-level approach to strategy development

The RIIO-ED2 Vulnerability Strategy is designed to identify the most impactful actions that we can take to effectively support our vulnerable customers as their needs evolve over time. The actions we propose to undertake, in the form of specific and time-bound commitments, are shaped around the needs and preferences of our customers.

In developing this strategy, we wanted to ensure that our existing approach to vulnerability did not bias our proposals – the commitments that underpin the strategy need to deliver the outcomes that our customers want and need regardless of what we are delivering for them today.

We designed a bespoke approach to develop a strategy truly centred on the needs of people and businesses in situations of vulnerability. The diagram below provides an overview of this approach, further described in the following sections.

Figure 14: Overview of the RIIO-ED2 Vulnerability Strategy development process

Stakeholder engagement phases 1, 2, 2b and 3	Stakeholder engagement phase 4	Stakeholder engagement phase 5

1 Informing our starting point

Leveraging the lessons learned from ED1 stakeholder engagement, a large body of research on consumer vulnerability and the findings of the central ED2 engagement programme, we shaped the starting position for our ED2 vulnerability strategy.

2 Developing options

We co-developed options of support that we could offer to ensure that the needs of our customers in vulnerable situations are met throughout ED2. Our expert stakeholders and partners guided the development of these options.

3 Testing options

We tested with our customer base the options co-developed with stakeholders. The options were brought to life through practical examples of the support we could offer vulnerable customers as well as the bill impact, per customers, implied by each of these.

4 Finalising the strategy

We embedded the feedback from our last round of expert engagement to reach the final strategy. As a result of this process, we have co-developed our ambition, the deliverables we propose and the measures we will use to assess impact delivered.

Step 1 - Informing our starting point

Our strategy did not start from a blank sheet of paper. Our first step was to systematically collect and analyse the evidence base that forms our core corporate knowledge of vulnerability matters by analysing the following data. This included:

Research	Description
RIIO-ED1 lessons learnt	A catalogue of RIIO-ED1 engagement learning to date and of the internal research carried out so far to shine a light on our vulnerable or disadvantaged customers' needs and investigate the most appropriate solutions to address such needs (covering both our ongoing vulnerability programme and our innovation projects)
Vulnerability data	Including our PSR data and the vulnerability/community factors mapped in our geospatial mapping tool.
External research insights	A literature review of the latest consumer research undertaken by: • Trusted organisations and subject matter experts (including Ofgem, Citizens Advice, the Climate Assembly UK, the Commission for Customers in Vulnerable Circumstances, National Energy Action, Energy Systems Catapult, Sustainability First, Centre for Sustainable Energy, Money Advice Trust, UKRN and Energy Saving Trust; and other utilities in our network areas.

This initial evidence base was complemented by insights into the future needs of vulnerable customers, delivered by our latest innovation project Socially Green, and by the following elements of the RIIO-ED2 vulnerability engagement programme (described below):

- The overarching priorities of our customers and stakeholders and how supporting vulnerable customers fit within these.

- The willingness to pay of customers in our regions for better and continued support of the most vulnerable in society.

- Research into the preferences of vulnerable customers as part of four core customer journeys: connections, planned power cuts, faults and general enquiries.

- In-depth research on the needs of vulnerable customers and the role that the wider customer base believes we should play in supporting them.

The lessons we gathered shaped our initial position on the RIIO-ED2 Vulnerability Strategy. This included:

- A set of outcomes that we will strive to deliver for all customers (presented in Section 1).

- A definition of the situations of vulnerability that will affect customers throughout the energy system transition (presented in Section 4).

- A clear set of functions that we will perform to comprehensively meet the needs of customers today and in the future (presented in Section 6).

These elements formed the backbone of our engagement with customers and stakeholders that informed the design of options on practical support we could deliver in RIIO-ED2.

Steps 2 to 4 - Developing and testing options to finalise the Vulnerability Strategy

Having defined our initial thinking on the RIIO-ED2 Vulnerability Strategy, as defined above, we engaged with over 60 stakeholders to test and challenge this starting point. As part of this engagement, we gathered feedback on aspects ranging from the outcomes we want to achieve, our understanding of the situations that affect customers and communities and the role we could play in addressing their needs over RIIO-ED2.

This initial research and engagement shed light on the actions we could take to better support our vulnerable customers throughout RIIO-ED2. We packaged these actions into three sets of 'options' that were tested with our customer base to assess the level of ambition – and spending – they supported across aspects of our Vulnerability Strategy.

Each of the options tested strived to achieve the same broad outcomes for our customers, however, the scope and volume of our support would vary in each of them. The sample activities shown in each option were costed to ensure that respondents understood the cost implications of their preferences. These options were also tested along with several others that touched upon all aspects of the RIIO-ED2 Business Plan, giving us a comprehensive view of our customers' support for our ambition in vulnerability relative to other areas of the plan.

The options developed and the customer feedback on these directly shaped the ambition of our commitments as reflected in our shareholders' investment to deliver ambitious targets over RIIO-ED2.

The feedback we gathered on the options developed with stakeholders gave us a clear mandate from our customers to go above and beyond our existing role in supporting customers and communities in vulnerable situations in RIIO-ED2. This is reflected in our strategy and commitments, presented later in the document.

The golden thread: Our bespoke stakeholder engagement programme

In developing this strategy, we could not rely solely on our current understanding of our customers' needs. To ensure that the actions we will take in their interest result in the intended effects and that these are the best we can deliver, we had to work closely with customers, stakeholders and expert partners.

We designed a bespoke engagement programme to develop our Vulnerability Strategy, drawing on insight from the overarching core RIIO-ED2 engagement programme where appropriate. The diagram below shows the objective of each of the steps in the engagement journey.

Figure 15: Our bespoke engagement programme to develop the RIIO-ED2 Vulnerability Strategy

Each phase resulted in informed, specific and actionable stakeholder and customer feedback that allowed us to refine the strategy with our customers' needs at its core. A description of the five phases follows:

Table 5: The phases of our bespoke engagement programme

Engagement activity	Who	Description
1- State of the Nation*	Customers	Quantitative research providing high-level baseline understanding of customers' sentiment towards vulnerability issues
2 - Customer Priorities*	Customers & Stakeholders	In-depth qualitative research understanding customers' and stakeholders' current and future needs and their priorities on helping customers in vulnerable circumstances
2b – Deep dive in CV*	Customers	A deep-dive of the qualitative research on customer priorities focused on consumer vulnerabilities by breaking them out into three key categories: • Vulnerable customers (eligible for Priority Services Register) • Customers in fuel poverty • Customers at risk of being left behind in the changing energy world
2 – Willingness to Pay*	Customers	Quantitative research exploring customers' Willingness to Pay for different attributes including services to vulnerable customers
3 – CV Councils	Stakeholders	A set of three in-depth sessions with a small group of 7 expert stakeholders that guided us throughout the development of the Vulnerability Strategy and the design of our stakeholder engagement programme
3 – Stakeholder workshops	Stakeholders	A set of 6 in-depth conversations with a total of 30 informed stakeholders on a specific set of topics: • 3 strategic sessions on our Strategic Role • 3 delivery sessions on Options Development

3 – Stakeholder surveys	Stakeholders	A survey sent out to a wider range of informed stakeholders including local authorities to complement the insights gathered via the workshops on the same topics (issued to 180 stakeholders, 15% response rate)
3 – Customer Services research	Customers	A wide market research engaging with different customer groups exploring the services they would like to receive in RIIO-ED2 across all customer journeys
4 – Options Testing*	Customers	Quantitative research testing key options included in our Vulnerability Strategy with customers (including cost information)
5 – Final Review	Stakeholders	In-depth conversations with expert stakeholders and feedback from UK Power Networks' CEG and Ofgem's Challenge Group.

*These activities support the core engagement programme

Please refer to the Vulnerability Engagement Summary for a detailed overview of all engagement and the research conducted on consumer vulnerability.

Ensuring broad and comprehensive representation of customers and stakeholders.

Recognising the critical role of customers and stakeholders in the development of this Vulnerability Strategy, we made extensive efforts to ensure a broad and informed representation covering all relevant groups and geographical areas throughout the engagement programme.

Stakeholder mapping, undertaken at the beginning of the strategy development process and refined and tested throughout, identified over 300 relevant stakeholders. These included groups ranging from consumer bodies to local councils and emergency response organisations. The stakeholder map below provides an overview of the key stakeholder groups engaged. More detail on our approach to customer engagement can be found in our engagement section of the Business Plan.

Figure 16: Map of broad stakeholder groups engaged in the development of the RIIO-ED2 Vulnerability Strategy
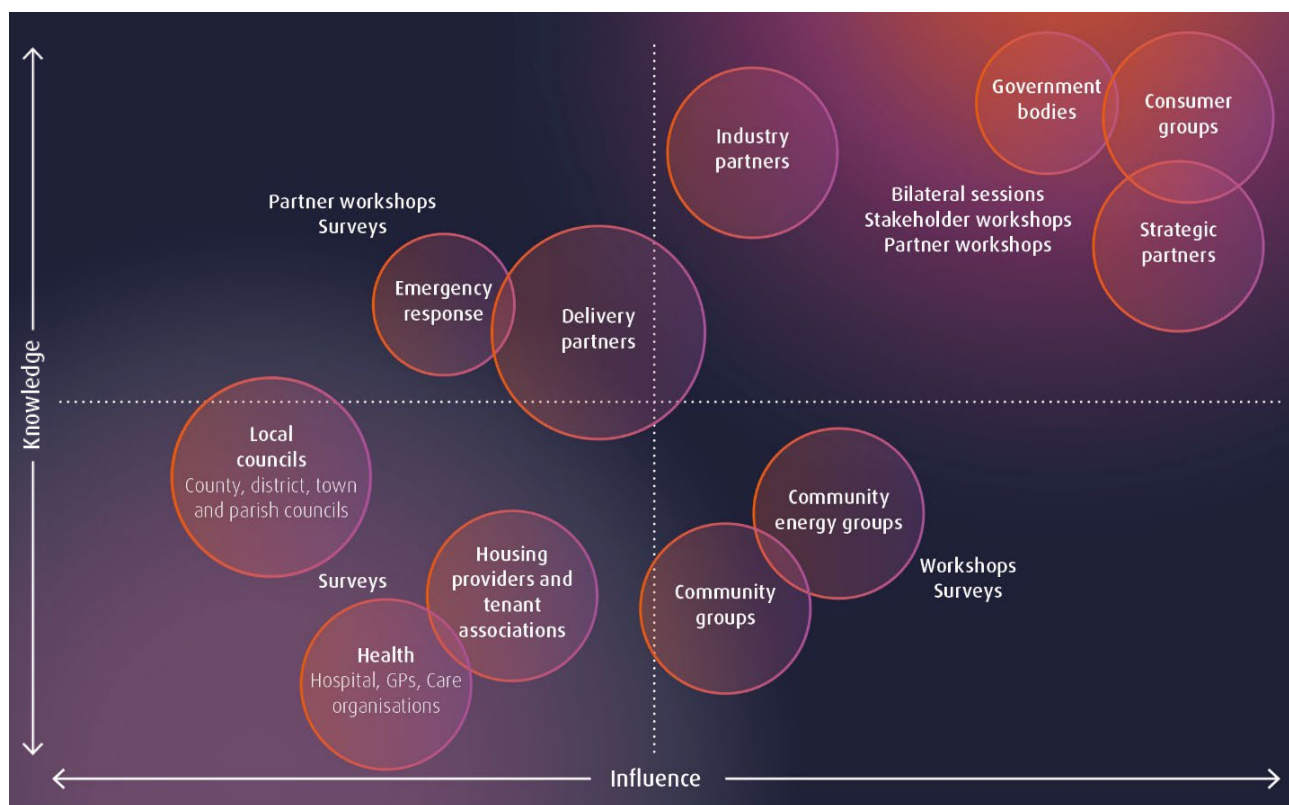
We understand that our stakeholders can experience engagement fatigue tied to the simultaneous requests of multiple networks developing RIIO-ED2 Business Plans, which only adds to already congested schedules. Our experience in

working with our close partners in the space of consumer vulnerability also tells us that smaller charities and local organisations can have minimal bandwidth to engage with us or other organisations.

The success of our engagement programme, therefore, rested on our ability to provide flexible means for all stakeholders to provide in-depth feedback at all stages of strategy development. To achieve this, we employed a wide range of engagement methods, described below:

- **Council** – A small group of very influential and knowledgeable stakeholders that could guide us on the development of the Vulnerability Strategy and on our approach to stakeholder engagement.

- **Workshops** – An in-depth conversation with several informed stakeholders on a limited set of topics. This method of engagement favours debate among stakeholders and allows us to gather contrasting views in a facilitated environment. In response to COVID-19, all workshops are planned online. In addition to asking questions during the event, we used tools to ask survey-format questions; this increased the volume of feedback and ensured we heard our 'silent stakeholders'.

- **Surveys** – A facilitated yet flexible approach to gathering stakeholder feedback. Surveys are supported by bespoke content produced to inform stakeholders on our' position and the surrounding environment before asking tailored questions.

- **Partners Forum** – A recurring event involving our network of partners that play a critical role in identifying and supporting vulnerable customers. We discussed key RIIO-ED2 issues in addition to ongoing discussions on Business as Usual matters.

Due to COVID-19 restrictions, we engaged all our stakeholders remotely during the development of the strategy. The Council meetings and the Stakeholder Workshops were recorded and shared with members of the Customer Engagement Group to evidence the open and transparent way we co-developed our options.

"There was clear evidence of a thread running between the various events… it was clear that a lot of energy and effort had been put into these events, a wide range of relevant individuals and organisations were given a genuine opportunity to participate and were listened to…" – Sarah Chambers, RIIO-ED2 CEG

6 – Our RIIO-ED2 Vulnerability Strategy

Comprehensive engagement with over 19,000 customers and stakeholders and thousands of customers on consumer vulnerability led us to develop an ambitious and forward looking strategy that will support and empower our customers throughout the energy system transition.

The RIIO-ED2 Vulnerability Strategy we have designed with customers and stakeholders is composed of four elements:

- A **statement of ambition** that sets out our overarching objective within consumer vulnerability.

- A set of **principles** that guides us in designing the best possible approach to addressing consumer vulnerability.

- A **strategic approach** that presents three distinct functions we will perform to deliver the support our customers want and need.

- **Commitments** that will address the needs of people and communities in vulnerable situations.

Together these elements capture our culture, ambition and the areas on which we will focus to best meet the evolving needs of our customers and stakeholders over the coming years. They also reach far beyond this document and influence other parts of our Business Plan, thereby ensuring that vulnerability is embedded across all aspects of our RIIO-ED2 plans.

Figure 17: Elements of our Vulnerability Strategy

We introduce the first three elements of our strategy below and present the commitments in the following section.

Our ambition

Our ambition is to deliver industry-leading support that maximises the value delivered to our customers in vulnerable circumstances against a significant commitment.

As a local trusted network and a socially responsible business, we will play an enhanced role in addressing vulnerability in those key areas where we can deliver the highest social impact by increasing the reach, the breadth and depth of our support and ensuring an affordable and just Net Zero transition.

This mission weds our relentless focus in making a lasting impact on our customers' lives while staying true to our core value of being sustainably cost-efficient.

Far from being only a slogan, our ambition lives and breathes in the work we do every day from the boardroom to our customers' doorsteps – it is an integral part of our culture as an organisation and our unique value proposition to our customers and communities.

Principles that set us apart

While our ambition expresses our overarching objective in serving our customers in vulnerable situations, the following set of principles express *how* we will act to achieve our goal.

- **Inclusive** – We will support anyone who may feel vulnerable and need extra help in the context of energy. Our approach to vulnerability will not place people within specific descriptions and will provide tailored assistance to address their unique circumstances. Accessibility is a central aspect of our inclusivity principle; we will take all reasonable steps to ensure that our communication channels, information materials, services and all customer journeys are accessible to all people, regardless of the situations that affect them.
- **Collaborative** – We understand that the impact of vulnerability reaches far beyond the energy industry and that we are not always best placed to support our vulnerable customers. We will continue to invest in our industry-leading partnership network to better identify vulnerability and make a lasting impact on our customers' lives. We will also actively support our partners by upskilling, funding and providing data so as to empower them to better support people and businesses in situations of vulnerability.

- **Innovative** – Being the most innovative Distribution Network Operator is part of our company-wide vision. This extends to our Vulnerability Strategy, and in practice, to the solutions we find to our customers' needs. As the energy system creates new opportunities for customers to be left behind, we will continue to find innovative solutions to ensure they can benefit from the energy system transition.

- **Agile** – From the onset, we have designed flexibility and adaptability in our approach to vulnerability. A flexible approach allows developing a specific set of tools, processes and services while addressing a vast range of customer needs. For example, this principle has allowed us to quickly adapt and respond to new situations of vulnerability that arose during COVID-19 as well as those that were exacerbated by it, such as domestic abuse. As we make strides into the energy system transition, we decided to highlight Agility as a new principle; the fast pace of change in the transition to Net Zero emphasises the role of flexibility in adapting to meet the evolving needs of our customers.

- **Impactful** – As with 'flexibility', 'impact' has long been a central tenet of our Vulnerability Strategy. The ultimate objective of every action we perform in support of our customers in vulnerable circumstances is to make a positive impact on their life. Our outcome-based approach ensures that every service we deliver adds the most positive and tangible value possible and we take full responsibility for this.

All of these principles have been explicitly and implicitly present at the core of our vulnerability approach for several years. As such, they are reflected in the choices we have made in developing our approach to consumer vulnerability throughout RIIO-ED1.

Supported by our customers and stakeholders, we believe that these five principles are most appropriate in dealing with the challenges that we will face in helping vulnerable customers over the coming years.

Supporting our customers in RIIO-ED2 by focusing on three strategic goals

Our ambitious strategy revolves around three strategic goals, defined with customers and stakeholders during the development of this Vulnerability Strategy. These three goals were identified as the areas that are core to our role as a Distribution Network Operator and the ones where we can deliver the most impact for our customers in vulnerable situations.

Supporting our customers in vulnerable circumstances through all our service journeys

Electricity is an essential service, and our foremost priority is to make it fully accessible and always available when our customers need it the most. We commissioned bespoke research with people in situations of vulnerability to ensure they do not face any obstacles in engaging with UK Power Networks across the following customer journeys:

- General Enquiries
- Planned Power cuts
- Faults
- Connection

While our research found that vulnerable customers have broadly the same expectations as the 'average customer', it also identified specific measures that can be taken to better cater to the needs of those in situations of vulnerability. We have also reviewed all our customer journeys to consider how best we can serve customers in vulnerable circumstances at each touchpoint we will have with them.

Figure 18: Seven bespoke journeys for vulnerable customers

We will make every contact count and take every opportunity to deliver outstanding service, ensuring that our vulnerable customers continue to enjoy satisfaction levels even higher than our target for our broader customer base. We will do so by:

- Acknowledging and resolving their issue effectively in a timely fashion.
- Ensuring that all service journeys are tailored by adopting solutions to address the needs of vulnerable customers, such as different communication channels or dedicated follow-ups, as informed by our research into each customer journey.
  - o Going above and beyond our customers' requests to propose additional, tailored support, available to them through our social delivery programme.

  o Our efforts will target all customers registered on the Priority Services Register as well as those who may need extra help on a one-time basis due to temporary circumstances.

  o Effectively performing this function will allow us to address customers' needs that we identify when we directly interact with them, verify additional circumstances that may affect them 'on the doorstep' and route them to additional support we will make available. To ensure we are effectively supporting PSR customers across all journeys we will separately measure and report on the service provided.

In addition, some initiatives will specifically focus on customers who are medically dependent on electricity. This customer group can suffer considerably from a power cut and in some cases with fatal consequences. We believe that although the likelihood is low, the consequence is so great that all DNOs should do more. UK Power Networks will continue to focus on all needs codes, with an additional push to provide battery packs to the medically dependent customers and encourage uptake of smart metering, because of the potential life threatening impact of power cuts.

We also recognise that many of our customers in vulnerable circumstances, such as the elderly or those who struggle to navigate the digital and online world for different reasons, continue to rely on the existing landline telephone network to access essential services. The digital switchover of the current telephone network planned by 2025 poses a risk for our customers who are not online, do not use a mobile phone or live in rural areas with poor connectivity. We will work with the telecoms industry and Ofcom to understand the implications of this significant change for our customers and to explore what suitable alternative options are available to ensure continuity in the provision of our essential services. We will closely monitor the Shared Rural Network Programme [9] to ensure our customers have suitable coverage, communicating with them suitably in advance of the 2025 deadline for digital switchover.

Supporting our customers in this area will not only include focus on our domestic customers but will also include targeted business-specific support services for our SME customers in vulnerable circumstances.

We define an **SME business in vulnerable circumstances as a business:**

- **whose operation is susceptible to a single power outage caused by factors outside its control, which regardless of duration**
  - **has the potential to significantly impact the lives and wellbeing of its employees or customers; or**
  - **impacts the business's operations to such a degree that it results in proportionally material financial loss to the business; or**
- **whose main point of contact has an impairment or communication need that, when identified, requires adjustments to ensure all communication is accessible.**

This definition has been shaped by our engagement with a representative group of 282 SMEs in 2021, through which we learnt that our support to business customers should be 'sector-agnostic' and prioritised by the primary and secondary impact an outage would have on their employees and customers when no risk management is in place. This resulted in us developing a two-tier Extra Care Register system with 12 new services for those SMEs most impacted. Our support services to SME businesses in vulnerable circumstances in RIIO-ED2 will build on the strong foundations we have developed for our Extra Care Register, which is already providing extra help for those businesses who provides critical care for others such as care homes, hospitals, GP surgeries and ventilator manufacturers.

Delivering greater support to our people and communities in need

We will build on the solid foundations laid during the RIIO-ED1 period to offer what we believe will be the most comprehensive and ambitious package of interventions tailored to vulnerable customers in the industry. The programme will cover internal capabilities (e.g. data, training) and external initiatives that aim to identify, understand, and serve people in vulnerable situations in tailored ways.

With our customers and stakeholders we have identified two key areas on which to focus the social delivery programme:

- Supporting customers who are in, or at risk of becoming fuel poor holistically.
- Leaving no-one behind in the changing energy world by removing barriers that prevent our customers from engaging with the energy market of today and tomorrow, maximising customer participation and digital inclusion.

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[9] About - Shared Rural Network (srn.org.uk)

Figure 19: Key areas of focus within the social delivery programme

To deliver this ambitious programme, we will leverage our existing approach to consumer vulnerability that includes:

- An extensive portfolio of support services designed to address the unique circumstances that affect each customer in vulnerable circumstances. This portfolio includes support ranging from income maximisation to a befriending service and portable battery packs that enable vulnerable customers in social housing access the opportunities of flexibility markets.

- An industry-leading network of over 600 partners that act as trusted parties locally to identify those who may need extra help and effectively reach them to deliver the wide range of services we offer.

- Our approach to acquiring, maintaining and using sophisticated vulnerability datasets, including the PSR and other vulnerability indicators.

- Sophisticated vulnerability training, delivered to the entire company and our partner frontline workers through innovative methods (e.g., VR and sensory training), enabling our front-line colleagues to identify and act on our customer's immediate needs. Please refer to the Workforce Resilience Strategy section of the Business Plan for more detail on how we will ensure that a skilled, diverse and inclusive workforce can best respond to the evolving needs of vulnerable customers throughout RIIO-ED2.

- The wider social role we play as a socially responsible and trusted network, including our contribution to tackle wider social issues such as maximising digital inclusion and transitioning to Net Zero.

Our existing approach to consumer vulnerability, built on the pillars presented above, is designed to address the 'intersectionality' of our customers' needs. This phenomenon refers to different situations of vulnerability overlapping to generate a specific set of needs. The agile nature of our approach to vulnerability (as presented in the section 'Principles that set us apart', above) addresses intersectionality by not specifying a stationary set of responses to specific circumstances, but rather, relying on vast portfolio of services that can be matched to fit the unique needs of each customer. Every customers' circumstances are assessed on a case by case basis. Our customer-facing staff are equipped with the knowledge to understand each customers' situation and offer bespoke services relying on a broad range of support offered by expert partners and the freedom they are given to do what's right for the customer. For example, in the case where an elderly customer suffering from dementia and in fuel poverty manifests distress during a power outage, our staff will be equipped to provide immediate support (e.g., hot food, blankets, hotel rooms) and trained to refer the customer to organisations that can address both mental health issues and provide income maximisation advice and energy efficiency measures. Providing a wide matrix of services empowers our colleagues to deliver impactful support regardless of how different situations of vulnerability overlap. The flexible nature of our approach to vulnerability places it well to deal with the increasing intersectionality of vulnerability situations, driven by the energy system transition, the pandemic and wider socio-demographic trends.

Innovating for all

As the energy system evolves, our vulnerable customers will face new obstacles in engaging with the energy market. As providers of an essential service that everyone pays for, we have a role to play in ensuring that all customers can access this service equitably. We already offer tailored services that remove blockers for our customers to enjoy new opportunities (including flexibility services) and we are exploring new business models that allow people to benefit from shared battery storage in blocks of flats with limited space.

Throughout our stakeholder engagement programme on the vulnerability and innovation strategies our stakeholders have worked with us to define the key themes on which to focus innovation efforts in RIIO-ED2. These include:

- Smarter use of data, e.g., to identify those struggling to pay their bills or those in transient vulnerability.

- Innovative solutions to address digital exclusion.
- Making the Net Zero transition affordable, just and inclusive (including the DSO strategy).

More detail on how we will evolve our innovation governance to deliver better outcomes for our vulnerable customers in RIIO-ED2 in collaboration with our partners can be found in our Innovation Strategy.

Ultimately, all innovation will aim to both better serve our customers and deliver the best value (defined as financial, societal and wellbeing benefits) for the least cost. Innovation, as a function, will be instrumental in achieving our objectives in areas that carry high risk and require trialling, and is a core part of our Vulnerability Strategy.

These three functions are mutually reinforcing. For example, our social delivery programme will allow us to best address the situations of vulnerability we meet on the front line in effective and efficient ways. At the same time, our approach to innovation may allow us to find new ways to identify those who are in needs or to unlock the biggest opportunities that require the innovation stimulus.

Our strategic approach to consumer vulnerability in RIIO-ED2 is summarised below:

Figure 20: Overview of our RIIO-ED2 Vulnerability Strategy
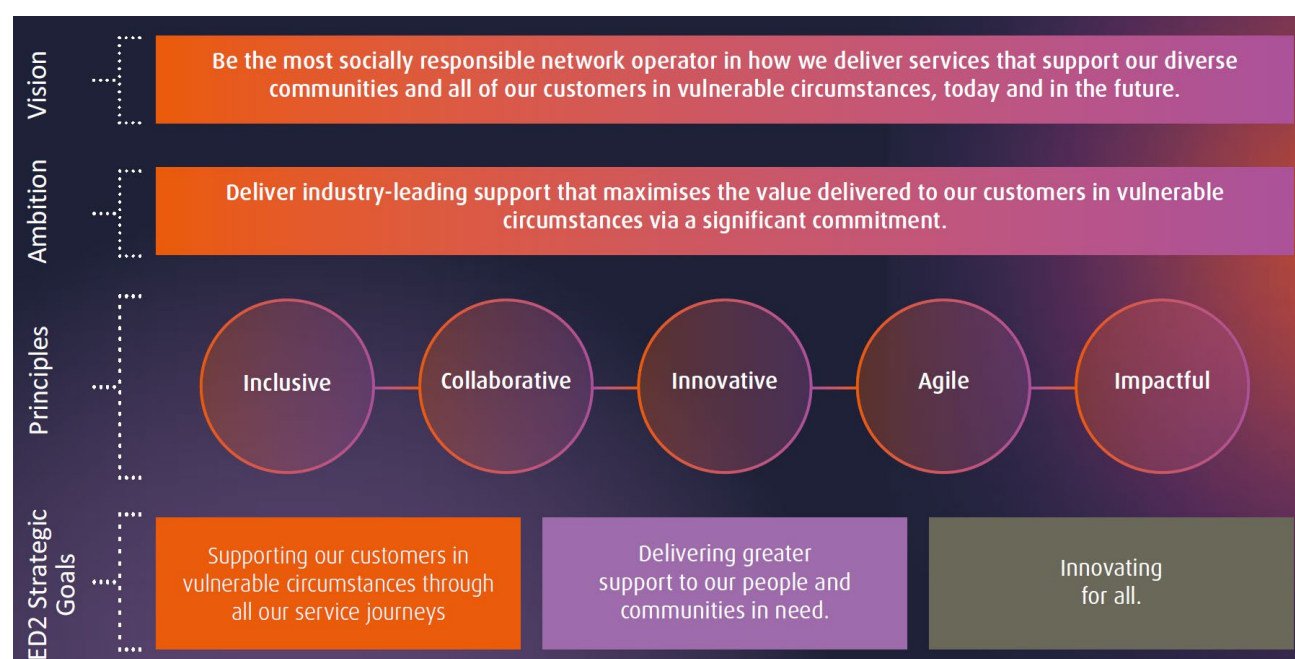
Vulnerability by design

Our focus on consumer vulnerability stretches far beyond this strategy and the commitments we have made as part of it. A profound awareness of our social role in ensuring a fair and just transition to Net Zero while addressing the needs of those in vulnerable situations is embedded across UK Power Networks.

Reflecting this awareness and in response to our expert stakeholders' guidance, we have adopted the 'vulnerability by design' approach in developing our RIIO-ED2 Business Plan. Doing so will ensure that the lessons we have learned in addressing consumer vulnerability align every part of the business towards achieving comprehensive outcomes that benefit our vulnerable customers. The figure on the side illustrates the interdependencies of the Vulnerability Strategy and different parts of our RIIO-ED2 business plan.

Moving forward, we will embed the following social sustainability principles in all our governance processes to ensure that we ask ourselves the right questions upfront and that we understand and measure the social impact of every choice and intervention we make:

Figure 21: Our Vulnerability Strategy is embedded across the ED2 Business Plan

- **Equity** - Will our initiatives identify the causes of disadvantage and inequality and look for ways to reduce them? Will they identify and aim to meet the needs of any particularly disadvantaged and marginalised people within the target group?

- **Diversity** - Will our initiatives identify diverse groups within the target group and look at ways to meet their particular needs? Will they recognise diversity within cultural, ethnic and racial groups?

- **Social cohesion** - Will our initiatives increase participation in social activities by individuals in the target group?

- **Quality of life** - Will our initiatives increase participation in social activities by individuals in the target group? Will they increase participation in social activities by individuals in the target group?

Embedding social sustainability principles across the business will require a cultural change and a robust framework to measure success that will reflect the following approach:

- The way in which we are embedding this into our culture is firstly ensuring the voice of customers in vulnerable circumstances are **represented at the executive level**, UK Power Networks' Director of Strategy and Customer Services will be this voice.
- To ensure our actions are tracked and their impact is measured, we will include consumers in vulnerable circumstances as a topic in the **regular reporting to our Board**.
- We are building on solid foundations: we have already progressively embedded inclusivity by design and social measurement requirements as part of our investment **governance processes**, specifically in our Innovation and Capital Programme governance, and learning from this experience we will expand this approach to all the other governance processes.
- We will continue to **focus on training our staff and partners** to better understand and better respond to a customer's situation of vulnerability regardless of service type. In RIIO-ED2, we will deliver in-depth vulnerability training to 100% of our customer-facing staff (i.e. call centre and all field operations, including contractors), and vulnerability awareness training to all UK Power Networks staff, every year. We will measure PSR customer satisfaction, and our staff's perceived preparedness to deal with specific needs, as measures of quality and effectiveness for our vulnerability training programmes.
- Finally, recognising that the consumer vulnerability and smart worlds are coming together, we are the first network **to amalgamate Innovation and Vulnerability teams** to ensure both functions benefit from one another's strengths, thus representing our ambitions on inclusivity by design.

Evidence of this culture embedding is evident in our DSO and Digital Strategies where business leads have taken specific actions to support customers in vulnerable circumstances. We present more detail on how this strategy has influenced other areas of the Business Plan to reflect a business-wide approach to vulnerability in Section 10.

7 – Our commitments to meet the needs of customers in vulnerable situations over RIIO-ED2

Our RIIO-ED2 Vulnerability Strategy culminates in 11 commitments designed to meet the immediate needs of our customers in vulnerable situations while accompanying them throughout the energy system transition.

Customers and expert stakeholders worked with us to shape and refine these commitments across the six phases of our stakeholder engagement process, as presented in Section 5. The tables below demonstrate how the stretching commitments that we propose to deliver during RIIO-ED2 meet the wants and needs of our customers and stakeholders. These also include measurable targets and explain how we will fund and deliver our proposals, including examples of the key activities that will underpin each commitment.

The commitments are presented in line with the three pillars of our Vulnerability Strategy:

- **Supporting our customers in vulnerable circumstances through all our service journeys –** Reflecting the social sustainability principle, embedded across UK Power Networks, commitments in this pillar focus on identifying PSR customers and providing outstanding service across all customer journeys.

- **Delivering greater support to our people and communities in need –** Stretching commitments designed to address fuel poverty and wider social needs associated with the Net Zero transition as well as to remove barriers that prevent our vulnerable customers from engaging with an evolving energy market.

- **Innovating for all –** Commitments that drive innovation, both within UK Power Networks and the industry at large, to better serve and address the needs of our customers throughout the energy system transition.

Supporting our customers in vulnerable circumstances through all our service journeys

Our customers' and stakeholders' wants and needs	• Most customers believe that those in vulnerable situations should receive a greater level of support from UK Power Networks. Customers expect us to make efforts to both prevent supply interruptions and to respond quickly when these occur. In practice, customers expect UK Power Networks to deliver bespoke services, such as dedicated 24/7 phone lines and accessible communications, tailored to meet the needs of vulnerable customers. • Customers in vulnerable situation echo the findings from the wider customer base and highlight the importance of communication during unplanned power cuts, the need for advance warnings and accessibility options. • Overall, there was broad support for our efforts to bring back supply within one hour to those on the PSR – customers view this as the level of support on which UK Power Networks should focus. • Qualitative findings were supported by Willingness to Pay research, which highlighted continued support for the existing service levels as well as for UK Power Networks to support more people across customer journeys.
How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS1 – We will continue to improve satisfaction of our PSR registered customers over our RIIO-ED1 baseline. We will target to be the #1 DNO Group as measured by PSR customer satisfaction or at least delivering 93% scores on average across our networks in each year of ED2 (vs. 91.5% average achieved in RIIO-ED1) - whichever is higher.**
Customer benefit	Vulnerable customers will be more satisfied when engaging with our highly trained staff and be better able to engage with the services we provide, ultimately receiving better support in response to their specific needs.

Our customers' and stakeholders' wants and needs	• Customers clearly encouraged, both directly and indirectly, UK Power Networks to grow the PSR and maintain the quality of its data. They recognised the importance of the database in our ability to help to those who need it the most and supported us in increasing the reach of the PSR. Customers also expressed substantial willingness to pay for UK Power Networks to increase the number of customers who are supported. • Stakeholders, on the other hand, supported increased PSR reach driven by broadening PSR eligibility. They also stressed the need to find new ways of engaging the vulnerable in a post-Covid-19 world. • Finally, research into existing thought leadership by Citizens Advice indicated that microbusinesses operating from mixed-use premises can face a gap in support from the energy industry.
How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS2 – We will expand the scope and reach of our Priority Services Register, delivering an overall 30% increase in registrations from the end of RIIO-ED1 in those categories that are most impacted by our service by the end of RIIO-ED2. We will target 3m households and 600,000 businesses registered.** **VS3 – We will keep our Priority Services Register (PSR) data up to date to maintain the relevance of our service, ensuring that we contact customers to update their PSR data and refresh our understanding of their needs every 18 months. In addition we will conduct proactive data quality checks on 100% of our PSR records every 12 months throughout RIIO-ED2.**
Customer benefit	VS2 - We are targeting to increase the proportion of eligible customers to 86% from 56%. This equates to 37% of households will be registered in total, this is up from 24% as of March 2021. In addition, eligible businesses in vulnerable circumstances will receive extra support. Meaning more customers will be supported when they need us most, with an increased focus on those categories subject to the highest risk (i.e. those who are medically dependent on electricity). VS3 - Our ability to support our PSR customers is heavily dependent on the quality of our data. Our commitment will deliver an up to date and relevant view of our PSR customer's individual needs, allowing us to tailor the support we provide to them when they need us most.

Our customers' and stakeholders' wants and needs	• Our stakeholders discussed the importance of PSR data quality as well as data sharing, recognising the links between them. Specifically, stakeholders expressed clear support for UK Power Networks to:
	
	    1. Collaborate with other utilities to ensure that every customer contact counts.
	    2. Promote open communication between the IT systems and databases of all partners.
	
	• Among the benefits of data sharing, stakeholders expressed the importance of reducing the need for those in vulnerable situations to repeat the circumstances when seeking support. They also discussed the need for UK Power Networks to clearly explain the purpose and benefits of data sharing to our customers and suggested that UK Power Networks can be an integrator of information so as to augment the third sector by leveraging their contacts and relationships 'on the ground'.

How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS4 – Our customers will only need to register to a Priority Services Register once. We will develop automated data links by 2024 (at the latest) with other utility companies so that customers will automatically receive enhanced service from us and other organisations providing essential services.**
Customer benefit	Customers only need to register with one party to receive extra care support from all their utilities, reducing administration burden on all parties.

Our customers' and stakeholders' wants and needs	• Customers generally believe that UK Power Networks should play a leading role in promoting awareness and sharing information as a trusted party in the energy industry. • Our stakeholders, on the other hand, believe that distrust and misinformation among customers surrounding smart meters could lessen our ability to deliver the outcomes that we set out to achieve. Expanding on the role of smart meters, other stakeholders stressed the pivotal role that smart data can play in UK Power Networks' efforts to deliver better service and remove obstacles for vulnerable customers.
How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS5 – We will help all medically dependent PSR customers realise the benefits of having a smart meter by sharing targeted advice every two years throughout RIIO-ED2. For example, we will utilise smart meters to establish new arrangements so that carers are automatically notified when a power cut occurs by 2024.**
Customer benefit	Customers who are medically dependent will have a faster response to their needs in the event of a power cut, reducing the risk to their health. Customer support structures, such as carers, will be automatically notified in the event of a power cut, providing important information to those supporting customers in vulnerable situations.

Our customers' and stakeholders' wants and needs	• As previously mentioned, most customers believe that those in vulnerable situations should receive a greater level of support from UK Power Networks. A critical aspect of this support according to both customers and stakeholders should be the provision of emergency supply to those in vulnerable situations.
How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS6 – We will offer increased support for our medically dependent PSR customers by dispatching battery banks to customers who are at risk of being without power for more than 4 hours between 2024 and 2028.**
Customer benefit	Customers who are medically dependent will be able to continue to use a power supply to meet their medical needs whilst power is restored.

Delivering greater support to our people and communities in need

Our customers' and stakeholders' wants and needs	• Customers understand the complexity of vulnerability and the link between situations of vulnerability and financial difficulties. In light of this, customers support an approach to vulnerability that considers financial circumstances. Our vulnerable customers, in particular, stressed that a clear need exists for greater education on using electricity as well as discounts and tariffs. • Customers also expressed clear support for collaborative working to address the needs of vulnerable customers. They believe that UK Power Networks should work with energy suppliers, local authority and social services, among other partners, to identify those struggling with energy bills and allow these partners to more effectively serve customers in vulnerable situations. • Our engagement with customers in vulnerable situations also tells us that existing financial support measures, such as the Warm Home Discount and Fuel Vouchers, while useful, do not go far enough in addressing our customers' needs. • Vulnerable customers expressed immediate interest when presented with the existing suite of financial support measures and asked that UK Power Networks communicate and promote these more widely. • In line with qualitative feedback gathered from customers, the willingness to pay of our wider customer base for increased support to those in vulnerable circumstances is limited. Most would accept a £1-2 increase on their bills if UK Power Networks provides transparency in its efforts and considers how bills of those already struggling are not impact. In general, our customer base believes that investment to provide additional vulnerability support should be taken from UK Power Networks' profits • Our stakeholders suggested that DNOs have a vital role in signposting customers towards other services, including those offered by the government. This is tied to a lack of awareness of the support available to vulnerable customers and the ways in which they can access it. However, our stakeholders also shared a clear view that there are limited resources in the third sector to deliver this support. They commented on the difference between informing customers of schemes and supporting them to take the opportunities available to them. Our stakeholders believe that there is a need for efforts that go the extra mile in making sure that customers can benefit from existing schemes.
How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS7 – In collaboration with regional partners we aim to provide targeted support[11] to a total of 500,000 fuel poor customers over RIIO-ED2, investing £18m to support over 200,000 directly and 300,000 through partnership programmes, delivering £67m of benefits by 2028. Additionally, we will provide fuel poverty information[12] to 800,000 customers each year, working with trusted partners.**
Customer benefit	500,000 customers in vulnerable circumstances will receive £67m of enduring social and financial value as a result of our fuel poverty support programme. Our support will include direct financial support to help those struggling to pay their bills, alongside practical support such as grant applications and home visits to help customers access a wide range of energy efficiency interventions.

Our customers' and stakeholders' wants and needs	• Our customers believe that there is a large gap in knowledge on the transition to Net Zero and its implications among the general population. They also believe that UK Power Networks is a credible voice to educate customers about emerging technology and accept that certain sections of the public will need more tailored support to understand and take part in the transition. Specifically, our customers advised we

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[11] In-depth support includes funding as well as practical support (e.g. grant application support, home visits) for customers to access a wide range of energy efficiency interventions (from insulation and draught proofing to new boilers and central heating systems), to maximise their income and reduce their energy bills (see Figure 9 at the end of Section 7 for a list of services included in fuel poverty in-depth support). In-depth support is delivered only based on the independent recommendations of an expert partner and following a home visit, taking into consideration the individual's needs and personal circumstances.

[12] Fuel Poverty information is defined as a physical or digital leaflet as well as verbal advice delivered by partners that includes a range of practical and easily actionable suggestions for customers to save money on energy and water bills, as a well as tariff switching and debt management advice. Please see our joint Electricity-Gas-Water leaflet here: https://www.ukpowernetworks.co.uk/power-cut/priority-services/saving-energy-and-reducing-your-electricity-bills

should be cautious about the role we should play wider than PSR, suggesting that we should focus our efforts on the groups most at risk of being left behind, citing those in financial difficulties, elderly customers as well as those impacted by disabilities or health conditions.

- Echoing the views of the wider customer base, our vulnerable customers (and especially those facing financial difficulties) expressed concern of 'being left behind' when discussing 'smarter, greener energy systems'. In general, vulnerable customers expect tailored support to assist them in the adoption and installation of new technologies. They also believe that it is important for businesses like UK Power Networks to champion the Net Zero transition and want to see more personalised advice and information to educate and advise them on how to adopt low carbon technologies.

- Our stakeholders also highlighted the importance of education on the benefits of new technologies and awareness of funding available to those in vulnerable situations to adopt these. They stated that this lack of awareness and education will be one of the key challenges to face in the next five to ten years. Stakeholders believe that UK Power Networks has a role to address new forms of vulnerability that could emerge throughout the energy system transition. To address and prevent new situations of vulnerability from arising, stakeholders suggested that we provide guidance and financial support (e.g. helping customers to upgrade their connection for LCT heating) to enable a shift towards renewable energy.

How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS8 – We will provide information and help [13] to 500,000 vulnerable customers over RIIO-ED2 to ensure no one is left behind in the changing energy system, at no cost to customers. As part of this, we will also co-fund grants towards the installation of low carbon technology systems via the UK Power Networks foundation**
Customer benefit	We will provide customers with practical steps to consider in the uptake of Low Carbon Technology, allowing them to participate in the energy system transition. We will also increase digital inclusion through the methods used to share this information and deliver value to customers by increasing participation in smart and flexible services. Overall, customers will benefit from £12.8m total financial and social benefits as a result of this programme.

Our customers' and stakeholders' wants and needs	Given the dynamic nature of vulnerability, our stakeholders want us to refresh our understanding of customer needs regularly through research and engagement. This should be reflected in the strategy and in the targeted support we provide to address those needs.
How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS9 – We will establish an annual cycle of research and engagement, to shape our vulnerability plans as our understanding in this area develops and the priorities of our customers change. We will use this to inform the publication of an updated RIIO-ED2 Vulnerability strategy in 2025 and 2027.**
Customer benefit	Our enhanced engagement will provide us with an even more detailed understanding of customers evolving needs, allowing us to provide more targeted support throughout RIIO-ED2. We will also share identified best practices from our research with other companies to benefit more customers outside UKPN areas.

Innovating for all

Our customers' and stakeholders' wants and needs	- Our stakeholders clearly identified the 'scale' of the decarbonisation challenge as one of the biggest obstacles we will face over the next five to ten years. As a result, they suggest that we focus our innovation efforts on ensuring a fair and just Net Zero transition. Specifically, they identified the scope for innovative approaches to address

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[13] We will administer a matched funding programme for LCTs for fuel poor customers, including financial support for low carbon heat in off-gas grid communities and delivering ECO energy efficiency measures in conjunction with electric heating installs. Customers will also benefit from the provision of Net Zero transition advice.

	key challenges (such as digital exclusion) and opportunities (identifying customer needs through data analysis before these are manifested.
How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS10 – We will deliver industry leading innovations to improve support to disadvantaged and vulnerable customers, ringfencing £5m of our Network Innovation Allowance (NIA) investment over the RIIO-ED2 period to focus in these areas.**
Customer benefit	Vulnerable and disadvantaged customers will experience the benefits of innovative solutions developed through the ring-fenced NIA investment.
Our customers' and stakeholders' wants and needs	• As stated above, our customers believe that a collaborative, joined-up approach is appropriate in supporting vulnerable customers as this is not the sole responsibility of UK Power Networks. In agreement with our customers, our stakeholders support partnerships with other organisations, especially utilities, to develop joint funding projects.
How we will respond to our customers' and stakeholders' wants and needs in RIIO-ED2	**VS11 – We will collaborate with other organisations to ensure at least 50% of our vulnerability innovation initiatives in RIIO-ED2 are delivered in partnership with other utilities and will attract £750,000 funding from these partnerships across the period.**
Customer benefit	Customers will benefit from the broader benefits that come from partnerships between UKPN and other utilities.

How our portfolio of services will evolve in RIIO-ED2

Figure 7 in Section 3 of this strategy presents an overview of the key services that we currently offer customers in vulnerable situations to (i) prevent detriment when a power cut occurs, (ii) lift customers out of fuel poverty and (iii) ensure no-one is left behind in the energy system transition.[14]

Responding to our stakeholders' feedback and reacting to the challenges posed by an evolving energy system, we proposed the eleven commitments presented in the section above. These commitments will build upon our existing service portfolio to offer:

• Fair and appropriate access to the opportunities presented by the energy market
• Enhanced affordability of the energy supply
• Protection and safeguarding from detriment stemming from aspects of the energy market, and in particular, from power cuts

The table below describes how our portfolio of services will evolve in light of the commitments we propose as part of this vulnerability strategy.

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[14] Please note that the table presents a non-exhaustive list of services currently available to vulnerable customers. Over 17 contact services (such as fast tracking for PSR customers across all channels, live translators, and live sign language translations via videocalls) and 20 information services (such as educational material of fuel poverty in British Sign Language) are not included.

Figure 21: Updated portfolio of consumer vulnerability services for the RIIO-ED2 period

Supporting our customers in vulnerable circumstances	Supporting households at risk of fuel poverty	Providing inclusive services to ensure no-one is left behind
9 different channels to register for PSR with PSR form available in 13 foreign languages, Easy Read, Large Print, Braille and audio format	Support to apply for Warm Home Discount and other grants	Discount for supply alterations
Calls answered within 4.8 seconds on average	Community grants fund	Community grants fund
24/7 dedicated priority number/line & PSR dedicated email	Energy efficiency and fuel poverty advice (incl. behavioural change)	Personalised energy consultations and home energy audits
Language Line, Video Relay, Text Relay & Browse Aloud services	Bill and tariff checking services (incl. tariff switching & Time of Use Tariff awareness)	Accessible support to remove digital barriers
PSR FastTrack across all channels	Debt support and income maximization	Scope "Disability Energy Support with water advice" Service
Average PSR contact rate of 3.76 interactions per incident	Energy efficiency improvements and heating upgrades	Entry threshold of 10kW for both LV and HV flexibility products to maximise residential customer participation
Community support team and vehicles	'Ways to keep you safe and save you money' booklet	Smart Meter Benefit information in tailored formats
Field staff customer app	Intervention referrals to other support services	Fuse upgrades for all domestic customers free of charge
Paid hotel rooms and transport	Home visits by community partners	**Targeted benefit advice on smart meters for medically dependent customers**
Hot meals and refreshments (large scale catering for major events)	Community events	**Information and advice on the changing energy system and opportunities**
Powercut emergency kit (e.g. torches, corded telephones, solar power chargers)	Fuel poverty training for frontline workers	**Deliver practical guidance and help to 500,000 customers over RIIO-ED2 (including specific services illustrated below, also see Annexe A8)**
Refrigerated medication cool bags	Dedicated team managing support services	**Co-funding towards the installation of low carbon technologies**
Automatic smart meter checks for on/off power integrated in the customer journey	**Fuel poverty advice to 800,000 customers a year (note similar type of advice is delivered in RIIO-ED1, in RIIO-ED2 we greatly increase volumes of delivery)**	**Electrification of disabled bays and engagement programmes to facilitate EV transition for disabled customers**
Dedicated fuel poverty advice and support line for PSR customers struggling with their energy bills and to keep their home warm	**In-depth tailored support for 500,000 customers over RIIO-ED2 in collaboration with regional partners, investing £18m to support over 200,000 directly and 300,000 through partnership programmes**	**Training on digital skills required to participate in energy opportunities**
Hot meals and refreshments (large scale catering for major events)	**Proactive identification of households in or entering fuel poverty to deliver targeted preventative support**	**Support for online-only grants for customers with accessibility / digital barriers**
Powercut emergency kit (e.g. torches, corded telephones, solar power chargers)		**Annual network charges grant for those in or on the verge of fuel poverty who are taking steps towards Net Zero**
Proactive planned and unplanned outage information in a wide range of tailored formats		**Exploring mechanisms to prioritise hard-to-reach customers into flexibility markets**
Mobile Wi-Fi, Paid hotel accomodation and transport		
Refrigerated medication cool bags		
Generators for use during a power cut		**New additions to UK Power Networks' portfolio of services included in the RIIO-ED2 Consumer Vulnerability programme**
Field staff customer app		
Battery banks dispatched to medically dependent customers at risk of being without power over 4 hrs		
18-month contact cycle **and 12-month proactive data quality checks on 100% of PSR records**		
Automated PSR data links with Other utility companies		
Carers of medically dependent customers with smart meters automatically notified in a power cut		

In addition to our portfolio of vulnerability services for domestic customers, we will continue to offer extra help to our business customers. Those registered on the Extra Care Register receive and will continue to receive:
- Guaranteed 'advance notice' and 'reminder notice' periods of a planned power cut and live outage update service
- Accessible communications
- Dedicated support phone line (outbound) and a 24/7 dedicated, 'live agent' support phone line (inbound)
- Advanced warning notices of severe weather conditions which might impact the power supply in their area
- Back-up supply solutions service where appropriate
- Check-list service and risk-mitigation advice providing a 'framework' check-list to help business focus and prepare in advance on the key impact areas created by an outage
- General electricity supply advice for business, e.g. making changes to their supply and starting their net-zero energy transition journey.

We already offer these services to our Extra Care Register customers today, including those businesses who provides critical care for others such as care homes, hospitals, GP surgeries and ventilator manufacturers. In RIIO-ED2 we will focus on increasing the reach of this support to ensure more businesses in vulnerable circumstances can access the priority services they are eligible for, as illustrated in Commitment VS2.

Delivering the mandate from our customers and stakeholders

The commitments and targets that we propose to deliver in RIIO-ED2 demonstrate our ambition to proactively support our vulnerable customers throughout the energy system transition. This ambition stems from our vision to be a respected corporate citizen while also clearly reflecting the mandate from our customers and stakeholders to promote an affordable and just Net Zero transition.

Throughout all phases of engagement, our customers have been clear that we have a key role to play in helping those in vulnerable circumstances. However, they expect us to help people in specific areas where we can make a real impact. During 'Options Testing', the latest phase of engagement, our customers highlighted that they want us to support as many people as we can during a power cut but focus our in-depth support on those who need it the most.

Guided by our customers and stakeholders, we believe that we will deliver the highest social value by focusing on our core role as a Distribution Network Operator:

- Supporting our customers in vulnerable circumstances (on the PSR) through all our service journeys.

- Delivering in-depth support to a significantly higher number of people in or at risk of fuel poverty.

- Ensuring no one is left behind in the changing energy world by providing targeted support.

- Unlocking additional value through innovation.

The commitments we proposed in this section translate our role in practical, specific and time-bound deliverables. To deliver these commitments, we will:

- Invest £9m directly from our shareholders, contributing towards the total £18m investment on in-depth fuel poverty support.

- Create a £11m social fund fully covered by our shareholder at no cost to customers to facilitate the transition to Net Zero and increase participation in the changing energy system for those customers at risk of being left behind.

Our proposal to invest shareholder funds in delivering our Vulnerability Strategy is a reflection of our triangulation between the diverse feedback gathered from customers and stakeholders throughout our engagement. While both customers and stakeholders reinforced the importance of addressing vulnerability and wider social issues, diverging views exist as to who should pay this support. Customers, on one hand, told us to focus on our existing role in supporting the vulnerable through the PSR, while tackling fuel poverty by providing information and limiting our interventions so that only the most at risk are supported throughout the energy system transition.

On the other hand, stakeholders told us that as a local trusted network we can play for a leading role in addressing vulnerability, filling gaps in resources available to the third section and expanding our role to facilitate a just transition to Net Zero.

We appreciate both perspective as well justified and relevant with respect to a complex and multifaceted issue such as vulnerability. Clearly reflecting this feedback, we propose to direct customer funding to essential support and fuel poverty advice while creating a social fund that exemplifies our ambition to deliver the boldest Vulnerability Strategy in the industry. Our shareholder investments will target the third sector funding gap to ensure our partners can deliver tailored and impactful support and fund all initiatives aimed at supporting customers in vulnerable situations throughout the energy system transition.

8 – How our RIIO-ED2 Vulnerability Strategy delivers value

As presented in Section 7, at the core of our RIIO-ED2 Vulnerability Strategy lies the ambition to deliver industry-leading support that maximises the value delivered to people and businesses in situations of vulnerability. Forecasting the impact delivered by our customer-driven commitments is the ultimate test that this strategy achieves its core purpose.

To estimate the value delivered by this strategy, we employed the newly developed industry-wide Social Return on Investment (SROI) methodology. This method, developed in coordination with all DNOs and key stakeholders such as Ofgem and Citizens Advice, seeks to monetise all outcomes (i.e. financial, social, wellbeing) delivered by networks to the benefit of customers and society at large.

As illustrated by the diagram below, we have only valued the commitments that will *directly* benefit our customers and communities. While all commitments proposed play a vital role in ensuring that our customers' needs are met throughout the energy system transition, not all of these aim to deliver material support to those in situations of vulnerability. For example, while expanding the reach of the PSR is critical to deliver tailored support to right people at the right time, this

commitment does not imply a direct and immediate benefit to customers. Restricting measurement of impact only to the commitments that imply a direct benefit to customers gives us a conservative and reasonable estimate of the benefits delivered over RIIO-ED2.

Value delivered over the RIIO-ED2 period

We expect to deliver a **total net benefit to our customers of £50.1m** (gross benefits of £105.7m) during the RIIO-ED2 period. These initiatives will continue to benefit our customers, stakeholders and communities long after the end of RIIO-ED2. Not considering the long term benefits of vulnerability innovation projects (beyond RIIO-ED2), which will depend on the nature of the projects started during RIIO-ED2, we estimate that our commitments will have delivered a net benefit of £113.5m by 2033 (gross benefits of £164.1m) and £202.4m by 2048 (gross benefits of £253.0m).

This rigorous estimate, arrived at through proxies and assumptions gathered from highly reputable sources (e.g. Government Departments, leading charities), demonstrates the immediate value, and the considerable long term impact, that we can deliver for our customers and communities by leveraging a sophisticated and mature approach to consumer vulnerability developed throughout RIIO-ED1.

It also essential that our Vulnerability Strategy delivers value for money. This reflects our vision to be a sustainably cost-efficient and trusted corporate citizen as well as the impact we have on the finances of over 20 million people through electricity bills. We expect to deliver at least:

- [£0.24] in net benefits for every pound spent on supporting our PSR customers through all service journeys.
- [£0.74] in net benefits for every pound spent on delivering greater support to communities and customers.
- [£3.00] in net benefits for every pound spent on innovation projects focused on consumer vulnerability.

Figure 22: Overview of the value delivered by the commitments that underpin our RIIO-ED2 Vulnerability Strategy
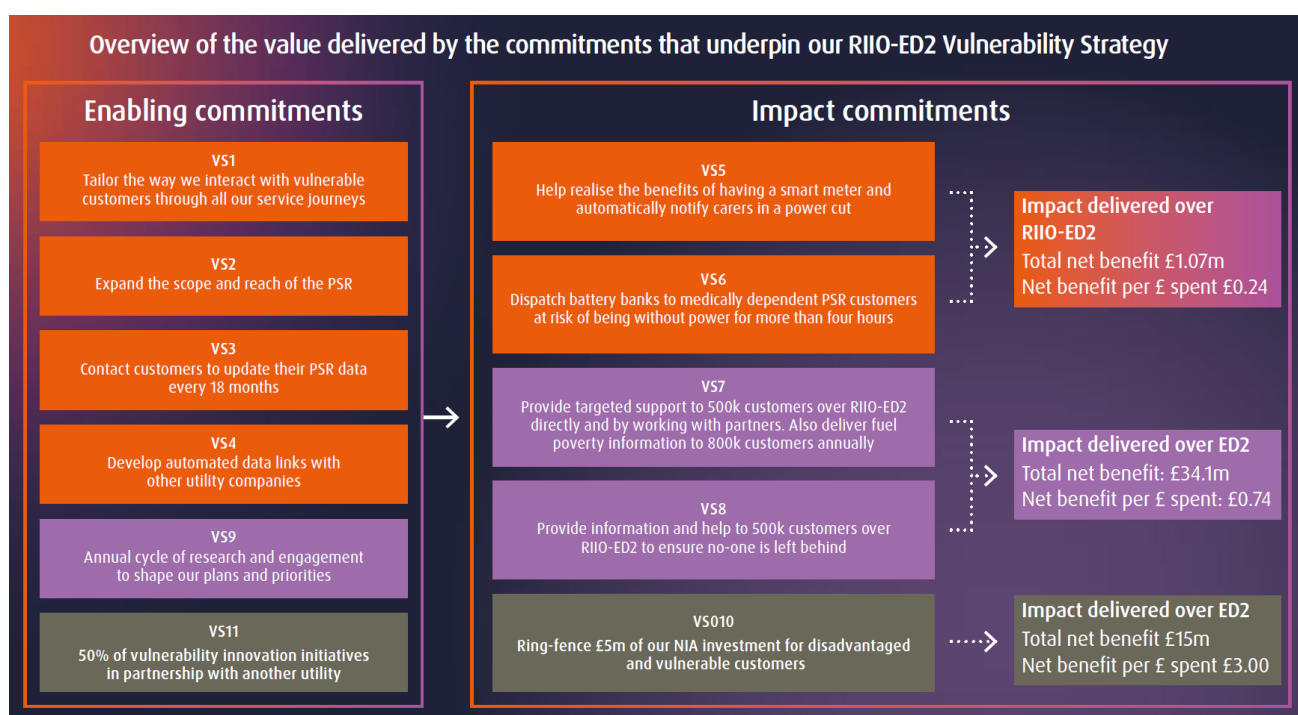
Outcomes not included in our measurement

In a bid to provide a conservative and reasonable estimate of the impact delivered by this Vulnerability Strategy, we did not measure outcomes of our commitments that can be hard to measure and quantify *objectively*. Non-quantified outcomes include but are not limited to:

- £20m of shareholder funding proposed to support the delivery of this Vulnerability Strategy. The funding will unlock benefits for customers in the form of enhanced fuel poverty support and subsidised low carbon technology installation while not adding cost to our customers' bills over the coming years.
- The avoided cost to the NHS linked to fewer people living in cold and damp homes.
- Customers in vulnerable situations benefitting from improved levels of customer service.
- Second-order benefits tied to the value that customers enjoy from having early access to low carbon technologies.

While ways of measuring these outcomes exist, including wellbeing valuation that is in line with the Treasury's Green Book guidance, we took a conscious decision to not include these in our measurements. Notwithstanding this decision, we consider these non-quantified outcomes to be a realistic consequence of the initiatives we have committed to deliver in this strategy and, therefore, the values estimated to be conservative estimates of our impact over RIIO-ED2.

9 – Ensuring our strategy remains fit for purpose throughout RIIO-ED2

Stakeholder Engagement is central to how we run UK Power Networks. Our stakeholders' feedback impacts our strategy, investment and everyday action from our CEO to the front line. Consumer Vulnerability is a crucial area for engagement today. Over the last two years, we held 365 engagements on consumer vulnerability, reaching more than 350,000 customers and stakeholders directly engaged by us or reached by our partners at community events.

The transformation undergoing in the energy market will mix with our customers' unique circumstances to create and exacerbate situations of vulnerability. To ensure that we are delivering the right outcomes for customers, in the right ways, we will need to continuously challenge and evolve our approach in this space.

The feedback of our customers and stakeholders will guide us throughout this transition. Over RIIO-ED2, we will employ build on our tried and tested engagement strategy, and expanding on our annual engagement programme to ensure the voice of our customers and stakeholders leads us in every step of the way.

Figure 23: Our Business as Usual approach to stakeholder engagement
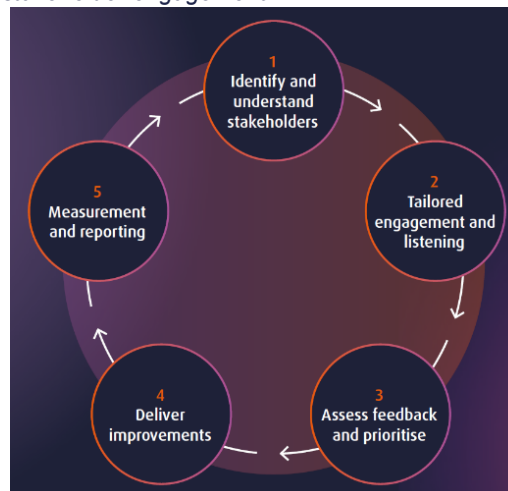
The external context for vulnerability that will shape our engagement strategy for RIIO-ED2

Helping those who are vulnerable touches on all parts of our business and is embedded in the way we operate: it is a key area where we devote substantial effort towards being a force for good. Our approach has been successful, but we see some growing challenges:

- the ongoing impact of the COVID-19 pandemic.
- potential for exclusion from opportunities arising as the energy system changes.
- digital exclusion.
- business vulnerability.

Tackling these challenges will require better understanding of their impacts and how they create or alter vulnerabilities. We will tailor our engagement to reach people who are affected, to ensure we hear their specific concerns, viewpoints, and requirements and make sure they are aware of, and can access, support. We have already started down this path, for example by developing a Net Zero Advice Line.

We tailor engagement to reach disadvantaged audiences for example to allow those with disabilities, or a lack of mobility, to participate fully. We will also engage independent experts and groups. For example, our Consumer Vulnerability Council has proved immensely valuable in shaping our Vulnerability Strategy and we will look to continue using a similar mechanism throughout RIIO-ED2, supported by engagement with a number of other groups and panels.

Our stakeholder engagement strategy for the RIIO-ED2 period

in place since 2015. Under each step of this strategy, sit a wide range of tools and processes, embedded throughout the organisation, that support our colleagues gathering high-quality feedback that can inform and shape our actions.

This strategy is designed to result in actionable feedback from a broad and inclusive range of informed stakeholders, giving us the richness and diversity of views needed to make decisions on a complex and multidimensional issue such as vulnerability.

The strategy will achieve this by:

- Running a comprehensive annual ongoing engagement programme to obtain meaningful insights to help improve our activities and decisions.

- Identifying the right stakeholders to engage, from a cross-section of groups that bring to the table different perspectives on the issue at hand.

- Tailoring engagement methods by providing flexible options for our stakeholders to share their views.

- Recording, triangulating and assessing stakeholder feedback to produce a clear picture of their needs, preferences and views.

- Embedding learnings in our ways of working and measuring their impact to only develop the ideas that generate the most benefit for our customers.

In our Ongoing Engagement Strategy for RIIO-ED2, we have created specific commitments that reinforce this approach, from enhancing the way we our commission our research, to how we interpret and disseminate insights to strengthen how engagement is utilised within our business. For more information see our Ongoing Engagement chapter in our core RIIO-ED2 Business Plan.

10 – Conclusion

Addressing consumer vulnerability is one of our top priorities, driven by our culture and, most importantly, our customers and stakeholders. Extensive engagement over recent years, and in particular during the development of this strategy, told us that our customers place addressing vulnerability among *the top three priorities for UK Power Networks* while stakeholder clearly expressed their view that we should play a leadership role in addressing this issue.

Reflecting the guidance of our customers and stakeholders as well as our drive to be a trusted and respected corporate citizen, we propose a bold and ambitious Vulnerability Strategy that delivers *deeper* support for *more* vulnerable customers. The mission of this strategy is to delivery industry-leading support that maximises the value delivered to our customers in vulnerable situations against significant commitments.

The stretching commitments we have made as part of this strategy will aim to satisfy three strategic goals shaped by customers are stakeholders:

- Supporting our customers in vulnerable circumstances through all our service journeys.

- Delivering greater support to our people and communities in need.

- Innovating for all.

Meeting these three goals will allow us to deliver outstanding service to our vulnerable customers while ensuring that their unique circumstances are met through tailored responses and that they are supported to participate in the energy system transition.

To fund the delivery of our boldest Vulnerability Strategy to date we propose to invest around £40m over the RIIO-ED2 period (not counting the Network Innovation Allowance) – a fourfold increase compared to our investment in RIIO-ED1. Responding to diverging views from customers and stakeholders as to who should fund this much needed support and reflecting our own ambition, we propose to invest £20m in shareholder funding to deliver this strategy. This social fund will act as a catalyst to enhance our in-depth support to those in fuel poverty while covering in full all initiatives aimed at leaving no-one behind in the transition to Net Zero at no cost to customers.

To ensure that our shareholder funding and the resulting services being delivered at 'no cost to customers' are meaningful, we are taking the following steps:

- Our shareholder investments will not be included in the Regulated Asset Value, thus no costs will flow to customers from these services and will be borne 100% by the shareholders.

- The value delivered from these services are measured using the industry Social Return on Investment tool set for consistency and transparency. We will publish all these CBAs and invite external scrutiny and challenge.

- We have committed to report annually on these investments and on the associated benefits delivered. Where appropriate, shareholder-funded initiatives will be independently managed through the UK Power Networks Foundation.

While stretching, we are confident that the commitments we have proposed are realistic and deliverable within the RIIO-ED2 period. Building on our industry leading approach to Consumer Vulnerability, established and refined with customers and stakeholders throughout RIIO-ED1 we will continue to enhance the tools, processes and capabilities that make these commitments achievable. Among these, our approach to acquiring, maintaining and using vulnerability data, as well as our structured network of over 600 local partners will act as critical enablers as we set out to accompany our vulnerable customers through the energy system transition.