Ofgem Electricity Distribution Price Control (ED3) Consumer Panel

Wave 1 Full Findings

March 2026

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Ofgem Foreword

Ensuring the energy system delivers for consumers - both today and in the future - is at the heart of Ofgem's role as Great Britain's energy regulator. As we look ahead to the next electricity distribution price control (ED3), which will shape how local electricity networks are funded and operated from 2028 to 2033, the decisions we take will have a lasting impact on households, businesses and the wider energy system.

ED3 represents a critical moment. Electricity networks will need to support a changing energy system - one that is cleaner, more flexible and increasingly dependent on electricity - while continuing to provide reliable, resilient and efficient services. At the same time, it is essential that costs remain fair and proportionate for consumers. ED3 will set the expectations for distribution network operators (DNOs), including the services they deliver, the outcomes they are expected to achieve, and how they are held to account.

In this context, understanding what matters most to consumers is not optional, it is essential. Ofgem has established an ED3 Consumer Voice programme to ensure that consumer perspectives are embedded throughout the development of ED3 policy and decision making, including as policy questions emerge. This programme reflects our commitment to place the consumer voice at the centre of the price control process.

A central element of this work is the ED3 consumer panel, which is a diverse group of members of the public who take part in structured, deliberative research. Through this approach, participants are supported to engage with complex energy issues, build their understanding over time, and reflect on the trade-offs involved, enabling informed consumer input in shaping the future of the electricity system across the ED3 lifecycle and beyond.

This report presents findings from the first wave of the consumer panel, which was intentionally designed as a foundational phase. It has established a baseline understanding of consumers' priorities, while building the knowledge needed for panel members to engage effectively with emerging policy questions in later stages of the ED3 process.

The programme forms part of a broader and evolving evidence base that Ofgem is drawing on as ED3 develops. Alongside other sources of data and engagement, it helps to ensure that decisions are grounded in a comprehensive understanding of consumer needs, expectations and priorities. The consumer panel and wider research programme will continue to evolve, providing ongoing insight as policies develop and decisions are taken.

This report is also intended to be useful beyond Ofgem. For distribution network operators and other industry stakeholders, it provides insight into the consumer context within which business plans are being developed and assessed and underscores the importance of demonstrating how proposals align with the interests of consumers.

We would like to extend our sincere thanks to the members of the ED3 consumer panel and to the independent research partners (the Social Agency), who have supported this work. The time, care and thought that participants have brought to engage with complex and often unfamiliar issues, alongside the expertise and rigour of the research delivery, have been equally important in ensuring that this programme provides a robust and credible evidence base for ED3.

Ofgem will continue to draw on this and other sources of insight as we develop the ED3 framework, with the aim of supporting a reliable, resilient and efficient electricity system that works for consumers and enables the transition to a cleaner energy future.

James Veaney

Deputy Director, Electricity Distribution

Executive Summary

The ED3 consumer panel is a domestic consumer panel of over 60 diverse members of the public, commissioned by Ofgem and managed by The Social Agency. Ofgem commissioned the panel to ensure the consumer voice is central to their decisions on the ED3 electricity distribution price control, which will come into force in April 2028 and last five years (until March 2033). During 2026, the panel will help inform how Ofgem regulates Distribution Network Operators (DNOs).

Wave 1 (February 2026) established a qualitative baseline of consumers' awareness and understanding of the energy sector and DNOs, explored their priorities and expectations, and examined their views on the need for and potential consumer impacts of investment on affordability. Panellists took part in two online workshops and an online task between sessions. The research was sequenced so that panellists first explored their existing associations with the energy sector and learned about DNOs and their role, without being asked to consider the trade-off between network investment and consumer bills. In the second workshop, panellists engaged with four investment scenarios covering growing demand, extreme weather, connecting new technology, and a smarter network, and debated the conditions under which bill-funded investment would be acceptable. To create a sense of ownership, Wave 1 also gave panellists the chance to vote on what to call the panel during the sessions. The winning name was S.P.A.R.K, standing for: Supply, Pricing, Affordability, Reliability, Knowledge.

Key findings are presented below, following the journey panellists went on and how their views and perceptions evolved through the research.

Coming into the panel:

Affordability dominated panellists' associations with the energy sector. Bills were described as high, rising, and a source of ongoing anxiety. Some participants perceived the sector as profit-driven, with consumers bearing costs while companies benefit. This focus on cost shaped panellists' day-to-day energy management behaviours and influenced awareness of wider sector challenges.

Baseline awareness and knowledge of DNOs and understanding of the energy system was very low. Most panellists had not heard of DNOs before the panel. Those that had typically encountered them due to a specific need, such as installing an electric vehicle (EV) charger at home. Likewise, most panellists exhibited relatively little knowledge and understanding of how energy gets to their home, or the range of actors involved in managing the system (beyond energy suppliers). Low baseline understanding meant panellists had no basis for judging whether DNOs were performing well or spending money wisely.

The themes that emerged in these initial discussions, including affordability concerns, low awareness, (dis)trust in the sector, and questions of fairness, persisted throughout the research. As panellists learned more and engaged with the trade-offs involved in network investment, these themes transitioned from spontaneous associations and immediate anxieties into the basis for more informed

views and support for investment that met certain conditions, for example, providing benefits for all consumers rather than just those on higher incomes. Affordability, in particular, moved beyond day-to-day bill pressures, becoming linked to wider questions of fairness in who pays and who benefits, whether investment represents efficient use of consumer money, and equity in how costs and benefits are distributed.

During the workshops:

After learning about DNOs, panellists recognised them as playing an important role and were surprised they had not heard of them before. They drew distinctions between responsibilities they considered essential, such as maintaining a reliable and resilient network, supporting vulnerable consumers, and delivering value for money, and those some viewed as secondary, such as supporting local communities and economic growth. This distinction later influenced which types of investment panellists considered justified.

Support for investment depended on the perceived likelihood that it would deliver results. Panellists appraised the investment scenarios through two dimensions of likelihood. First, whether the changes driving investment would actually come to pass: extreme weather and technological evolution were broadly accepted as inevitable, generating stronger support for investment in resilience and smart network upgrades, while changes driven by government policy attracted more scepticism, particularly where panellists doubted the government's ability to deliver on its ambitions or questioned whether most consumers could afford to adopt new technologies. Second, whether consumers would see the benefits: some panellists doubted that benefits such as bill reductions would ever reach consumers, suggesting that companies would instead use savings to increase their profit margins. Where changes were perceived as unlikely or benefits as uncertain, the case for investment was weaker.

Willingness to accept potential bill rises depended heavily on perceptions of who benefits and who pays. Investment delivering future cost savings to all consumers attracted the strongest support. Investment perceived as benefiting everyone equally (e.g. upgrades to improve the resilience of local networks to extreme weather) was also well supported. Investment perceived as primarily benefiting those considered by panellists to be more affluent, such as upgrades to connect EVs, heat pumps and solar panels, attracted the least support, as many panellists felt it unfair for all households to contribute equally when benefits of investment are shared unequally at this time. Similarly, panellists felt businesses who stand to benefit from consumer-funded investments should shoulder part of the costs (for example, housing developers whose new builds require the local electricity network to be expanded).

Principles for investment

Six principles for investing in DNOs were identified through analysis of the views expressed by panellists across the wave (listed in no particular order). These principles were not tested or validated with panellists during the workshops;

they are the product of the researcher's analysis of the themes that emerged through the deliberation.

- Invest early to avoid paying higher costs in the future
- Shield vulnerable consumers from price rises and energy supply interruptions
- Ensure costs are proportionate to benefits, with those who stand to gain the most paying a greater share
- Base investment decisions on clear evidence of genuine need and demand, rather than perceived or assumed motivations such as political priorities or profit-seeking.
- Help consumers understand how their money is used and the benefits to them
- Hold DNOs accountable for sensible investment, timely delivery, and outcomes for consumers.

Introduction

Background: ED3 and the panel

Ofgem is the energy regulator for Great Britain. It works to protect energy consumers, especially vulnerable people, by ensuring they are treated fairly and benefit from a cleaner, greener environment.

Ofgem regulates the revenues energy networks[1] can recover from consumers energy on a five-year cycle, deciding how much money network companies can collect from customers, setting the outputs that they must deliver and holding them to account over the period. Each five-year period is referred to as a 'price control'. ED3 is the name given to the next electricity distribution price control (2028-33).

In 2026, electricity Distribution Network Operators (DNOs) will submit their ED3 business plans, setting out what they need to spend to maintain, upgrade, and improve local electricity networks over the next price control period. Ofgem will review these plans in detail, comparing companies, benchmarking costs, and testing the evidence. Ofgem then sets a revenue limit which determines the share of consumer electricity bills that goes toward network costs. To hold DNOs accountable, Ofgem will set targets, performance measures, financial incentives, penalties, and annual reporting requirements. This is intended to ensure companies deliver the service, investment, reliability, resilience, and customer support consumers expect, and at a fair price.

Understanding what consumers need from the distribution companies is a key part of the price control process. In Ofgem's ED3 Framework Decision, published in April 2025, Ofgem committed to ensuring that the consumer voice is central to policy development and decision-making throughout the process. To support this, Ofgem commissioned The Social Agency, an independent research agency, to set up and manage an ED3 consumer panel made up of a diverse mix of 61 members of the public (see the appendix for a full sample breakdown). During 2026, the panel will take part in further research, the findings from which will help inform the ED3 price control process.

This report presents findings from the first wave of research, which was conducted in February 2026. Further details about the objectives and methodology for this wave are provided below.

[1] Energy networks are the physical systems of wires, cables, pipes and substations that carry electricity and gas from where they are produced to homes and businesses. The electricity distribution network — the focus of ED3 and this report — are the local networks that deliver electricity the final stretch into communities and buildings. Distribution networks are different from transmission networks, which move electricity over long distances, for example, via large electricity pylons.

Wave 1 project overview

Objectives

Wave 1 investigated domestic consumers':

- Awareness and understanding of the broader energy sector, electricity distribution networks and DNOs
- Priorities for and expectations of DNOs
- Views on the need for and potential consumer impacts of investment in DNOs on affordability

As this was the first meeting of the panel, Wave 1 also aimed to build panellists' knowledge of the energy sector generally, and electricity distribution specifically, providing a shared foundational baseline to support more complex discussions in later panel sessions.

Objectives were as follows:

1. Onboard panellists and encourage engagement by:
    - Providing panellists with an introduction to Ofgem and the purpose of the panel
    - Explaining how the panel will work in practice and motivating panellists to participate full throughout the long-term research process
    - Fostering relationships between panel members and establishing a sense of collective purpose
2. Provide Ofgem with qualitative baseline insight into consumers':
    - Knowledge of and familiarity with the energy sector overall
    - Awareness and understanding of DNOs and their role, remit and core functions
    - Underlying attitudes towards DNOs, Ofgem and the energy system, including levels of trust and confidence priorities and expectations for DNOs, both in context of their own priorities as consumers, and consumers more widely
    - How these priorities and expectations interact, including perceived tensions and trade-offs
    - Initial views on network investment, including perceptions of need, value for money and what constitutes justified or legitimate investment
    - Early views on risk, reliability and future system needs, including how these considerations are weighed against affordability concerns

Methodology

The research employed a qualitative, deliberative approach. Deliberative research involves participants learning about a topic as the basis for more informed discussion, rather than expressing views based on lack of knowledge, misunderstandings and/or assumptions. It is particularly useful when seeking to understand the public's priorities on complex topics about which they know very little — for example, as this research demonstrates, electricity distribution and DNOs.

Panellists took part in two online workshops. Between the workshops, they also completed a short online exercise to supplement learning (via an online community platform called HowSpace). Panellists learned more about the energy sector and DNOs across three stages of the research. Across the two workshops, panellists applied their learning to explore, discuss and debate their priorities for ED3 DNO investment.[2] The next section provides further detail about panellists' deliberative journey.

Deliberative journey at a glance

The research was sequenced so that, in **Workshop 1**, panellists first explored their existing associations with the energy sector and their awareness of electricity distribution and DNOs, before learning anything new. This starting point was anchored in affordability: bills were described as high, rising, and a source of anxiety. Awareness of DNOs was very low, and trust in organisations responsible for providing energy was uneven. Panellists then learned about DNOs and their role in the energy system, without being asked to consider the trade-off between network investment and consumer bills. The **post-workshop online task** consolidated this learning and introduced, for the first time, the link between DNO investment and consumer bills. By **Workshop 2**, panellists were able to apply what they had learned to four investment scenarios, debate trade-offs, and refine their views into clearer conditions for acceptability.

Table 1 summarises the deliberative journey, showing that:

- Panellists joined the panel concerned about rising bills, largely unaware of DNOs, and displaying uneven levels of trust in organisations they understood as responsible for providing energy.
- After learning about DNOs, panellists recognised them as playing an important role but distinguished between responsibilities they considered core and those some saw as secondary. This later influenced which types of investment they considered justified.
- Learning that further investment in DNOs means increases in consumer bills created a tension between recognition of DNOs' importance and a strong desire for bills not to rise.
- As panellists engaged with the benefits of investment and the risks of not investing, this tension resolved into conditional support. The six principles that emerged from analysis of the wave as a whole reflect the themes present from the outset: affordability shaped demands for early investment and protection of vulnerable consumers; low initial awareness and, for some panellists, distrust in the sector drove expectations for transparency and accountability; and questions about fairness informed the principle that costs should be proportionate to benefits.

[2] For further detail about the workshops, online exercise and how data was analysed, see Annex 2.

This report follows panellists through this journey, from initial baseline views, through engagement with new information, to more specific and conditional views on how investment in DNOs should be approached.

Table 1: Deliberative journey at a glance

Stage	What was introduced	Where the conversation had reached
Starting point (beginning of Workshop 1)	N/A. Discussion drew on existing knowledge and experience.	Anchored in affordability: bills described as high, rising, and a source of anxiety. Awareness of DNOs was very low. Trust in energy sector organisations was uneven.
Discovering DNOs (Workshop 1)	The role and responsibilities of DNOs; how distribution networks fit within the wider energy system; the distinction between DNOs and energy suppliers; what consumer bills pay for. No information about investment trade-offs was provided at this stage.	Panellists recognised DNOs as important and were struck by how little they had known. They distinguished between responsibilities they considered essential and those some viewed as secondary. Their lack of prior awareness left them with no basis for judging DNO performance or spending.
Consolidating and questioning (online task)	A quiz on Workshop 1 content. The link between DNO investment and consumer bills was introduced for the first time.	Panellists reviewed their learning and prepared questions and reflections for Workshop 2.
Engaging with trade-offs (Workshop 2)	Four investment scenarios (growing demand, extreme weather, connecting new technology, a smarter network), each with consequences of investing and not investing.	Panellists accepted the need for investment but attached clear conditions. Tensions emerged around affordability, inevitability versus government policy, and fairness in who pays and who benefits.
Six principles for investment (identified through analysis)	These principles were not introduced or tested during the workshops. They are the product of the researcher's analysis of the themes that emerged across the wave as a whole.	Invest early to avoid higher costs; shield vulnerable consumers; ensure costs are proportionate to benefits; base investment on evidence of actual need; make spending transparent; hold DNOs accountable for delivery.

A note on analysis and interpretation

This research is qualitative and is based on a panel of 61 domestic consumers. Findings are not intended to be statistically representative. They are instead intended to provide in-depth insight into how consumers think and feel about the issues explored, and the reasons behind their views.

The ED3 panel was deliberately recruited to capture a diverse mix of backgrounds, life experiences and perspectives (see Annex 1). While all panellists received the same information about DNOs — designed to be as clear and accessible as possible — the extent to which individuals understood and how they interpreted that information varied, shaped by their pre-existing attitudes, levels of trust and personal experiences. This wave was not designed to systematically explore the roots of these different perspectives, for example, whether distrust of energy companies stemmed from personal experience, media coverage, or broader political outlook. Instead, the research deliberately focused on identifying and comparing the rationales panellists used to support or oppose consumer bill-funded DNO investment. This approach allows the findings to look beneath surface-level disagreement and identify areas of common ground in what matters to consumers. For example, while panellists sometimes disagreed about which DNO responsibilities they considered essential or discretionary, they shared a common principle that investment funded through consumer bills should be reserved for what is genuinely essential.

As Table 1, above, illustrates, the deliberative approach enabled panellists to move beyond their initial starting point and discuss and debate their expectations and priorities from a more informed position. However, their understanding remained incomplete by the end of this wave. Some questions were beyond the scope of this wave to address, for example, calls for more details on what else consumer bills pay for, beyond DNOs and the energy supplier costs. Also, some misconceptions persisted, for example, at times some panellists still confused DNOs with energy suppliers. This reinforces the importance of interpreting findings at the level of underlying principles rather than detailed technical proposals. Additionally, the more panellists learned, the more questions they raised, many of which were beyond the scope of these initial workshops. Future waves will build on and extend panellists' understanding further.

Where panellists proposed specific actions without being fully informed about the practicalities and trade-offs involved, the research deliberately focused on the underlying principle driving the proposal rather than the specific mechanism suggested. For example, calls for energy bills to reflect a more detailed breakdown of what consumers are paying for – including the amount of money going to DNOs and how this is spent – are reported as reflecting a desire for transparency and assurance that money is being used efficiently. This approach more reliably reflects what the data can tell us about public priorities.

Findings

Part 1: Coming into the panel - Baseline knowledge and views of the energy sector and DNOs

This section examines panellists' starting point at the beginning of **Workshop 1**: their baseline knowledge and views of the energy sector and DNOs. It sets the context for interpreting later deliberation, because three backdrops shaped discussion throughout Wave 1: **(1) affordability concerns (2) very low knowledge/awareness/understanding of DNOs and how the electricity system works**, and **(3) uneven levels of trust in organisations responsible for providing energy,** linked to concerns about private companies unfairly profiting at the expense of everyday consumers.

Associations with the energy sector

Coming into the first workshop, panellists' spontaneous associations with the energy sector centred on cost. Affordability was the immediate and dominant concern. Panellists described bills as high, rising, and a source of ongoing anxiety. Several groups saw the sector as profit-driven, with consumers bearing the cost while companies — particularly energy suppliers — benefit. Some panellists also perceived energy costs in GB to be high relative to other countries – this pre-existing belief was a source of frustration and, for some, confusion as to why this may be the case.

> "The first thing that comes to mind is money, because electricity goes up and doesn't look like it's ever not going to go up."

> "All [the energy sector's] profits go to its shareholders and not back to actually the people who are helping us, or making things better for the future, like, because it's all privatised…we're the ones paying, and it's going straight to the shareholders."

This focus on affordability shaped how some panellists managed their energy use day-to-day. These panellists reported cost-saving behaviours like switching off sockets, heating fewer rooms, reducing water in kettles, shifting laundry to off-peak hours, and actively seeking better tariffs. While discussions did not systematically examine how prevalent these behaviours were across the panel, many panellists expressed a desire to reduce their energy costs.

> "I go around, turn the sockets off that need turning off."

> "We've started doing the washing at the weekend, because between 11 and 4 the electricity is half price."

Affordability also influenced panellists' awareness of sector-wide challenges. Understanding of these challenges was uneven, but panellists tended to know more about issues with clear links to bill rises, such as the Russia-Ukraine conflict[3] and its impact on energy prices.

> "A lot of [the price rise] is politics, which largely is international events - with Russia and Ukraine and things like that going on."

Beyond affordability, two other themes emerged. Several panellists – mostly from more rural areas, for example in South-West England and Scotland - reported experiencing power cuts regularly, with some suggesting these have become more frequent. Others who had not been directly impact were aware of outages in other parts of the country through recent media coverage of Storm Goretti (8-9th January 2026) as well as other high-profile storms and floods in recent years.

> "It's been unbelievable here the last week. There have been power cuts all around us, but not where I am, on the outskirts."

Panellists also held competing views towards renewable sources of energy. Some recognised the transition to cleaner energy as necessary in principle but questioned whether renewables could work reliably — for example, questioning reliance on solar photovoltaic (PV) sources during winter — and struggled to see how the transition would benefit them personally in the near term.

> "I'm not too bothered about clean energy... as long as it's cheap and available."

> "Clean energy is a very high priority with a young child growing up and wanting to know the future there for him."

Awareness of electricity distribution and DNOs

Baseline awareness of DNOs was very low. Most panellists had not heard of a DNO before the first workshop and accordingly knew nothing about what they are or what they do. The small number who had some awareness had typically encountered them because of a specific need — for example, installing an EV charger, setting up solar PV panels, or searching online during a power cut. In some cases, panellists realised they had been contacted by their DNO in the past without understanding who they were or what they did. For example, one panellist on the Priority Services Register had been contacted by their DNO during a power cut but did not realise this at the time.

[3] Note both workshops happened before the US/Israel-Iran conflict began on 28th February

Part 2: During the workshops - Discovering DNOs and engaging with trade-offs

This section explores what happened **during the deliberation**: how panellists responded as they learned new information about DNOs and their role (in Workshop 1), and then as they engaged with scenarios for consumer bill-funded investment in DNOs (first introduced in the online task and explored in depth in Workshop 2)[4].

Responding to information about DNOs' roles and responsibilities

In Workshop 1, panellists watched a short video explaining what electricity distribution networks are and how they relate to transmission networks, the role and responsibilities of DNOs in operating their networks, the distinction between DNOs and energy suppliers, and what consumer energy bills pay for, including the proportion attributable to electricity distribution. At this stage, no information was provided about the trade-off between network investment and consumer bills. Panellists were then asked to discuss and rank the following DNO responsibilities:

- Building and maintaining a resilient and reliable network
- Restoring power quickly and keeping the network safe
- Providing fast, fair and easy connections
- Supporting customers in vulnerable situations
- Delivering value for money for customers
- Communicating clearly and providing good customer service
- Enabling the transition to a clean energy system
- Supporting local communities and economic growth

After learning about DNOs, panellists widely agreed they play a very important role. A recurring reaction across groups was surprise at the perceived invisibility of DNOs. Given their newly perceived importance for maintaining and upgrading local electricity networks, panellists found it striking that they had never heard of them or their activities. This invisibility made it difficult for most panellists to judge whether their local DNO needed to invest more in specific areas: because they had no prior relationship with or knowledge of DNOs, they had no basis on which to judge whether they were providing good service or spending money wisely.

> "I know nothing of my DNO, so I couldn't even comment [on their performance]. I didn't even know they exist."

> "I can't believe that in all the years I've paid for energy, I've never ever heard of [a DNO] before."

When asked to rank DNO responsibilities, groups prioritised them differently. Some panellists felt that responsibilities could not be meaningfully ranked, viewing them all as interdependent and essential. Others drew a distinction between responsibilities they considered fundamental and those they saw as secondary or ‘nice to have’.

[4] Further detail about what information panellists received and when is provided in Annex 2.

This distinction mattered because it directly influenced views on investment in later discussions. Panellists who saw a responsibility as genuinely fundamental tended to view investment as non-negotiable; responsibilities perceived as less essential led some to question whether investment in those areas was justified.

Several responsibilities were widely seen as essential. Building and maintaining a reliable, resilient network was consistently ranked as a top priority, because panellists felt that too much depends on a reliable electricity supply, from day-to-day living and local services to the health and wellbeing of vulnerable people who rely on a continuous power supply for medical equipment. Similarly, many panellists felt that supporting customers in vulnerable situations is essential, including protecting them from both financial harm (for example, being pushed into debt due to bill increases) and physical harm (for example, interruptions to medical equipment due to power cuts). Providing value for money was also considered essential, though panellists often interpreted this as keeping bills affordable. Restoring power quickly was seen as closely linked to reliability and resilience.

> "If you haven't got a reliable service, then you wouldn't be able to carry out the other priorities. It's like building a house. You want to make sure that the foundations are strong. So I'd probably say that [responsibility] is at the top, and then everything else should cascade."

Communicating clearly and providing good customer service also emerged as important, primarily as a response to panellists' surprise at how little they had previously known about DNOs. Having discovered the significance of DNOs' role, panellists expressed a desire for them to become more visible and communicative with the public.

There was more disagreement over remaining responsibilities: providing fast and fair connections, enabling the transition to a clean energy system, and supporting local communities and economic growth. Some panellists saw these as essential; others viewed them as of secondary importance. This disagreement was driven by several factors. Some panellists perceived technologies such as EVs, heat pumps and solar panels as limited to more affluent groups and did not see investment in connecting them as something that would benefit them personally, tying into themes of affordability and fairness. Others held prior concerns about renewables and growth more broadly; for example, some panellists in more rural areas expressed reservations about new housing developments and solar farms in their communities. More generally, some acknowledged these responsibilities as important in principle but questioned whether the public or the country could afford to prioritise them right now, given existing cost pressures.

> “Ultimately, yes, we'd like all of them to be priorities. But looking at the economy and everything, that's not really going to be feasible, so, for me, having a social conscience, I'm more about the vulnerability side of things. Of course I would be wanting to be about renewables and making things a better place for the generation, but at the moment, the state of everything in the UK, that's just not feasible.”

Responding to information about the impact of DNO investment on consumer bills

Information about the impacts of DNO investment on consumer bills was introduced first in the online task and then explained in more depth during Workshop 2.

The potential of bill rises to fund investment prompted universal concern. Against a backdrop of already-high living costs and recent sharp rises in energy prices, panellists felt many consumers would struggle to afford further increases. They were particularly worried about the impact on already-vulnerable groups, including the elderly, low-income households, and people who rely on electricity to power medical equipment at home. Some expressed frustration at what they saw as a lack of understanding across government, regulators and utilities providers about the cumulative impact of rising bills across all household essentials. In light of this context, any bill rises for DNO investment needed to be seen in the wider context of bill rises across the board, rather than in isolation.

> "I think [Ofgem] need to understand that things at the moment are really high. Hopefully in the future, if, like, the energy prices drop down, then yes, it would be more affordable for people to contribute more towards investment, but currently it just seems so overwhelming to even think that prices are going to go up even more. Everybody's struggling."

At the same time, panellists recognised that DNO investment is needed, even if they debated whether certain kinds of investment were justified or should be prioritised. To support further deliberation around this tension, panellists learned about four scenarios for consumer-funded investment in DNOs. Responses to these scenarios are examined below.

Responding to scenarios for consumer-funded investment in DNOs

In Workshop 2, panellists were presented with four scenarios explaining changes in technology, climate and how society generates and uses electricity, and what this means for the future of electricity distribution networks. Each scenario set out consequences of investing and of not investing.[5]

Panellists had different views towards the scenarios and whether they constituted justifiable cases for increasing consumer bills to fund investment in DNOs. Two lenses shaped how panellists appraised the scenarios: the perceived likelihood that the changes driving investment would come to pass and that consumers would see the promised benefits, and the perceived fairness of who pays and who benefits.

[5] Further detail about the scenarios is provided in Annex 2

How likely is it?

Panellists' support for investment was influenced by two dimensions of perceived likelihood: whether the changes driving investment would actually come to pass, and whether consumers would see the benefits if investment went ahead.

On the first dimension, panellists broadly agreed that some changes are genuinely inevitable. Extreme weather was accepted as becoming more frequent and severe, and panellists understood that this is already tangibly affecting the reliability of electricity supply. They also accepted that technology is constantly evolving and that local networks need to keep pace. Against this backdrop, panellists tended to be more accepting of investment in resilience upgrades and in making the network smarter.

> "I don't think we can stop the march of technology. It's just a fact of life. And if the DNOs don't invest in new technology it will be to their detriment."

By contrast, some panellists viewed other changes as driven primarily by government policy, for example, the expansion of housing, the transition to renewables, and the adoption of electric vehicles and heat pumps. While some saw these as inevitable, others were sceptical about the government's ability to deliver on these ambitions. For these panellists, this scepticism weakened the case for investing in the network now to prepare for changes they believed may not materialise. This was driven primarily by two factors: doubts about the competency of government to deliver on policy targets, and doubts that most consumers would be able to afford to adopt new technologies such as EVs and heat pumps. Where changes were perceived as unlikely or uncertain, the case for investment was weaker.

> "[Nation-wide adoption of energy efficiency upgrades] is not going to happen, because there's too many old properties, and people don't have the money to invest in it. So I think [Government has] a wish list that's out of grasp of most people in the UK. But they want to do it anyway, to justify the spend."

On the second dimension, some panellists doubted that the benefits of investment would ever reach consumers, even if the investment went ahead. They suggested that DNOs and energy suppliers would divert savings into profits and shareholder dividends, or make poor investments that fail to deliver results. This drove demands for transparency about how money is spent, clear timelines for when upgrades will be delivered, and accountability mechanisms to ensure consumers see returns on investment. This distrust was compounded by the perceived invisibility of DNOs discussed earlier in this section.

> "I don't think we would see the cheaper costs as consumers. I think the energy firms would just enjoy a greater profit margin."

Who benefits and who pays

Panellists' willingness to accept bill rises depended heavily on whether they perceived the benefits of investment would be shared fairly. A clear hierarchy of support emerged across the scenarios.

Investment in upgrades that would deliver future cost savings to all energy consumers regardless of their personal circumstances attracted the strongest support, for example, smarter network upgrades enabling consumers to take advantage of off-peak rates more easily. This was seen as a "no brainer", especially when set against the risk of inaction leading to higher costs later. Panellists expected these savings to be realised in the shorter term. This reflected an expectation that, if consumers today are footing the bill for investment, they should see returns on this, for example, lower bills.

> "I feel like [investing in a smarter network] is a bit more fairer for everybody, because everyone will benefit a bit more from this one."

However, some panellists worried that because technology is always evolving, the public would always be asked to invest more. This meant panellists showed more support for upgrades they perceived as something that could be done once rather than requiring ongoing investment.

Investment perceived as providing equal benefits for everyone in the community, for example, extreme weather resilience upgrades, was also well supported. So was investment that would maximise returns from investments already made, such as smarter upgrades that prevent renewable energy from going to waste. Indeed, when told that, without a smarter network, energy generated from renewable sources could be wasted, panellists expressed a strong negative reaction at the prospect of wasting energy the country has already invested in generating.

By contrast, investment perceived as benefiting only people with the financial means to take advantage of it attracted the least support, for example, upgrades making it easier to connect EVs, heat pumps and solar panels. Continuing a theme already expressed in Workshop 1, many panellists believed these technologies are only affordable to consumers they considered to be more affluent, and highlighted that people in certain types of housing, such as flats, are less able to benefit. Because they considered that the benefits would be shared unequally, panellists saw it as unfair to expect all households to contribute equally through their bills.

> "I think it would be good for people that [can afford these technologies]. But your people on lower incomes and people who are renting or live in certain properties [like flats] are not going to benefit from it."

It is important to note that perceptions of the same scenario varied, often reflecting varying assumptions about who benefits and over what timeframe, rather than simple disagreement. For example, some panellists saw investment in solar PV connections as helping all consumers save money in the long run as it would generate cheaper power locally. Others struggled to see how this would bring any benefit.

There were also competing views on whether investment should be funded locally or nationally. Some groups felt the communities directly benefiting from upgrades should pay, while others preferred a national pot redistributed based on need. Views shifted depending on the nature of the investment. For example, some panellists were more supportive of a national approach for resilience upgrades, arguing it would be unfair to expect harder-hit communities to pay more simply because of their exposure to extreme weather. This is a notable exception to the broader pattern: in this case, panellists were willing for others to pay for changes that primarily benefit other communities. However, not all panellists agreed. Some continued to feel that those benefiting most from upgrades should foot the greatest share of the bill, regardless of the circumstances. Where the need for more investment in a particular area was seen as the result of a local DNO having been considered to have underinvested, panellists felt it would be especially unfair to expect consumers in other regions to pay.

> "I don't think it'd be fair just to different parts of the country make them pay if they're suffering more, they're going to get a bigger hit otherwise."

> "It depends if your DNO needs it or not. If our area is good, then I wouldn't want to invest more in it, because it's fine. But other areas of the country might need to, and I suspect there's probably an element of not wanting to pay for those other areas."

Part 3: By the end of the workshops - Principles for investing in DNOs

This section summarises the **end result of Wave 1's deliberation**: the principles panellists arrived at for how investment in DNOs should happen, and the guardrails and conditions under which bill rises would be acceptable.[6] These principles reflect themes that strengthened as panellists moved from low initial knowledge toward a more informed discussion, while remaining anchored in the backdrop of affordability pressure. They also capture the cross-cutting priorities that emerged most clearly through scenario discussions in Workshop 2—including fairness in who pays and who benefits, protection for vulnerable consumers, evidence-based and value-for-money investment, and expectations for greater transparency and accountability.

Principle 1: Invest early to avoid higher costs in the future

Panellists consistently supported investing now to avoid higher costs later. Investment in smarter network upgrades that would deliver near-term cost savings attracted the strongest support of any scenario. The risk of inaction leading to higher costs reinforced this view, as did the argument that planned investment is cheaper than emergency repairs. Panellists expected the benefits of early investment to be realised in the shorter term, for people alive today.

> "There's an element of, if we don't do it now and do it in the future, it could be much more expensive. So it's about finding that balance and not just kicking the can down the road and ending up paying a much bigger bill because of that."

Principle 2: Shield vulnerable consumers from price rises and interruptions to electricity supply

Panellists called for mechanisms to protect vulnerable groups from bill rises, such as means-testing and social tariffs. They were also concerned about the impact of electricity supply interruptions on people whose health depends on a continuous power supply, for example, those who rely on electricity for medical equipment at home. The elderly, low-income households, and people in these situations were identified as particularly at risk. Supporting vulnerable consumers was also consistently ranked as one of the most important DNO responsibilities, though some panellists struggled to understand exactly how DNOs can do this in practice.

> "If there is some sort of social tariff for [vulnerable consumers] so that they're not getting impacted as much, or if you are on a million pound salary, you actually pay more towards it, so there is more a fair spread - if [investment worked] that way, then, yeah, I would pay it."

[6] These principles were not introduced or systematically tested during the workshops. They are the product of the researcher's analysis of the themes that emerged across the wave as a whole.

Principle 3: Ensure costs are proportionate to benefits — those who stand to gain the most from investment should pay a greater share

Panellists expected businesses that profit from the changes driving investment to shoulder a share of the costs — for example, developers building new homes, companies profiting the expansion of data centres thanks to use of AI, and energy suppliers gaining more customers. They argued that a share of these profits should be reinvested to pay for network upgrades. Some also argued that bill rises should depend on usage, with heavy users of electricity paying proportionately more.

> "I'd like to see [costs of investment] partially offset by the energy suppliers because ultimately they're the ones that make the money in the industry. Okay, they can pass some of the burden on – they're businesses at the end of the day and they need to make money. But at least take a share of it."

Panellists were least supportive of investment where what they perceived to be wealthier households or those in certain types of housing would benefit. The underlying expectation was that if everyone is asked to contribute through their bills, the benefits should be shared as widely and fairly as possible. Allocating funds based on need emerged as a possible counter to this view. For example, some panellists indicated they would accept their bills rising if it meant consumers living in areas that are more exposed to extreme weather are protected – even if their areas did not directly benefit. Others, however, disagreed with this view, because they did not think it fair to pay increased bills to fund investments that they would not benefit from.

Principle 4: Base investment decisions on evidence of actual need and demand

Scepticism about the government's ability to deliver on policy ambitions (for example, housing targets and encouraging the transition to green technologies like EVs and heat pumps) led panellists to question why consumers should pay for changes that might not happen. Panellists wanted investment to be driven by evidence of what is genuinely needed, not by political ambitions. They were more accepting of investment where the driving forces were seen as clearly inevitable, such as climate change and technological evolution. They expected the evidence base for investment to be clearly communicated to the public to justify any rises in energy bills.

> "[There needs to be] due diligence and proof to Ofgem that the investment is actually needed, [rather than] a wish list."

Principle 5: Help consumers understand how their money is used and the benefits it provides

Panellists called for much greater transparency from DNOs about how they spend money raised through consumer bills. Specific suggestions included providing an itemised breakdown of spending as part of the energy bill. Several panellists wanted this to extend beyond DNOs to the full energy bill, so the public can see exactly

what they are paying for. The 'invisibility' of DNOs meant panellists had no basis for judging whether money is being spent wisely, making greater transparency essential to building public trust and making bill rises more acceptable.

> "We've all got to expect that things go up with the rate of inflation, but when it goes above those rates, there needs to be sort of justifications and clear outcomes, [so the public can know] what the money's been used for and to see what improvements have actually been made."

Principle 6: Hold DNOs accountable for sensible investment, timely delivery, and outcomes for consumers

Panellists expected clear timelines for when upgrades will be implemented and when the public should see results. They expected DNOs to be held to those timelines, and to be held accountable for delivering the benefits promised in return for investment. This demand was driven by widespread scepticism that benefits would ever reach consumers. In cases where investment does not yield results, panellists expected DNOs to be penalised and for mechanisms to be provided consumers to recoup costs. Panellists perceived Ofgem[7] and, more broadly, the Government as the actors responsible for ensuring accountability.

> "In a lot of things, like politics for example, accountability is never taken. [We need] to actually see the accountability happen. So, for example, if they said, we're going to invest this £10,000 and get you this power station, and then they come back saying, oh, we're over budget or whatever, we need to actually see that they're getting fined for it."

[7] Important to note that panellists were informed that Ofgem is the energy regulator for Great Britain at the beginning of the dialogue, which may have influenced their views on who is responsible for ensuring accountability.

Conclusion

Wave 1 of the ED3 consumer panel has established a qualitative baseline of how consumers think and feel about the energy sector, electricity distribution and DNOs. That baseline is characterised by three defining features: very low awareness and understanding of DNOs and the wider energy system, concerns about the cost of energy, and uneven levels of trust in Government and private organisations responsible for providing energy.

These themes are closely connected. Because panellists knew almost nothing about DNOs before the research, they had no basis for judging whether investment was needed or money was being spent wisely. This knowledge gap made affordability concerns more influential in shaping their responses. Panellists approached the question of investment not from a position of informed assessment, but from one of financial anxiety and caution. Where distrust featured, it took two forms. First, doubts about competency, particularly whether government could deliver on its policy ambitions. Second, doubts about the profit-seeking motives of private companies, for example, panellists were concerned that energy companies would divert savings from investment into profits rather than passing them on to consumers.

Despite this, panellists did not reject the idea of consumer-funded investment. Through the deliberative process, they engaged constructively with the trade-offs involved. Their deliberations helped surface six principles that reflect what matters most to them:

- Investing early to keep costs down
- Protecting vulnerable consumers
- Ensuring fairness in who pays and who benefits
- Grounding investment in evidence rather than profit motives or political ambition
- Making spending transparent
- Holding DNOs accountable for delivery.

These principles are underpinned by the themes of knowledge, affordability, (dis)trust and fairness that ran throughout the research.

This is an important foundation for future waves, which will build on panellists' growing understanding to explore more complex and specific questions about how DNO investment should be shaped for the ED3 price control.

Annexes

Annex 1: Who is on the ED3 panel?

The ED3 panel is a consumer panel of 61 diverse members of the public, covering all 14 DNO regions across Great Britain. Table 2 provides a breakdown of the characteristics represented on the panel.

Table 2: ED3 Panel sample profile

Characteristic	Details	Count
Gender	Males	26
Gender	Females	35
Age	18-29	9
Age	30-44	23
Age	45-64	20
Age	65+ years	9
Family type	Families with children at home – any age	34
Family type	Families with children at home – children under 2 years	4
Family type	Singles/couples without children at home (pre-family, never had children or empty nesters)	27
Household income	HHI of under £30,000 per annum	17
Household income	HHI income of between £30,000-£40,000 per annum	16
Household income	HHI income of over £40,000 per annum	28
Employment status	In employment, education or training	50
Employment status	Not in employment, education or training	11
Ethnicity	White ethnicity	51
Ethnicity	From an ethnic minority background - mix across Asian and Black Ethnic Groups	10
Nation	England	44
Nation	Scotland	9
Nation	Wales	8
DNO	National Grid Electricity Distribution South West	4
DNO	Southern Electric Power Distribution PLC	4
DNO	London Power Networks	5
DNO	South Eastern Power Networks PLC	3
DNO	Eastern Power Networks PLC	6
DNO	National Grid Electricity Distribution South Wales	5
DNO	National Grid Electricity Distribution West Midlands	4
DNO	National Grid Electricity Distribution East Midlands	4
DNO	SP Manweb PLC	3
DNO	SP Electricity North West	5
DNO	Northern Powergrid (Yorkshire)	7
DNO	Northern Powergrid (Northeast)	2
DNO	SP Distribution Ltd	7
DNO	Scottish Hydro Electric Power Distribution PLC	2

Characteristic	Details	Count
Location type	Urban or suburban area	45
Location type	Rural area	16
Housing tenure	Owner occupiers	35
Housing tenure	Private renters	12
Housing tenure	Social renters	14
Disability/ Long-term health condition	Households in which someone (either participant or family member) is disabled and/or has long-term health condition (mental and physical)	12
Disability/ Long-term health condition	Households in which someone (either participant or family member) requires energy dependent medical equipment/ devices	5
Energy supplier	Large supplier – any	53
Energy supplier	Large supplier – British Gas	11
Energy supplier	Large supplier - E.ON / E.ON Next	10
Energy supplier	Large supplier - EDF Energy	6
Energy supplier	Large supplier - Scottish Power	7
Energy supplier	Large supplier - OVO Energy	6
Energy supplier	Large supplier - Octopus Energy	11
Low carbon/ tech adoption	Have Solar panels, heat pump &/or EV charging point	6
Fuel type	Dual fuel	48
Fuel type	Electricity-only supply – any location	13
Fuel type	Electricity-only supply - rural located	5
Smart metering	Have an electricity smart meter	44
Smart metering	Do not have an electricity smart meter	17
Payment method	Pay via Direct debit	48
Payment method	Pay by standard credit	6
Payment method	Pay via Prepayment meter – any type	7
Payment method	Pay via Prepayment meter - using smart prepay-ment	4
Tariff	Fixed rate	38
Tariff	Standard variable	18
Tariff	Time of Use Tariff	5
Vulnerability indicators	Registered on PSR	22
Vulnerability indicators	Fuel debt	10
Vulnerability indicators	Low digital confidence	12

Annex 2: Methodological notes on the workshop and analysis

Panellists took part in two online workshops. Between the workshops, they also completed a short online exercise via an online community platform called HowSpace.

Both workshops began in plenary, to welcome panellists and explain the agenda. Actual discussion happened in breakout groups involving up to 8 panellists, a moderator from The Social Agency, and an Ofgem observer (8 breakout groups in total). All moderators, observers and panellists returned to plenary at the end of each workshop, to say thank you and close the session.

Workshop 1 (1 hour)

The first workshop began by exploring panellists baseline awareness, understanding and associations with the energy sector, electricity distribution and DNOs. Panellists then watched a short video explaining:

- What electricity distribution networks are and how they relate to transmission networks
- The role and responsibilities of DNOs in operating their own network
- The distinction between DNOs and energy suppliers
- What consumer energy bills pay for, and what proportion of these bills funds DNOs

Panellists were actively encouraged to ask questions and share reflections while watching the video. Once panellists felt confident they understood the information, the workshop closed with an exercise designed to explore which DNO responsibilities they considered most important and why. This exercise examined the following responsibilities:

- **Building and maintaining a resilient and reliable network** – e.g. by upgrading old equipment, making sure there's enough capacity,[8] and protecting the system from bad weather and long-term climate and security risks
- **Restoring power quickly and keeping the network safe –** e.g. by getting the lights back on as soon as possible after a power cut and making sure equipment isn't overloaded.
- **Providing fast, fair and easy connections** e.g. by connecting new homes or helping you get an EV charger or heat pump installed without long waits or confusing steps

[8] In this context, capacity refers to how much electricity the local network can handle at any given time. If demand for electricity grows — for example, because more people are charging electric vehicles or using heat pumps — the network needs enough capacity to deliver that electricity without becoming overloaded. When a network runs out of capacity, new homes or businesses may not be able to connect, or existing connections may become less reliable.

- **Supporting customers in vulnerable situations** – e.g. through the priority services register[9] and by making sure vulnerable people (e.g. who rely on medical equipment or are elderly) are prioritised during power cuts
- **Delivering value for money for customers –** e.g. by spending money wisely so customers aren't paying more than they need to
- **Communicating clearly and providing good customer service -** e.g. by letting you know when there's a power cut in your area and making it easy to get help if something goes wrong
- **Enabling the transition to a clean energy system–** e.g. by upgrading the system to handle more solar panels, batteries and electric vehicles as people switch to cleaner energy
- **Supporting local communities and economic growth –** e.g. by making sure the network can support new businesses and housing developments in your area

Post-workshop 1 online task

After workshop 1, panellists completed a short online quiz designed to check their recall and understanding of information provided during the workshop. They were also given an opportunity to ask any questions about the information and voted on their preferred name for the panel.

Workshop 2 (2 hours)

The second workshop began with panellists' reflections on workshop 1 and the pre-task, including any outstanding questions they had, and how what they had learned had influenced their views towards the energy sector and electricity distribution. Following this, discussions explored panellists' views towards the need for investment in electricity distribution networks, given that this investment will mean an increase in consumer energy bills.

To stimulate this discussion, moderators presented four scenarios explaining changes in technology, climate and how society generates and uses electricity, and what this means for the future of electricity distribution networks. Each scenario also presented consequences of investing and not investing in the network. These scenarios were developed by The Social Agency based on Ofgem's ED3 Framework Decision, and carefully reviewed and updated by Ofgem policy stakeholders. To avoid ordering effects, breakout groups rotated through the scenarios in different orders.

Table 3 provides a summary of the four scenarios:

[9] A free support service run by energy suppliers, DNOs and water companies in the UK. Customers can sign up if they're in a vulnerable situation — for example, elderly, disabled, living with a long-term health condition, or reliant on electricity for medical equipment. Being on the register means they get extra help during power cuts or supply interruptions, such as priority updates, alternative heating, or welfare checks.

Table 3: Workshop 2 Scenarios

Scenario	Situation	If investment:	If no investment:
Growing demand for electricity	Over the next 10-20 years, we'll need much more electricity. The government wants to build 1.5 million new homes. Data centres are expanding to power things like streaming and AI. More people will be driving electric cars and heating their homes with heat pumps instead of gas boilers	New homes, businesses and data centres can get connected when they need to Costs are spread over time, keeping bills more manageable The system is ready for millions more electric cars and heat pumps More solar and wind power can get added to the network	New homes and businesses might not be able to connect to the network Bills could rise if upgrades are left too late and cost more to do in a hurry The system could become less reliable and we could see an increase in interruptions
More extreme weather	Climate change is bringing more storms, flooding and extreme weather. Recent winters have shown how severe weather can damage electricity equipment and cause power cuts	Power cuts are shorter and less frequent, even in bad weather Other services that rely on electricity - like phone networks, water and transport - stay running Repairs are planned rather than reactive, keeping costs down	Power cuts could become longer and more frequent Other services that rely on electricity — like phone networks, water, transport, electric heating and car charging — could also be affected Emergency repair costs would rise
Connecting new technology	More people want to install solar panels, home batteries, EV chargers and heat pumps	Households can install solar panels, batteries and EV chargers without long waits Businesses can set up and expand	Households could face long waits to install solar panels, heat pumps or EV chargers

Scenario	Situation	If investment:	If no investment:
	Businesses also need reliable connections to expand or move into an area	where they're needed Fewer gas boilers and petrol cars means less pollution contributing to climate change	Businesses might not be able to set up in areas where the network is full We'd carry on using more gas and petrol
A smarter, more complex network	The electricity network is becoming more complex. Instead of power flowing one way from big power stations to homes, it now comes from many sources — solar panels on roofs, wind turbines, batteries. Managing this needs better technology and smarter systems	Renewable energy gets used rather than wasted The system can balance supply and demand in real time, reducing bills because power plants do not need to be turned on to cope at peak times Households can benefit from cheaper electricity at off-peak times	Renewable energy could go to waste because the system can't manage it properly Bills could be higher because the system is not managed as well Households would miss out on things like cheaper off-peak electricity

Analysis

After both workshops, each moderator completed a proforma to capture notes, reflections and illustrative quotes from their groups. A senior researcher at The Social Agency systematically analysed these proformas to identify cross-cutting themes and differences between and within each group, compiling emerging findings into a toplines report. This report was shared with moderators to ensure the analysis reflected the findings from their group. The report was then shared with Ofgem for review and feedback. The toplines formed the basis for the final report findings, presented in this document.