

Community Benefits for Electricity Transmission Network Infrastructure – Social Research

Final report

Prepared by BMG Research for the Department for Energy Security and
Net Zero

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Contents

Executive Summary	5
Communities' views and preferences towards transmission infrastructure	5
Communities' views and preferences towards community benefits	6
Introduction	8
Policy Context	8
Research Objectives	9
Methodology	10
Use of case study approach	10
Quantitative approach	11
Qualitative approach	12
Notes on statistical significance	13
Limitations and interpretation	13
Communities' views and preferences towards transmission infrastructure	15
Awareness of electricity networks and transmission infrastructure	16
Awareness of plans to build new transmission infrastructure	18
Acceptability of hypothetical new transmission infrastructure	20
The impact of information on acceptability	26
Views towards alternative types of transmission infrastructure (T-pylons, underground and offshore cables)	27
Are communities willing to pay for more acceptable infrastructure?	30
Community involvement in the planning process	32
Communities' views and preferences towards community benefits	34
Awareness of community benefit schemes	34
Key design options: flexible or consistent; mandatory or voluntary	35
Are communities willing to pay for community benefit schemes?	38
Should direct payments or community funds be prioritised?	39
Direct payment eligibility	40
Community fund eligibility	41
What objectives should community funds focus on?	42
How much interest is there in participating in developing and designing community benefit schemes?	43

The impact of community benefits on infrastructure acceptability _____	46
Support for use of community benefits _____	46
Reasons for supporting and opposing community benefits _____	47
How did different types of community benefits affect acceptability? _____	49
What level of direct payment could help improve acceptability? _____	52
What size community fund could help improve acceptability? _____	57
Conclusions _____	60
Annex A: Quantitative survey questionnaire _____	61
Annex B: Qualitative topic guide _____	116
Annex C: Example community benefits from the qualitative phase _____	125

Executive Summary

The Department for Energy Security and Net Zero (DESNZ) commissioned BMG Research to conduct mixed methods research to understand communities' views and preferences towards transmission infrastructure and measures that can be taken to improve acceptability of transmission infrastructure including community benefits. The research aims to inform development of community benefits and other policies relating to community acceptability of transmission infrastructure.

The research focussed on three case study areas where there are proposals for transmission infrastructure projects that have been classified as essential by the National Grid Electricity System Operator to enable the Government's 2030 offshore wind ambitions: East Suffolk/Thanet/Dover, Lincolnshire, and Inverness/Keith.¹ The case studies represent a range of project types across different regions, with different geographies and population profiles. The case studies were selected to provide illustrative examples of communities that may host transmission network infrastructure projects.

BMG carried out a survey achieving 2,359 valid responses from households who were randomly selected, providing data representative of the three areas sampled. The survey was followed by three focus groups/workshops (one per case study area), with 11-12 community members per workshop. The report details a comprehensive analysis of both qualitative and quantitative data.

Communities' views and preferences towards transmission infrastructure

75% of those surveyed had some level of knowledge of electricity networks, though relatively few (8%) knew a lot. However, qualitative insights from the follow-up workshops suggest that understanding may be less widespread than stated in the survey. Among those surveyed, there were high recognition rates for lattice pylons (91%) and substations (89%), but a lower recognition rate for T-pylons (41%).

In terms of acceptability, nearly half of the respondents (49%) expressed that they would find the construction of hypothetical new transmission infrastructure in their local area acceptable. 32% reported they would find this unacceptable and 16% reported they would find this neither acceptable nor unacceptable. For those surveyed, the main reason for accepting the infrastructure was the view that it would contribute to meeting the growing electricity demand and enable more low-carbon and renewable sources. Conversely, opposition to new local infrastructure development was largely driven by concerns about its visual impact.

¹ Classified as an "HND essential option" in the [NOA 2021/22 Refresh](#). For more information on the profile of the three areas, see the methodology section

The majority of survey participants initially reported that underground (74%) and offshore cables (69%) would be more acceptable than lattice pylons. However, for many this preference was no longer held once potential environmental impacts were considered, with only 33% (underground) and 26% (offshore) of respondents continuing to support these options.

After reviewing an image of T-pylons and lattice pylons, those surveyed showed a preference for T-pylons. 51% of respondents reported they would find T-pylons more acceptable than lattice pylons. 5% showed a preference for lattice pylons over T-pylons, while 37% reported no preference.

Similarly, workshop participants were more resistant to the construction of infrastructure if it was visible and perceived to damage the local environment, initially preferring undergrounding and offshore developments. However, most participants preferred lattice and T-pylons once they were made aware of the environmental impacts of undergrounding and offshore infrastructure. Screening substations in buildings or via landscaping measures (e.g. tree cover) was felt to be a positive and was generally preferred to substations without screening measures. Furthermore, participants desired greater communication to explain the need for the construction of new infrastructure (such as low carbon generation, and domestic energy security) to increase acceptability.

Survey respondents were informed that the construction and maintenance of infrastructure is funded through electricity bills. Over a third (34%) of respondents were unwilling to add costs to their bills for alternative transmission infrastructure (e.g. T-pylons, underground and subsea cables which are generally more expensive than overhead lattice pylons). However, over half (58%) were willing to add up to £1 per month. Evidence from the workshops suggested that there was a hesitancy to add to bills because energy costs are already perceived as very high, with most participants believing the responsibility should fall on the energy suppliers or developers, who were seen to be making large profits.

Communities' views and preferences towards community benefits

57% of survey respondents were aware of community benefits schemes. Both survey respondents and workshop participants favoured flexible, area-specific schemes which were mandatory for developers to include as part of their projects. Opinion was split with 46% of respondents being opposed to adding costs to electricity bills to pay for these schemes and another 46% saying that they were happy to add at least £1 to their monthly bills. Funding community benefits through electricity bills was a controversial proposal in the workshops, with many participants believing that these should be funded by energy suppliers or developers. Out of the people surveyed, fewer were willing to add at least £1 to their monthly bills for community benefits (46%) than for alternative transmission infrastructure (58%).

For direct payments, respondents were most likely to agree that they should include renters (65%) as well as businesses (60%) impacted by the infrastructure and that it should also be based on the distance from the new infrastructure (63%).

For community funds, those experiencing the greatest impact once the infrastructure is built (41%) were the group of respondents that were the most likely to say that they should be targeted to benefit, followed by those experiencing the greatest impact from construction (32%). Additionally, almost half (47%) stated these funds should support measures for community transition to net zero, potentially due to the overarching goal to reach net zero through new transmission network infrastructure.

In terms of how communities are involved in community benefits schemes, survey respondents expressed interest in participating in the design of community benefits, particularly through voting for projects seeking funding (69% interested in this). The workshop participants' principal priorities for benefits schemes were the longevity of a schemes impact, transparency in the way it is designed, and accountability from those delivering the scheme. Some workshop participants expressed concerns about voting or committees allocating funds due to concerns over misuse of funds. This further emphasises their desire for transparency and accountability.

Two-thirds (67%) of respondents who were aware of community benefits supported their use for transmission infrastructure projects and 9% oppose them. The main reason for opposing community benefits related to perceptions of bribery.

Electricity bill discounts were identified as the type of community benefit that was able to help increase acceptance for new transmission infrastructure for the most respondents (78%). This was followed by jobs, training and apprenticeship opportunities for local residents (65%) and direct payments to those in close proximity to the new transmission infrastructure (63%). Workshop feedback suggested that the popularity of bill discounts was driven by recent experiences of rising energy bills, the expectation bill discounts would have more long-term impacts than other types of benefits, and because this creates a clear association between the type of infrastructure being built and the type of benefit received (cheaper electricity bills via a discount).

Lastly, while community benefit schemes proved to be effective drivers of acceptability for infrastructure projects, their impact was more pronounced among those who initially accepted the projects. Discounts on energy bills (69%) and direct payments (56%) were the only benefits that increased acceptability for more than half of those who initially found projects in their local areas unacceptable.

The survey data provided evidence on how different levels and types of benefit (wider and direct) could help improve acceptability for new transmission infrastructure projects. Direct payments of £10,000 were able to help improve acceptability for the majority (55%-67%) of those who felt they were needed in each scenario tested. Further increases in acceptability were limited beyond £10,000. For wider-benefits, funds of £500,000 over 10 years were able to improve acceptability for the majority of respondents (60%), with further increases in acceptability limited beyond £5 million over 10 years. Following deliberation, workshop participants felt that £500,000 over 10 years may not be sufficient to increase acceptability and that a greater level of funding may be needed, but participants were hesitant to provide alternative amounts without having more context about a given infrastructure project.

Introduction

Policy Context

The UK Government has committed to a fully decarbonised electricity system by 2035, subject to security of supply considerations, and net zero by 2050.² This will require speeding up deployment of low-carbon and renewable electricity generation technologies. UK Government has set out plans for this in the British Energy Security Strategy³ and Powering Up Britain - Energy Security Plan.⁴

In the nearer term, the government has an ambition for up to 50GW of offshore wind by 2030, to progress up to eight new nuclear reactors by 2030, and set an expectation for a fivefold increase in solar deployment, up to 70GW, by 2035. Electricity networks will play a critical role in these ambitions. Thus, enabling the two-fold or more increase in electricity demand expected by 2050, as different sectors – including transport, heat and industry electrify.⁵ Analysis by the Department for Energy Security and Net Zero suggests that in Great Britain, around four times as much new transmission network will be needed in the next seven years as was built since 1990.⁶ Furthermore, the pace at which this new transmission network infrastructure is built, needs to increase significantly to keep on track of targets.⁷

Communities can experience disruption and wide-ranging impacts including, but not limited to, visual impacts when hosting new transmission infrastructure. This can contribute towards opposition to projects and project delays.⁸ Government has recognised the vital role that communities hosting this transmission infrastructure will play in supporting national objectives. In response, in March – June 2023, the government consulted on a proposed approach to community benefits for electricity transmission network infrastructure to ensure that communities feel that they are positively benefiting for their role, helping to increase acceptability for local projects.⁹ Government has set out how community benefits schemes are expected to play an important role in recognising host communities and is developing proposals to establish a scheme which can deliver consistent, tangible and fair benefits for communities.¹⁰

² [BEIS \(2021\), Plans unveiled to decarbonise UK power system by 2035](#)

³ [DESNZ \(2022\), British Energy Security Strategy](#)

⁴ [DESNZ \(2023\), Powering up Britain – Energy Security Plan](#)

⁵ [DESNZ \(2022\), Electricity Networks Strategic Framework: Enabling a secure, net zero energy system, Appendix 1: Electricity Networks Modelling, section 2.1](#)

⁶ [DESNZ Analysis Calculated based on transmission network project length data provided by the three Transmission Owners.](#)

⁷ [DESNZ, Electricity Networks Commissioner: companion report findings and recommendations](#)

⁸ Ibid

⁹ [Department for Energy Security and Net Zero \(2023\), Community benefits for electricity transmission network infrastructure](#)

¹⁰ Ibid

Research Objectives

This research aims to improve understanding of communities' views and preferences towards transmission infrastructure and measures that can be taken to improve acceptability including community benefits. In turn this will inform the development of community benefits and other policies relating to community acceptability of transmission infrastructure. The core objectives of this project are:

- To understand communities' views and preferences towards transmission infrastructure.
- To understand communities' views and preferences towards community benefits.
- To explore how different approaches to community benefits schemes could affect community acceptability of transmission infrastructure projects across different groups.

Methodology

The Department for Energy Security and Net Zero (DESNZ) commissioned BMG Research as an independent contractor to deliver this project. This was a mixed-methods study comprising a quantitative and qualitative phase:

- Quantitative: Survey of members of the public in three case study areas (n=2359)
- Qualitative: Three deliberative workshops with members of the public. One workshop per area with 11-12 participants each.

The fieldwork for both phases was conducted between July and September of 2023.

Use of case study approach

This study used a case study approach of areas where electricity network transmission infrastructure projects are proposed. The case studies aimed to cover a variety of infrastructure project types, regions, geographies, and demographics.

Potential infrastructure projects in scope of the research were included in the project brief and were used to identify case study areas to sample. The potential projects in scope met the following criteria which was set by DESNZ:

- Classified as an “HND essential option” in the “Network Options Assessment (NOA) 2021/22 Refresh”.¹¹
- Projects are new infrastructure. Those which only involve changes to existing infrastructure, such as line reinforcements or developing existing substations, are not within scope.
- The initial brief was for projects in England only, but this was subsequently expanded to Scotland.
- The three case studies selected collaboratively by BMG and DESNZ were:
 - Lincolnshire County
 - Inverness/Keith (including Keith and Cullen, Speyside Glenlivet, Forres, Nairn and Cawdor, Aird and Loch Ness, and all Inverness wards)
 - East Suffolk, Dover, and Thanet local authorities

In these case study areas there are proposals for transmission infrastructure projects classified as essential by the National Grid Electricity System Operator to enable the Government's 2030 offshore wind ambitions.¹² The proposals also meet the additional criteria set out above.

¹¹ [National Grid ESO \(2022\), NOA 2021/22 Refresh](#)

¹² Classified as an “HND essential option” in the [NOA 2021/22 Refresh](#). For more information on the profile of the three areas, see the methodology section

Throughout this report, these three areas are referred to as “Lincolnshire”, “Inverness/Keith”, and “East Suffolk/Thanet/Dover” as a shorthand for readability. Further information on the process and rationale for selecting these case studies can found in the technical report.

Quantitative approach

Fieldwork for the survey took place using a primarily push-to-web methodology whereby selected addresses from the case study areas were sent letters through the post which invited them to take part in the survey online. This approach was designed to achieve 95% of the target sample (1,800 of the 1,890 interviews).

A secondary approach used a face-to-face methodology whereby respondents were interviewed on the doorstep with the interviewer recording answers onto an interactive version of the survey on a tablet device. This was designed to achieve the remaining 5% of the target sample (90 of the 1,890 interviews). This approach promoted participation among digitally excluded groups.

These two methodologies achieved a sufficient number of responses to deliver the required sample. However, poor response rates amongst respondents aged 16-34 meant that the sample was not representative of the local populations. As a result, a third online panel¹³ and river sampling¹⁴ methodology was introduced towards the end of the fieldwork. This involved specifically targeting younger respondents via panel providers and river sampling whereby respondents are sourced through the purchase of mailing databases. This achieved 324 additional surveys.

In total BMG Research surveyed 2,359 adults, aged 16+ between July 13th and August 22nd 2023. This was carried out across the three case study areas across the UK with between 725 and 841 completions per area. Participants took approximately 20 minutes on average to complete the survey.

Monitoring quotas were set (sourced from Census 2021 or Defra’s urban/rural designation) within each chosen area so that each could be monitored for how representative the sample collected was by age, gender, housing tenure, and rurality.

After fieldwork, weights were also applied to the data so that it was representative of the three individual areas by age, gender, housing tenure, and rurality. Finally, a weight was applied to each area so that it accounted for a third of the total project sample.

Further details of the sampling frame, research methodology, weighting procedures, and reporting are outlined in the technical report for this project.

¹³ An online panel is a collection of people who are willing to participate in surveys and provide feedback on a given topic. These people will be pre-screened and profiled, allowing specific targeting of appropriate respondents based on their location or demographics.

¹⁴ River sampling is an online sampling method that recruits respondents by inviting them to the survey either from a publicly available mailing list, or through recruiting them while they are doing some other online activity.

Qualitative approach

To allow for further exploration of key themes that emerged through the quantitative phase, three half-day workshops were held, one in each of the three areas sampled in the quantitative phase. Workshops were all held in September 2023.

These workshops consisted of 11-12 participants each, sampled from a mixture of those who had taken part in the quantitative phase, and those recruited specifically for the workshop itself.¹⁵ Quotas were applied to recruitment to ensure that there was a balance of participants based on age, gender, education, and their views of infrastructure. Table 1 below details these targets.

Table 1: Workshop target quotas

Demographic	Quota set
Age - 16-34	3
Age - 35-54	4
Age - 55+	5
Gender - Male	6
Gender - Female	6
Education - Degree or above	5
Education - Below degree qualification	5
Education - No qualification	2
View of Infrastructure - Very acceptable	1
View of Infrastructure - Somewhat acceptable	2
View of Infrastructure - Neither	6
View of Infrastructure - Somewhat unacceptable	2
View of Infrastructure - Very unacceptable	1

¹⁵ 12 community members participated in each of Inverness/Keith and Lincolnshire County workshops, and 11 in the East Suffolk/Dover/Thanet workshop.

These quotas were achieved across all workshops. More information on how the quotas were set is included in the technical report.

Workshops were conducted face-to-face in a community venue at a convenient location within each area. The workshops were structured to combine whole-group sessions and breakout groups.

The workshop format allowed for the inclusion of visual stimulus materials to explain transmission infrastructure projects and community benefits to participants, informing their discussions and idea generation. The workshops were recorded using portable dictaphones with participants' consent, responses to the tasks were collected by moderators on flipcharts, and moderators wrote up detailed notes after each workshop. After all workshops had been completed, an analysis meeting was held and findings were written up by the lead qualitative researcher in answer to the project objectives. Both the moderators' notes and the recordings were used to inform and check the written analysis. Verbatim quotes were transcribed from the recordings by the lead researcher to illustrate participants' responses, where appropriate.

Notes on statistical significance

Where significant differences between sub-groups and the total sample are identified, 'total sample' represents the total sample minus the sub-group in question.

Significance differences are calculated at a 95% confidence level. Only where a difference is statistically significant is it discussed in the report analysis.

Limitations and interpretation

There are a number of potential limitations to this research design as with all research approaches. Some specific limitations to this project for consideration when interpreting results are discussed below.

The study approach means that survey data is representative only of the communities surveyed, rather than the population of Great Britain. However, it was felt more beneficial to focus on communities who may be impacted by new transmission infrastructure in the future. It is possible that different case studies could have yielded different results, however across the case studies included, high-level conclusions were consistent. Therefore, data should be interpreted as representative of the three case study areas only and providing indicative insights more broadly.

It was not possible to achieve sufficient responses from younger groups without the introduction of the online panel and river sampled participants. Whilst this introduced a non-probability sampling element to the sample, the majority of respondents (86%) were recruited via the random probability sample. Without this there would not have been enough responses from younger age groups to conduct meaningful analysis; this was felt more important than the purity of the sample.

Hypothetical scenarios were used to assess acceptability alongside example images and high-level information about different types of infrastructure. It is possible that in the context of real projects people may respond differently, however significant effort was taken to ensure participants could provide informed responses. This included engagement with experts to design research materials, cognitive testing and piloting.

Communities' views and preferences towards transmission infrastructure

This section summarises research findings relating to communities' views and preferences towards transmission infrastructure.

Summary

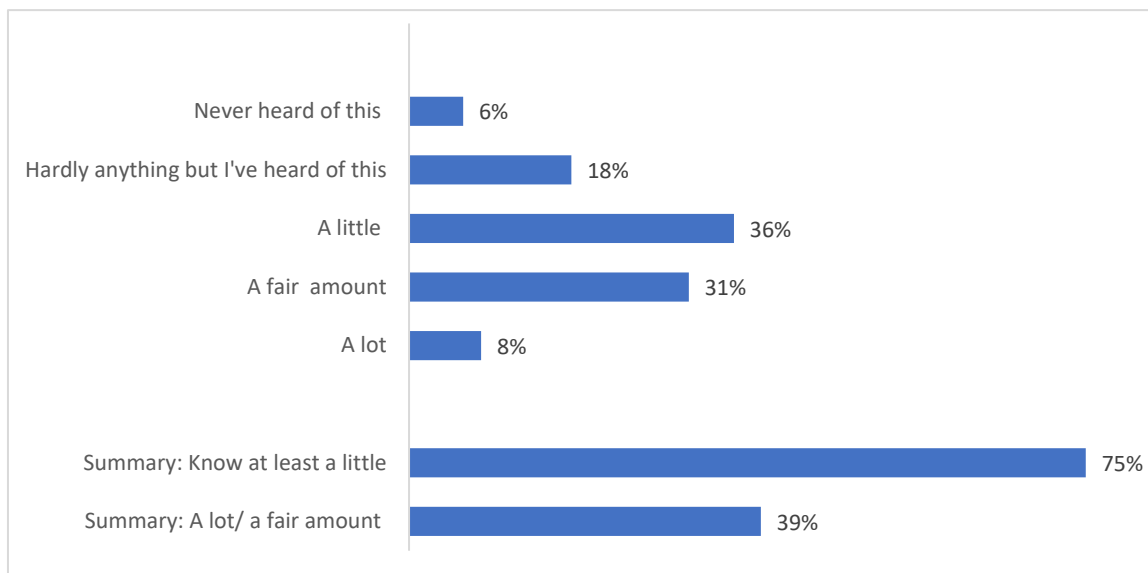
- Three in four (75%) respondents reported knowing at least a little about electricity networks.
- Recognition of lattice pylons and substations was high (91% and 89% respectively) with recognition of T-pylons being a lot lower (41%).
- 88% had heard about the need to build more transmission infrastructure as part of the UK's transition to low-carbon and renewable energy. However, less than a third (31%) stated they know a lot or a fair amount.
- 49% said they would find the construction of hypothetical new transmission infrastructure in their local area acceptable. The main reason reported was that it would help deliver more electricity to meet increasing demand.
- 32% said they would find the construction of hypothetical new transmission infrastructure in their local area unacceptable. The main reason reported was concern that it would impact their view.
- Over half (51%) found a T-pylon more acceptable in their local area than a lattice pylon.
- Acceptability increased if overhead powerlines were moved underground or offshore (74% and 69% respectively) but support for moving powerlines underground or offshore decreased significantly when informed of the potential environmental effects.
- 58% were willing to add up to £1 per month to fund alternative transmission infrastructure (e.g. T-pylons, underground and subsea cables). However, 34% reported no costs should be added to bills for this.

Awareness of electricity networks and transmission infrastructure

Survey respondents were provided with a simple description of electricity networks and asked about the level of knowledge they held about electricity networks before participating in the survey¹⁶.

Three in four (75%) participants reported knowing at least a little about electricity networks before taking part in the survey, however, less than one in ten (8%) knew a lot. Levels of knowledge increased with age, with those aged 55+ significantly more likely to say they know a lot/ a fair amount (44%) compared to 16 to 34-year-olds (32%) and 35 to 54-year-olds (36%). There were no notable differences in levels of knowledge between the three case study areas sampled.

Figure 1: Levels of knowledge about electricity networks



Source: B1. Before today how much, if anything, did you know about electricity networks? Base: All respondents (2359)

While knowledge of electricity networks amongst respondents was relatively low, recognition of the specific transmission infrastructure was much higher¹⁷. Both lattice pylons (91%) and substations (89%) were widely recognised. T-pylons were less likely to be recognised with just two in five saying that they have seen them before (41%). It is important to note that T-pylons have only been energised in South West England which could explain the lack of recognition¹⁸.

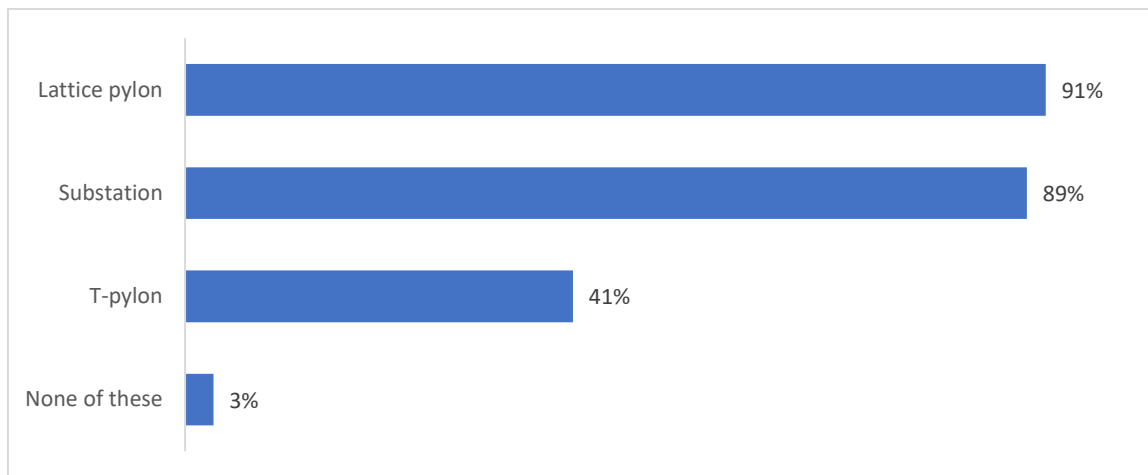
¹⁶ Electricity network description included in questionnaire: "Two types of electricity networks are used to move electricity around Great Britain. The 'transmission network' is used to transfer electricity at high voltages across long distances from sources such as wind farms and power stations, to regional substations. Regional substations reduce the voltage to the lower levels needed by the 'distribution networks', which carry electricity to homes, businesses and anywhere else using electricity. Together these form the electricity grid which is outlined in the diagram below."

¹⁷ Participants were shown images of lattice pylons, T-pylons and substations.

¹⁸ <https://www.nationalgrid.com/its-t-time-all-T-pylons-now-erected-hinkley-connection-project>

There were some differences across the three case study areas which could reflect how common different types of infrastructure are in different parts of Great Britain. Participants living in Inverness/Keith were more likely to recognise substations (93% vs. 88% East Suffolk/Thanet/Dover and 86% Lincoln) while those in Lincolnshire were more likely to recognise T-pylons than in the other areas (45% vs. 39% Inverness/Keith and 38% East Suffolk/Thanet/Dover).

Figure 2: Awareness of types of infrastructure



Source: B2. Please select those images where you recognise the infrastructure shown. Base: All respondents (2359)

Workshop insights

Workshop participants discussed their perceptions of existing transmission infrastructure. Generally, transmission infrastructure was accepted by workshop participants at its current levels because it was seen as necessary to ensure their electricity supply. Pylons were passively accepted as part of the visual background of daily life by participants. Many felt they did not often notice existing pylons because of their omnipresence. Workshop participants were less aware of substations and did not report noticing them regularly unless they lived near them.

“They’re [lattice pylons are] the sort of things you see but you don’t see because you see them every day.” (Female, East Suffolk/Thanet/Dover)

“The actual transmission infrastructure is something I’ve never given any thought to, it’s in the background and I just assume it’s going to work” (Male, Lincoln)

Participants in Inverness/Keith brought up the Beaully-Denny line running through the Cairngorms. Generally, this was discussed in a negative light, with participants referring to the pylons as unattractive “super” pylons. Some discussed how they believed that the natural beauty and environment of the national park was damaged by the infrastructure, at the expense of supplying Glasgow with power with no supply benefits to the Scottish Highlands.

Participant 1: “They’re super pylons.”

Participant 2: “There was a lot of resistance. They run through the Cairngorms National Park ... And they are bloody huge! When you see them at scale with hills around them, they don’t look so bad, but when you see them next to the original pylons, they’re huge.”

(Participant 1 and Participant 2 both male, Inverness/Keith)

Substations were not felt to be aesthetically appealing. However, screening substations in buildings or via landscaping measures (e.g. tree cover) was felt to be a positive and generally preferred to substations without screening measures. Participants wanted screening to be sensitive to the local area; buildings were seen to be more appropriate for urban centres and landscaping for more rural locations.

Awareness of plans to build new transmission infrastructure

Survey participants were asked whether they were aware of the need to build more transmission infrastructure across the UK as part of the UK’s transition to low carbon and renewable energy. While the majority (88%) had heard about this, less than a third (31%) claimed they know a lot/ a fair amount. Conversely, 12% of respondents admit to having never heard of this.

Those who are more likely to know a lot/ a fair amount:

- Those who own their homes outright (40%)
- Those in rural areas (38%)

Participants in the East Suffolk/Thanet/Dover and Inverness/Keith¹⁹ case study areas were asked specifically if they were aware of any plans to build new transmission infrastructure within a 15-minute walk from their home. The majority were unaware in both areas (83% East Suffolk/Thanet/Dover; 77% Inverness/Keith). In East Suffolk/Thanet/Dover 10% of participants were aware and a further 8% were unsure. Awareness was slightly higher among participants in Inverness/Keith (15%) with a further 7% unsure. These low levels of awareness are notable given proposals for a new High-Voltage Direct Current (HVDC) link between Suffolk and Kent²⁰ and a new 400 kV double circuit addition between Inverness/Keith²¹.

Workshop insights

Researchers provided workshop participants with an overview of electricity transmission network infrastructure, covering what this infrastructure is, what it looks like and what it is needed for. The overview included an explanation of the UK government’s plans to achieve net zero emissions by 2050 and to fully decarbonise the electricity system by 2035. Participants were informed of the role of transmission infrastructure in achieving these plans, including how

¹⁹ Lincolnshire was not included in this question because at the time of case study selection, formal project engagement and consultation had not started for all proposed infrastructure projects in the county.

²⁰ See project SCD1: <https://www.nationalgrideso.com/future-energy/pathway-2030-holistic-network-design/holistic-network-design-offshore-wind/our-interactive-map>

²¹ See project reference BBNC: <https://www.nationalgrideso.com/future-energy/pathway-2030-holistic-network-design/holistic-network-design-offshore-wind/our-interactive-map>

DESNZ analysis suggests approximately four times as much new transmission network infrastructure will be needed in the next seven years as was built since 1990.²²

Workshop participants were surprised that the need for new transmission infrastructure construction was so great and that there are forecasts that energy demand may more than double by 2050:

“I’d like to see what they’d base that assumption on, the doubling: is it development, energy consumption, electric cars?” (Male, Inverness/Keith)

Participants had limited prior understanding that constructing new transmission infrastructure is an important enabler for achieving Great Britain’s net zero targets. Participants tended to connect renewables and low carbon energy generation with net zero. This suggests a possible information gap that could be resolved through messaging and public information campaigns.

“[The government] needs to justify it [network transmission infrastructure projects] to people and it clear to everyone why it needs to be done ...to help people understand why it has to happen.” (Male participant, East Suffolk/Thanet/Dover)

The targets of 2035 for fully decarbonising the electricity system in Great Britain and 2050 for net zero emissions were seen to be unrealistic by some.

Participant 1: “I’m not sure about ‘net zero’ ...”

Participant 2: “They want to get rid of carbon emissions from fossil fuels before 2035, and it’s 2023 so it doesn’t seem possible.”

(Participant 1 and Participant 2 both female, East Suffolk/Thanet/Dover)

Some participants were also unsure of the concepts of “decarbonised” and “net zero”. They were generally understood as relating to “environmentally friendly” approaches but the specifics such as how these concepts relate to carbon emissions were not widely understood. For example, when discussing decarbonisation of the energy system some participants did not immediately associate the use of coal and gas-fired power stations as contributing to carbon emissions.

“I didn’t realise they meant [by ‘decarbonised’] we’ll not using gas-fired power stations anymore, because that’s madness to me.” (Female, Inverness/Keith)

That being said, Russia’s invasion of Ukraine meant that participants were more aware of the UK’s vulnerability to volatile energy market prices and supply. Participants discussed the need for greater energy security in response to the need for new transmission network infrastructure. Energy security was seen as important and was also expected to reduce the cost to households, as well as to prevent power cuts.

²²https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1175647/electricity-networks-commissioner-companion-report.pdf

“It’s got to come from somewhere and the UK needs to be more self-sustaining. And unpopular as it is my view is, we need to do whatever we need to have electricity, I don’t really agree with this net zero target.” (Female, Lincoln)

“Is there a means to [not use] gas so that we’re not reliant on the politics of China and Russia?” (Female, Inverness/Keith)

“Energy security means we don’t have to rely on other countries for [energy] generation.” (Male participant, East Suffolk/Thanet/Dover)

Acceptability of hypothetical new transmission infrastructure

The survey aimed to understand the acceptability of new transmission infrastructure projects in participants’ local areas using a hypothetical scenario, in which participants were asked to imagine that there were plans for a new substation or lattice pylons to be constructed within a 15-minute walk of their home.²³ Survey respondents were randomly split into two groups and shown an image (see below) of either a substation or a lattice pylon.

Image 1: Substation



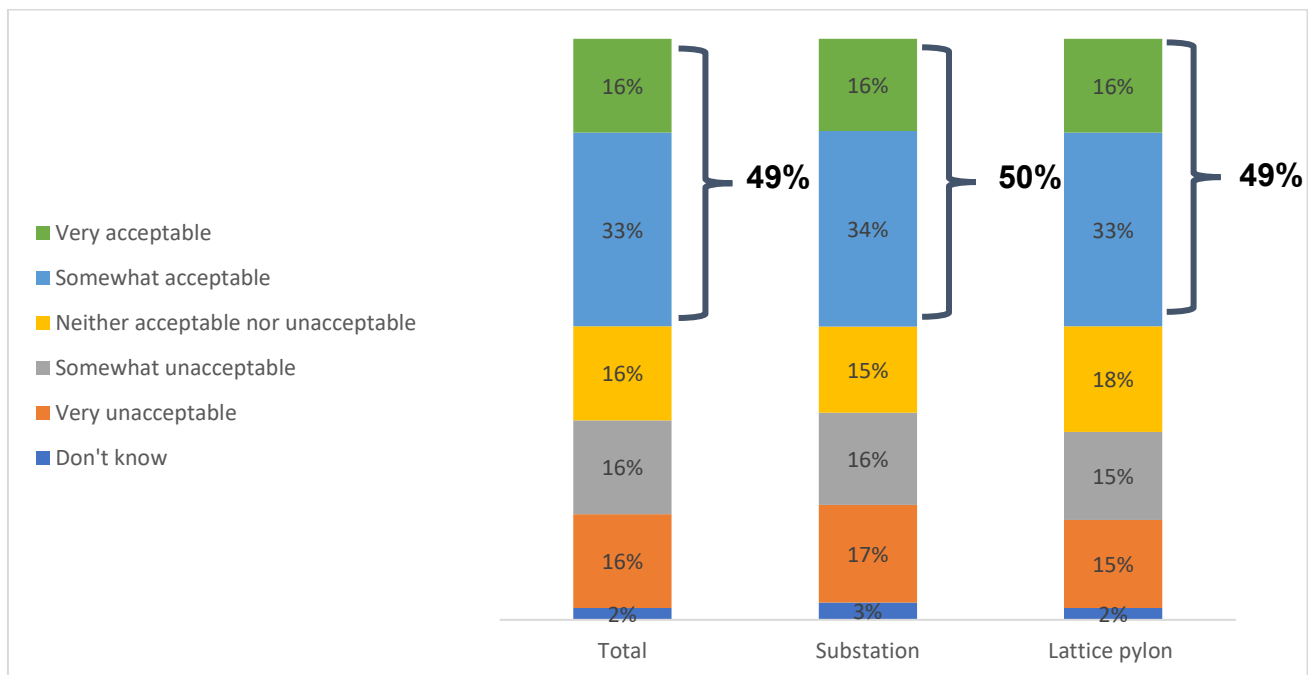
²³ Full question including the scenario: “Now imagine that there are plans for a new substation/lattice pylons to be constructed within a 15-minute walk from your home. This would look like the substation/ pylons shown in the photo below. In this scenario imagine you cannot see the new infrastructure from your home; however, you live near enough that you see it often when out and about in your local area. During construction, imagine you experienced some short-term impacts including some noise, road closures and increased traffic from construction vehicles. How acceptable or unacceptable would you find this being built within a 15-minute walk from your home?”

Image 2: Lattice pylons



Around half (49%) of the survey respondents reported that the hypothetical infrastructure would be acceptable, with little difference between a substation (50%) and lattice pylons (49%). Around three in ten reported that hypothetical plans for a new substation (33%) or lattice pylons (30%) would be unacceptable (Figure 3).

Figure 3: Acceptability of building a substation or a Lattice pylon



Source: C1a/ C1b How acceptable or unacceptable would you find this being built within a 15-minute walk from your home? Base: Set A- Substation (1166). Set B- Lattice Pylon (1193)

Given the limited differences between acceptability for participants in the substation and lattice pylon groups, the following section discusses pooled results.

The survey data suggests a relationship between age and acceptability. Participants in the 55+ age group (39%) were significantly more likely to report that either a new substation or new lattice pylons in their local area would be unacceptable, than 16-34s (21%) and 35s-54s (27%).

Participants living in rural areas (34%) were also significantly more likely than participants living in urban areas (30%) to report that new infrastructure would be unacceptable. Those who own their homes outright were significantly more likely to report that new infrastructure would be unacceptable (35%), compared to renters (30%) and mortgage holders (28%), though some of this difference could be driven by high proportions of older people owning their home outright.

There were also some differences in acceptability based on awareness of transmission infrastructure and community benefits. Participants reporting at least a little prior knowledge of the need for more transmission infrastructure were more likely to report new local infrastructure would be acceptable (53%) compared to those who had never heard of this (40%).²⁴ Those who had never heard of community benefits schemes were significantly less likely to report that new local infrastructure would be acceptable (44%) than those who had heard of them (54%).

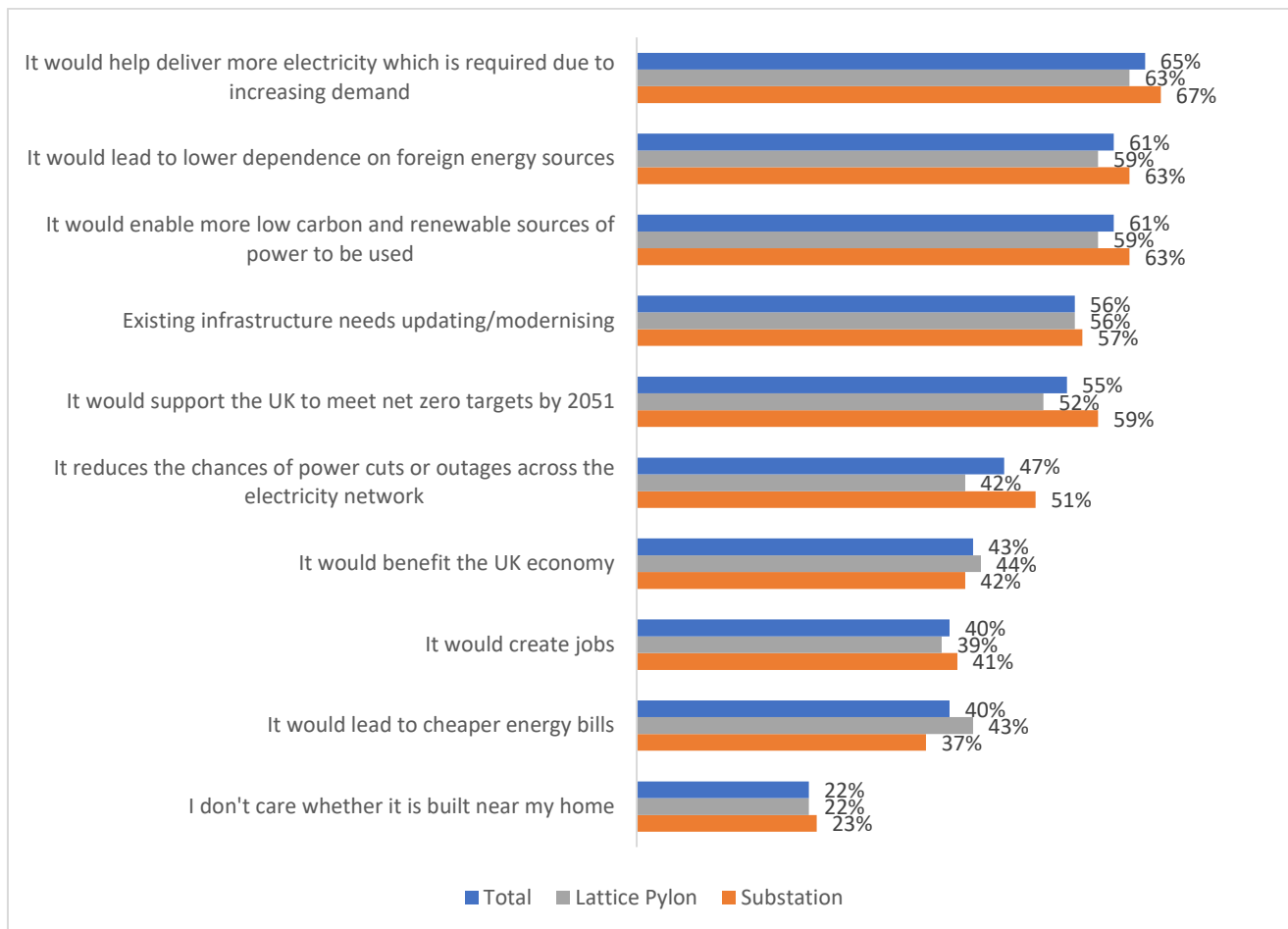
Drivers of acceptability or unacceptability

Having ascertained whether respondents found infrastructure acceptable or unacceptable, the study then explored the reasons why respondents held their views of hypothetical new transmission infrastructure in their local area.

Among those surveyed, the top reason why the infrastructure was seen as acceptable was that it will help deliver more electricity to meet increasing demand (65%). This was followed by reducing dependence on foreign sources, and enabling more low-carbon and renewable sources of power (both at 61%). The least common reasons are 'it would create jobs' and 'it would lead to cheaper energy bills' at 40%.

²⁴ Note that whilst the differences are statistically significant, the never heard of this group sample size was relatively low.

Figure 4: Reasons why a substation or a lattice pylon is acceptable



Source: C2 You said you would find [SET A – a substation/SET B – lattice pylons] being built within a 15-minute walk from your home acceptable. Why is this? Base: All who support electricity network infrastructure to be built in the local area (1147) Not shown – “Don’t know” and “Other”

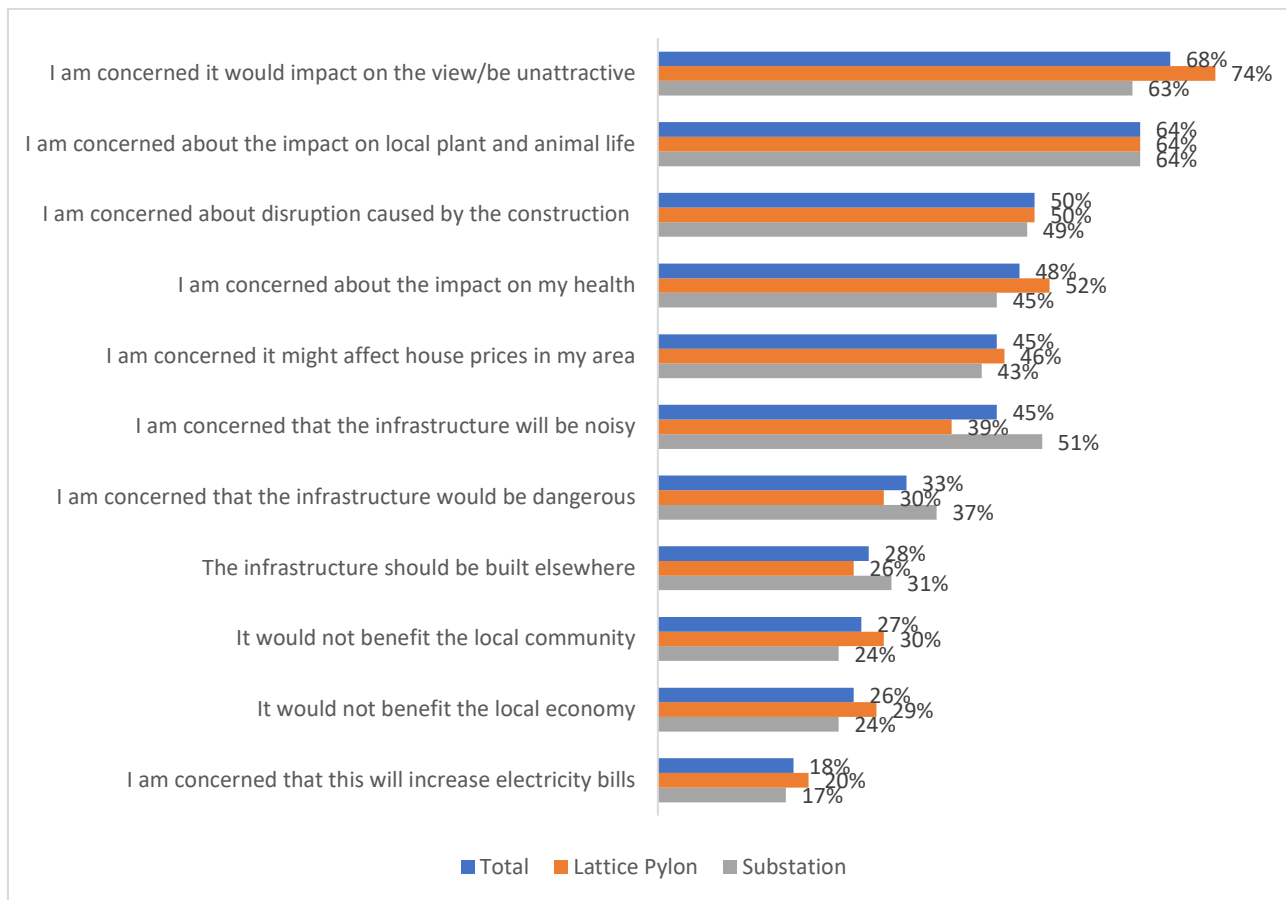
There were some differences in priorities between the youngest (16-34) and oldest age band (55+), with older respondents also selecting more reasons overall. Particularly notable was that reasons relating to renewable energy and net zero were more highly ranked for 16-34s than those 55+. Table 2 outlines the ranking for these groups.

Table 2: Ranking of reasons by age

Rank	16-34	55+
1	It would help deliver more electricity which is required due to increasing demand (59%)	It would help deliver more electricity which is required due to increasing demand (72%)
2	It would enable more low-carbon and renewable sources of power to be used (56%)	It would lead to lower dependence on foreign energy sources (70%)
3	It would support the UK to meet net-zero targets by 2050 (49%)	Existing infrastructure needs updating/modernising (67%)
4	It would lead to lower dependence on foreign energy sources (48%)	It would enable more low-carbon and renewable sources of power to be used (64%)
5	It would lead to cheaper energy bills (45%)	It would support the UK to meet net-zero targets by 2050 (59%)

Those who reported that a new hypothetical infrastructure project in their local area would be unacceptable were asked why they felt this way. The most common reason selected was that it would impact the view (68%). This was followed by concerns over plant and animal life (64%) and worries about the disruption caused by the construction (50%). Figure 5 summarises the frequency for different reasons respondents would find a new hypothetical project unacceptable.

Figure 5: Reasons why a substation or a lattice pylon is unacceptable



Source: C3 You said you would find [SET A – a substation/SET B – lattice pylons] being built within a 15-minute walk from your home unacceptable. Why is this? Base: All who oppose electricity network infrastructure to be built in the local area (783) Not shown – “Don’t know” and “Other”

There were some differences in reasons for finding hypothetical new transmission infrastructure unacceptable between respondents in urban and rural areas. Those in rural areas were significantly more likely to say they were concerned about:

- The impact on local plant and animal life (70% vs. 60% urban)
- It would not benefit the local economy (31% vs. 24% urban)

Whereas those in urban areas were significantly more likely to say were concerned about:

- The infrastructure being dangerous (37% vs. 27% rural)
- That it will increase electricity bills (21% vs. 15% rural).

Workshop insights: health concerns

Some workshop participants expressed concerns about the possible impact on health, specifically the effects of electromagnetic fields (EMF)²⁵ from both overhead and underground

²⁵ Regarding electromagnetic fields (EMFs), the balance of scientific evidence over several decades of research has not proven a causal link between EMFs and cancer or any other disease. The National Institute for Health

cabling. These participants were worried about the effect of EMF on people's physical and mental well-being, which they believed were negatively impacted by EMF. However, other participants dismissed these concerns.

The impact of information on acceptability

Having asked about initial views of infrastructure based only on a respondents existing knowledge, survey respondents were presented with the following information about the potential benefits and rationales for building transmission infrastructure, and were asked to what extent this information would make plans for hypothetical new local transmission infrastructure more or less acceptable:

“Analysis suggests that building more transmission infrastructure will help to:

- *Lower bills for consumers in the long term*
- *Support jobs through building and maintaining powerlines*
- *Increase energy security*
- *Enable the roll out of new renewable and low carbon energy sources*
- *Support the UK achieving net zero carbon emissions”*

Overall, 60% of respondents reported that this would help them find the project more acceptable in comparison to just 7% who would find it less acceptable. Introduction of this information also helped improve acceptability for 38% of respondents who originally reported new local transmission infrastructure would be unacceptable. Likewise, for those who were previously on the fence (those who found the building of local transmission infrastructure neither acceptable nor unacceptable), 53% reported this information would help them to find the infrastructure more acceptable.

Workshop insights

During the workshops participants were asked to discuss their thoughts on how information about new transmission network infrastructure should be communicated to the public. A common theme across the workshops was that there was a desire for more information to be shared around the potential benefits to households, businesses, and individuals as a result of the new transmission network infrastructure. It was also suggested across all workshop locations that this be communicated in plain and simple language, which participants felt could aid understanding and promote acceptance. More broadly, this also included explaining what “decarbonisation” and “net zero” mean, as well as the benefits to Great Britain. Participants also wanted to know more about why new transmission network infrastructure was needed in

Protection's Centre for Radiation, Chemical and Environmental Hazards, keeps under review emerging scientific research and studies that may link EMF exposure with various health problems and provides advice to the Department of Health and Social Care on the possible need for introducing further precautionary measures.

their area, suggesting that communicating needs for and benefits from infrastructure could drive greater acceptability.

Across the three workshops, participants expressed cynicism towards the intent behind building the transmission infrastructure, for example citing concerns about developers' profits and corrupt officials. People believe some corrupt officials grant permissions for large developments (including projects like transmission network infrastructure) for personal gain. Thus, while participants expected developers, energy suppliers, and government to inform them about new transmission network infrastructure, they did not trust them to tell them about new projects.

“You automatically don’t believe anything that comes from the government now” (Male participant, Lincolnshire)

“Not politicians. I don’t trust them, I don’t believe what they say, they lie and they’re so corrupt.” (Female, Inverness/Keith)

Instead, participants felt neutral parties were more trustworthy, such as scientists, engineers, prominent consumer champions, or TV personalities (Chris Packham and Martin Lewis were suggested). However, some participants remained sceptical of scientists and similar experts following COVID-19, who felt the pandemic was poorly communicated and handled.

“I don’t know who I would trust, because you hear ‘this is the science on COVID’ and obviously this didn’t work... This was the guidance given, with the masks and the jabs. I don’t think it worked... Sometimes the scientists are wrong.” (Male participant, Lincolnshire)

Participants noted possible employment opportunities such as local jobs, training, and apprenticeships should be communicated as benefits and were drivers of acceptability. However, across all workshops, participants disliked the idea of short-term employment to people from outside the area because it meant local communities and businesses did not receive the benefits.

Views towards alternative types of transmission infrastructure (T-pylons, underground and offshore cables)

This section discusses views towards alternative types of transmission infrastructure which are sometimes used as alternatives to overhead powerlines and lattice pylons. This included T-pylons, underground and offshore powerlines.

Survey respondents were shown an image (see image 3) of a lattice and a T-pylon and asked which they would find more acceptable if there were plans for new pylons within a 15-minute walk from their home.

Image 3: Lattice pylon (left), T-pylon (right)

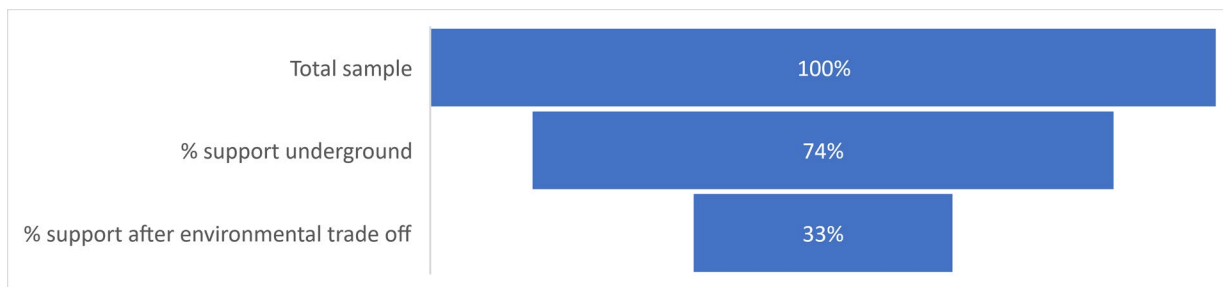


There was a preference for T-pylons, with half surveyed (51%) stating that a T-pylon would be more acceptable; this contrasts with 5% who reported a lattice pylon would be more acceptable. However, a large proportion (37%) reported no preference for either. The preference for T-pylons was also present for those who reported local infrastructure would be unacceptable: 49% of this group preferred T-pylons.

The survey showed an initial preference for moving overhead powerlines underground or offshore, however this diminished significantly after respondents were informed of the potential environmental impacts.

While three-quarters (74%) found plans to move overhead powerlines underground more acceptable initially, only one third (33%) still did when informed about the potential environmental impacts of this infrastructure.

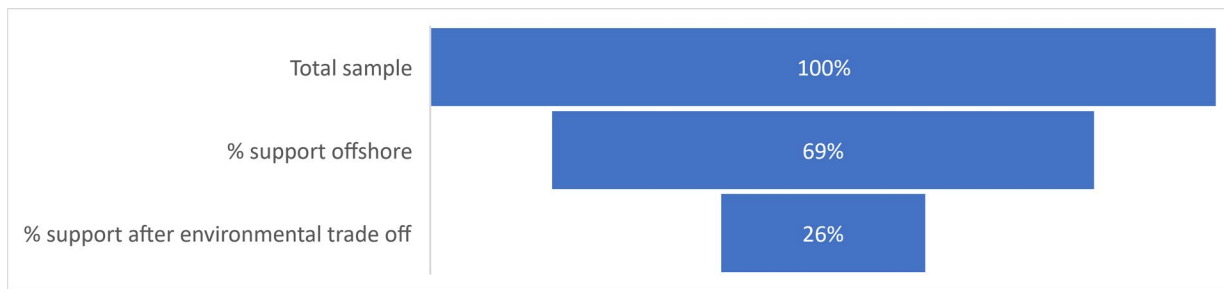
Figure 6: Support for underground infrastructure



Source: C7. If there were plans to construct lattice pylons carrying overhead powerlines within a 15-minute walk of your home, to what extent would the plans be more or less acceptable to you if the overhead powerlines were buried underground or moved offshore through subsea cabling? Base: all respondents (2359) C8/1 Powerlines buried underground can cause a greater loss of trees, shrubs, and hedgerows than overhead powerlines: Thinking about environmental impacts only, would you still find the plans for this infrastructure acceptable given the potential that...? Base: all who were supportive of underground powerlines (1768)

There is a similar pattern for offshore powerlines. Two-thirds (69%) initially found this infrastructure more acceptable, but when informed about the potential environmental impacts, only 26% of respondents still did.

Figure 7: Support for offshore infrastructure



Source: C7. If there were plans to construct lattice pylons carrying overhead powerlines within a 15-minute walk of your home, to what extent would the plans be more or less acceptable to you if the overhead powerlines were buried underground or moved offshore through subsea cabling? Base: all respondents (2359) C8.2 Powerlines moved offshore through subsea cabling can cause physical damage or loss of seabed habitats with possible implications for marine ecosystems including fish and mammals. (1665)

Those who initially opposed building local infrastructure were significantly more likely than average to report burying powerlines underground (82% vs 74%) or moving them offshore (80% vs 69%) would be more acceptable than overhead powerlines. Introduction of potential environmental impacts also diminished the preference for this group. After considering potential environmental impacts, 39% of those initially opposed to building local infrastructure had a preference for underground cables, and 31% had a preference for moving powerlines offshore.

For both underground and offshore options, there was a significant proportion of respondents who felt unable to say whether these alternatives to overhead powerlines were still preferable after being informed of potential environmental impacts. “Don’t know” responses were given by 20% of those who showed an initial preference for underground cables and 25% of those who showed an initial preference for offshore cables. This suggests that this group would require further information to make their decision.

Workshop insights

Workshops carried out after the survey were used to explore in greater detail how decisions about preferences for different types of transmission infrastructure are made and what factors are most important.

The size and scale of the transmission network infrastructure was highlighted as a factor affecting levels of acceptance. Many did not like the idea of large, visually intrusive transmission network infrastructure projects. Projects that have a smaller visual impact were more well-liked, for example, participants in Lincolnshire felt that a single pylon or a small substation would not impact the wider community significantly.

“Nobody wants eye-sores in the countryside.” (Male participant, East Suffolk/Thanet/Dover)

After initial perceptions were gathered on the different types of infrastructure (T-pylons, lattice pylons, substations, underground and subsea cables) workshop participants were presented with information to help them understand the size, cost, construction, and environmental

considerations for the different types of infrastructure. Participants particularly focused on the environmental and feasibility implications during their discussions.

Generally, T-pylons were felt to be more visually attractive than lattice pylons, with a less intrusive shape compared to lattice pylons. However, lattice pylons were generally seen to be commonplace and therefore accepted. T-pylons were perceived to be more environmentally responsible than lattice pylons due to being shorter and having a smaller footprint on land. The potential for T-pylons to require less concrete when being installed was also viewed positively.²⁶ However, participants in Inverness/Keith felt that they would not be appropriate for their area because of the hilly, windy landscape.

As was seen in the survey, initial preferences for underground and offshore cabling changed for many once environmental and cost implications were introduced. Workshop participants voiced concerns about the potential for ongoing monitoring and maintenance for underground cables, and the environmental implications if areas had to be dug up multiple times. Some participants also expressed concerns about “warming” of the soil from undergrounding believing this could negatively impact local wildlife, vegetation, and agriculture (note this was raised by workshop attendees and was not a risk covered in the briefing).

Across the workshops, there was some confusion around how offshore power reached people’s homes. For example, many participants had not considered the need for onshore transmission network infrastructure to connect offshore generation and cables to the mainland. Many also expressed concerns about damage to the seabed and sea life after they were made aware of these risks.

Are communities willing to pay for more acceptable infrastructure?

After survey participants were asked about whether they found alternative transmission infrastructure (T-pylons, underground and subsea cables) more acceptable than lattice pylons and overhead powerlines, and were informed of the potential environmental impacts, they were asked whether they would be willing to add to their electricity bills to fund these alternatives which may be more expensive. Note that participants were informed at this point that the cost of building and maintaining transmission network infrastructure is already paid for through electricity bills, with every household in Great Britain last year paying around £4 per month via their electricity bills towards these costs.

Almost six in ten (58%) of those surveyed were willing to add up to £1 per month to their monthly electricity bill to pay for alternative transmission infrastructure (T-pylons, underground and subsea cables), and a third (33%) were willing to add up to £5 per month. However, 34% were not willing to add any additional costs to their bills to fund alternative transmission infrastructure. Those who find building local infrastructure unacceptable were significantly more

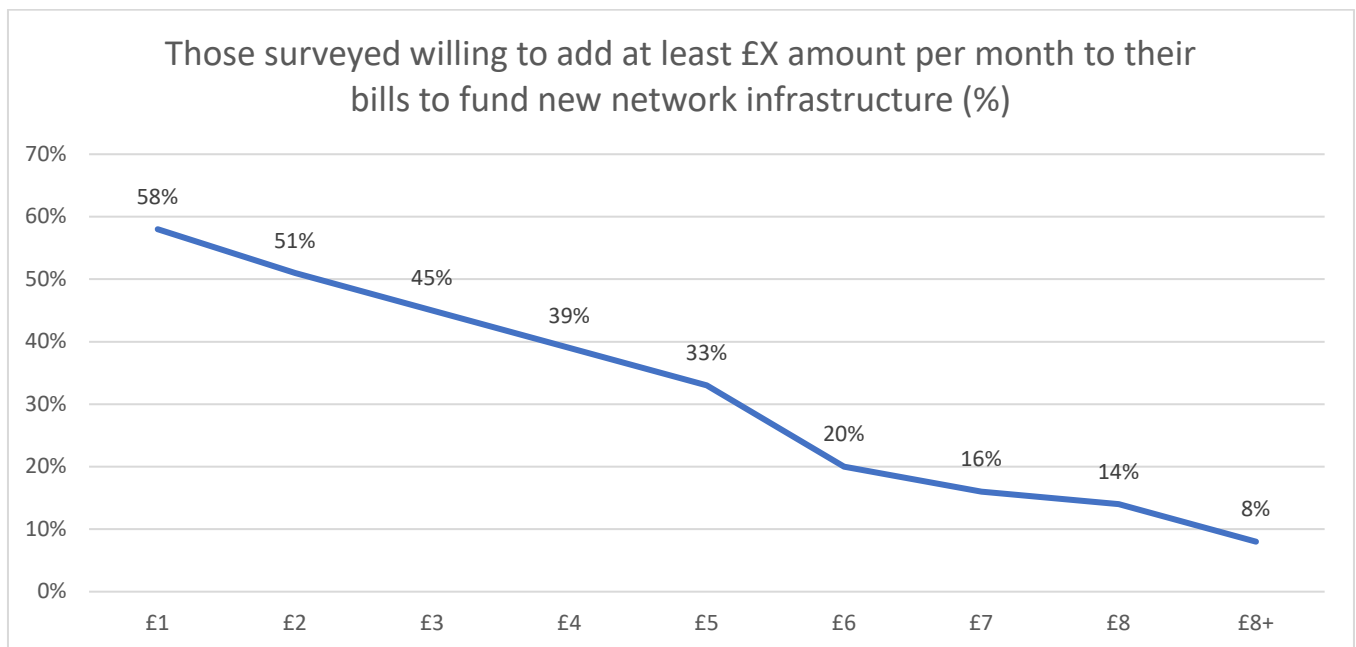
²⁶ Lattice pylons require 1.5 times the amount of concrete required from T-pylons, and three times as much land. <https://www.nationalgrid.com/stories/energy-explained/what-is-a-T-pylon>

likely to believe that no costs should be added to bills (42%). Differences were also evident for those who prefer a T-pylon to a lattice pylon. Those who had a preference for T-pylons were less likely to report that no costs should be added to bills (28%), than those who prefer lattice pylons (40%).

Those who had a preference for lines to be moved offshore were more likely to be willing for costs to be added to bills (62%) than those who did not have a preference for this (51%). There were no differences for those with or without a preference for underground cables.

Those who live in urban areas were also more likely to report no costs should be added to bills compared to those in rural areas (30% vs 37%).

Figure 8: How much respondents are willing to add to their electricity bills for t-pylons, underground or subsea cables



Source: C9. The cost of building and maintaining transmission network infrastructure is paid through electricity bills. In Great Britain last year, around £3.75 of every household's monthly electricity bill contributed towards these costs (equivalent to £45 per year). If T-pylons, underground and subsea cables were more expensive than overhead powerlines and lattice pylons to install, how much more would you be willing to pay as part of your monthly electricity bill to cover these extra costs? This would be on top of the £3.75 per month already paid and would be added to all electricity bills in Great Britain going forward, including yours.

Workshop insights

As part of the workshops, participants were informed that the costs of building and maintaining transmission network infrastructure are funded through electricity bills, with each household contributing around £4 per month as part of their electricity bill. There was limited awareness of this among workshop participants, with many surprised and having further questions such as whether transmission operators also receive subsidies from taxpayers. Participants requested greater transparency over the make-up of their energy bills and what it funds. Some suggested a breakdown should be included on their energy bills to help households understand how this money is spent.

“I’d never thought, it was very naïve of me, that I never knew some of the cost [of electricity] went to the infrastructure.” (Female, Lincoln)

Workshop participants were asked to discuss whether they would be willing to add to their electricity bills to fund the wider use of T-pylons, underground cables and subsea cables, which could be more expensive than lattice pylons and overhead cables. Some were willing to increase this from around £4 to £6, on the basis that these alternative types of infrastructure would lead to reduced environmental impact.²⁷ Others did not want to pay any more and felt that the current amount added to bills to fund transmission infrastructure was unacceptable and should be removed; the profit announcements by energy companies in the last 12 months were a common reason these costs were perceived to be unacceptable by participants.

It is important to note that participants conflated developers and energy suppliers throughout the research. In part this was because they pay energy suppliers for their electricity (and gas). Therefore, participants felt energy suppliers should be contributing to the construction and maintenance of transmission network infrastructure.

Community involvement in the planning process

The workshops explored participants’ understanding of the planning process for transmission infrastructure projects. Participants were asked about their prior awareness before they were provided with a brief overview of the key steps and asked for their reflections.²⁸ Most participants had not engaged with planning processes, and the few who had engaged with community consultations were generally unaware of the wider planning process.

Overall, the planning process for transmission network infrastructure was felt to be complex and with technical language that participants felt would make the process difficult to comprehend and engage with. Therefore, participants suggested that the language should be simplified to explain it more clearly to be understood by all members of the community.

“The language needs to be accessible to everybody, not full of jargon. Otherwise, they don’t know what they’re discussing or agreeing to.” (Female participant, East Suffolk/Thanet/Dover)

When reflecting on their perceptions of the processes, some perceived the planning process to be a box-ticking exercise, with the decision to build infrastructure pre-determined, therefore community consultation was superficial.

Considering what good practice planning processes would look like, many emphasised the need for meaningful consultation whereby communities feel they can represent their wishes. When asked what aspects of projects they would like to be consulted on, across the workshops the following aspects of projects were felt to be important:

²⁷ It should be noted that these alternatives do not necessarily lead to reduced environmental impact or may have different types of environmental impacts than lattice pylons and overhead pylons.

²⁸ The briefing was tailored for the workshops in England and Scotland to reflect the differences in the processes.

- The location
- The size
- The design
- Any associated community benefits

Participants were asked to share their views on how and by whom they should be consulted by. Across the workshops there was the view that consultations need to include both online forms and offline events, that are publicised widely, via local councils, energy suppliers (through bills), out-of-home campaigns, online social media campaigns, and through local media (newspapers, radio, TV). Some participants suggested direct mail consultation forms should also be used to ensure residents who may be digitally excluded, could also make their views known.

Participants also felt that it was important to receive an update after their involvement, such as an email and/or letter explaining the community views expressed and how these were taken into account in the planning process. This two-way communication drove perceptions of accountability, as well as acceptability of transmission network infrastructure because it felt like the community was more likely to be listened to if a response had to be provided.

Communities' views and preferences towards community benefits

This section looks at understanding communities' views and perceptions towards different community benefit approaches.

Summary

- Over half of respondents (57%) had heard of community benefit or schemes matching the definition.
- Respondents tended to lean more towards community schemes being flexible for each community, as well as them being mandatory rather than voluntary for developers to provide.
- 46% of respondents do not want to see costs added to bills to pay for community benefit schemes, which is higher than those who said they were not willing to pay for alternative forms of transmission network infrastructure (34%).
- Views on whether wider benefits or direct payments to households should be prioritised were mixed, with splitting evenly the most common preference.
- Respondents were most likely to agree that direct payments should include renters (65%) as well as businesses (60%) impacted by the infrastructure.
- Opinions were fairly mixed in terms of the distance that should apply for eligibility for community funds with around a fifth not knowing.
- Those experiencing the greatest impact once the infrastructure is built were the group of respondents most likely to say should be targeted for any community benefit.
- There was interest in being involved with the design of community benefits, in particular voting for projects that had applied for funding.

Awareness of community benefit schemes

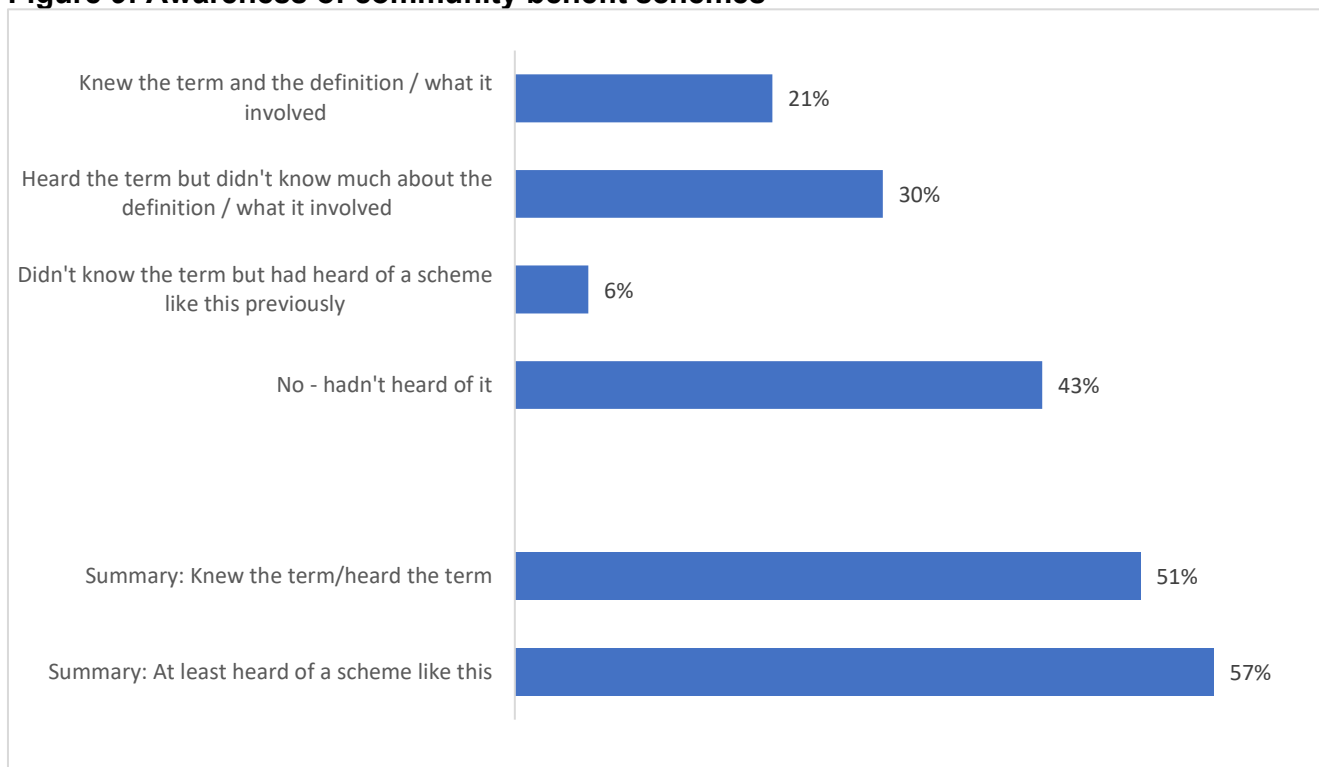
The survey was used to understand prior awareness of community benefits. Participants were provided with the following information and asked whether they had heard of them before participating in the survey:

“Community benefits can include funding for projects or initiatives decided by the local community to enhance the local economy, society and/or environment, or direct payments to individuals in a local area. It can also include funding that local groups can apply for to fund their own projects.”

Overall, 51% of those surveyed reported they recognised the term community benefits.²⁹ However, just 21% reported that they knew the term and what it involved. 43% reported they hadn't heard of community benefits at all.

Those living in Inverness/Keith were significantly more likely to be aware of the term (65%) than those in East Suffolk/Thanet/Dover and Lincolnshire (53% and 52% respectively). Workshop participants in Inverness/Keith demonstrated awareness of community benefits schemes related to nearby windfarms, suggesting the prevalence of other energy infrastructure projects in the surrounding areas may be driving this difference.

Figure 9: Awareness of community benefit schemes



Source: F1. Had you heard the term community benefits before taking this survey? Base: all respondents (2359)

Key design options: flexible or consistent; mandatory or voluntary

The survey explored preferences towards several key design options for community benefits, covering whether there are preferences for consistent or flexible approaches to community benefits, and whether there is a preference for community benefits to be a mandatory or voluntary requirement for transmission infrastructure developers to offer.³⁰

Survey respondents showed a preference towards community schemes being flexible and specifically designed for each community rather than a consistent approach for all transmission

²⁹ Total of those reporting they “knew the term and the definition/what it involved (21%) and those reporting they had “heard the term but didn’t know much about the definition/ what it involved (30%)

³⁰ Respondents were given opposing statements (on a 0 to 10 scale). A strong preference was classified as 0-3 (strong preference for consistent/ voluntary approach) or 7-10 (strong preference for flexible/mandatory).

infrastructure projects across Great Britain: 41% surveyed indicated a strong preference with a flexible approach, compared to 26% who showed a strong preference for a consistent approach.

Survey respondents showed a strong preference for community benefits schemes to be delivered on a mandatory rather than voluntary basis. Over half of respondents (53%) felt it should be mandatory for developers of transmission infrastructure projects to provide community benefits, compared to 12% who believed this should be voluntary.

Workshop insights

The workshops sought to understand in greater detail why there may be a preference for community benefits to be a mandatory requirement for transmission infrastructure projects. Workshop participants were informed that DESNZ had consulted on a voluntary guidance-based approach to delivering community benefits across Great Britain.³¹

The voluntary nature of the guidance was questioned by some participants, who felt that this meant developers of transmission infrastructure projects would not necessarily have to offer these. This meant that participants worried communities could end up hosting large transmission networks without receiving community benefits.

“What’s concerning me is the word ‘voluntary’, it should be mandatory.” (Female participant, East Suffolk/Thanet/Dover)

Whilst workshop participants felt that it was important to consult local communities and to build bespoke community benefits schemes, it was felt that implementing this would be challenging.

Workshop insights

To further understand preferences for how community benefits could be designed and delivered, workshop participants were asked to discuss views on potential principles which could be applied to community benefits schemes, and to provide suggestions on additional principles. The example principles presented were informed by previous research.³²

³¹ <https://www.gov.uk/government/consultations/community-benefits-for-electricity-transmission-network-infrastructure>

³² Department for Transport, ‘Understanding local attitudes and preferences towards a Community Compensation Fund’ (31 May 2019). <https://www.gov.uk/government/publications/community-compensation-fund-social-and-behavioural-research>

Table 3. List of principles described to workshop participants

Community benefits scheme possible principles	Description
Fairness	Everyone should receive the same amount of money
Equality	Those closest to the transmission infrastructure should receive more compensation than those furthest away
Immediacy	The scheme's impact should benefit people immediately
Longevity	The scheme's impact should benefit people over the long term, even if this means that people cannot feel benefits immediately
Democracy	The scheme's uses should be decided by members of the community
Delegation	The scheme's uses should be decided by the Council or another independent oversight body
Broad Scope	Making the scheme's benefits stretch as far as possible across projects and areas
Concentrated Scope	Targeting the scheme to specific, high-impact projects
Transparency	Commitment to publishing information about the scheme's funds and how they are being spent
Accountability	Mechanisms are in place to make sure the developer is accountable for the scheme

Across the workshops, longevity, transparency, and accountability resonated with participants. 'Integrity' was suggested as another principle, which was a blend of fairness (fairly allocated funds) and honesty.

"I think it's longevity for me ... Something that's permanent, long-lasting and not a quick fix."
(Male participant, Lincoln)

A common theme arising from the workshops was the importance of transparency and being able to demonstrate that community benefits were distributed appropriately and that decision-makers administering them can be trusted. Delegation was important to this, for example some participants suggested setting up committees who they felt could be trusted to make decisions. Participants could not reach a consensus on who should comprise these hypothetical

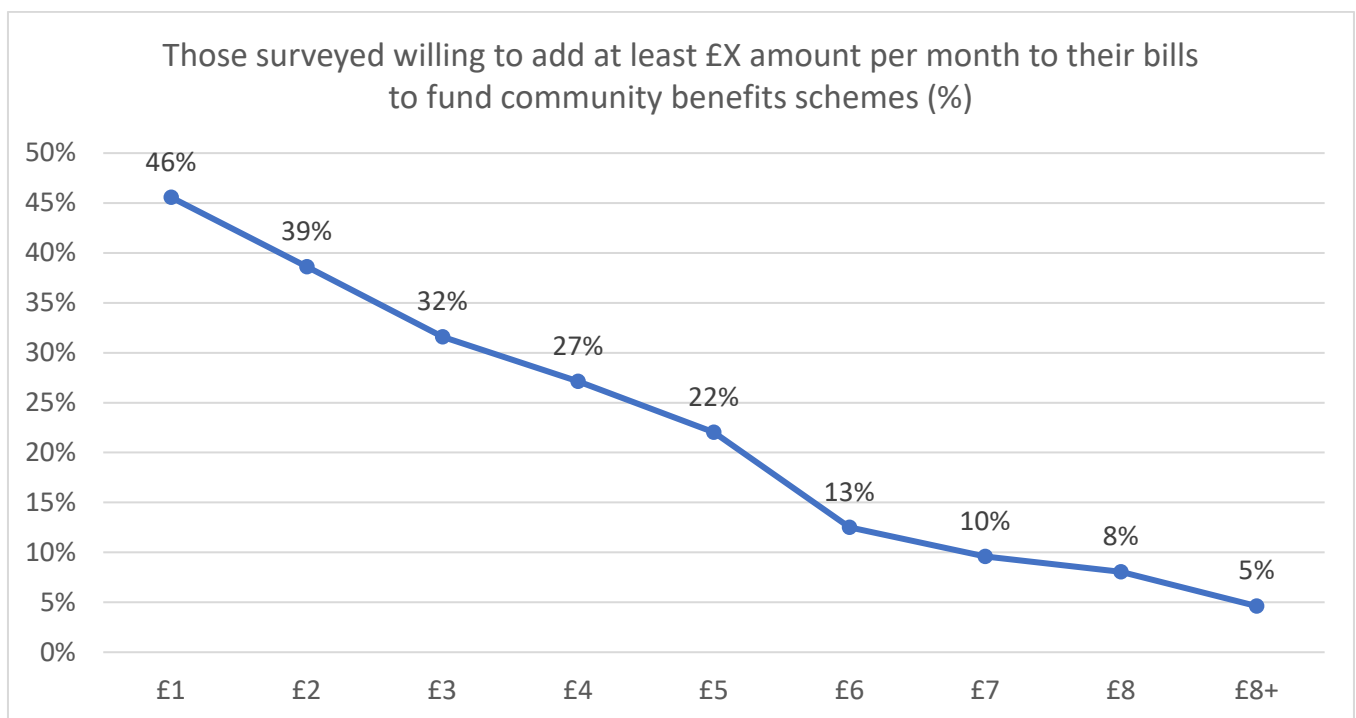
committees. Some felt the council should be responsible, others an independent committee of local stakeholders and community leaders. However, both scenarios were seen to be problematic and subject to possible bias or mismanagement. Additionally, some participants disagreed because they felt a committee would add another layer of bureaucracy.

“There’s transparency, ‘hey, this is where we screwed up and we’re fixing it’, and there’s integrity where you’re trying not to do that and not get caught in the first place.” (Female participant, Inverness/Keith)

Are communities willing to pay for community benefit schemes?

Almost half (46%) of those surveyed reported that they would not be willing to add additional costs to their electricity bills to fund community benefits schemes. This is higher than the proportion who said they were not willing to pay for alternative transmission infrastructure (T-pylons, underground cables and subsea cables) (34%). Overall, 46% of those surveyed reported they would be willing to add at least £1 per month to their electricity bill to fund community benefits, with the proportion reducing as the monthly level increases (Figure 10).

Figure 10: Amount respondents are willing to add to their bills monthly



Source: F5B. If electricity bills across Great Britain were to increase to pay for community benefit schemes in certain areas across the country, what is the maximum amount you would be willing to pay as part of your monthly electricity bill to fund community benefit schemes? Base: All respondents (2359)

Workshop insights

Participants were informed that funding for community benefits schemes would likely be funded through electricity bills, in a similar way to how the maintenance and construction of transmission infrastructure is funded.

Across the workshops this was highly controversial with many rejecting this approach. Many expected that the burden of funding community benefits should be on energy suppliers and/or developers. The profits of energy suppliers were cited as reasons why suppliers should be contributing to the community benefit schemes. The developers were also seen to be making money from the construction of the projects and thus should offset some of those profits to the affected communities.

“That doesn’t make any sense! Why would my electricity bill have anything to do with that? If the electricity companies gave x-amount then fine ...” (Female participant, Lincoln)

Participants believed that it was unfair for (some) household bill payers to essentially be paying for their own benefits schemes. Inverness/Keith participants in particular strongly rejected increases in household bills to fund community benefits. Prior to this most Inverness/Keith participants were accepting of electricity transmission infrastructure projects if they included appropriate community benefits schemes. However, afterwards, all participants rejected bill-funded community benefit schemes.

Should direct payments or community funds be prioritised?

The survey explored respondents’ preferences for how two key approaches to community benefits should be prioritised – wider benefits (e.g. community funds and investing in local facilities) or direct payments to local properties. Respondents were most likely to report that they should be split evenly (36%), however a slightly greater proportion reported that direct payments should be prioritised (30%) than those reporting wider benefits should be prioritised (23%). 11% reported they did not know.

There were a number of statistically significant differences between sub-groups reported below:

Groups more likely to prioritise direct payments compared to the overall sample (30%):

- Those who find the building of infrastructure unacceptable (37%)
- 16-34-year-olds (36%)
- Those in East Suffolk/Thanet/Dover (33%)

Groups more likely to prioritise wider benefits compared to the overall sample (23%):

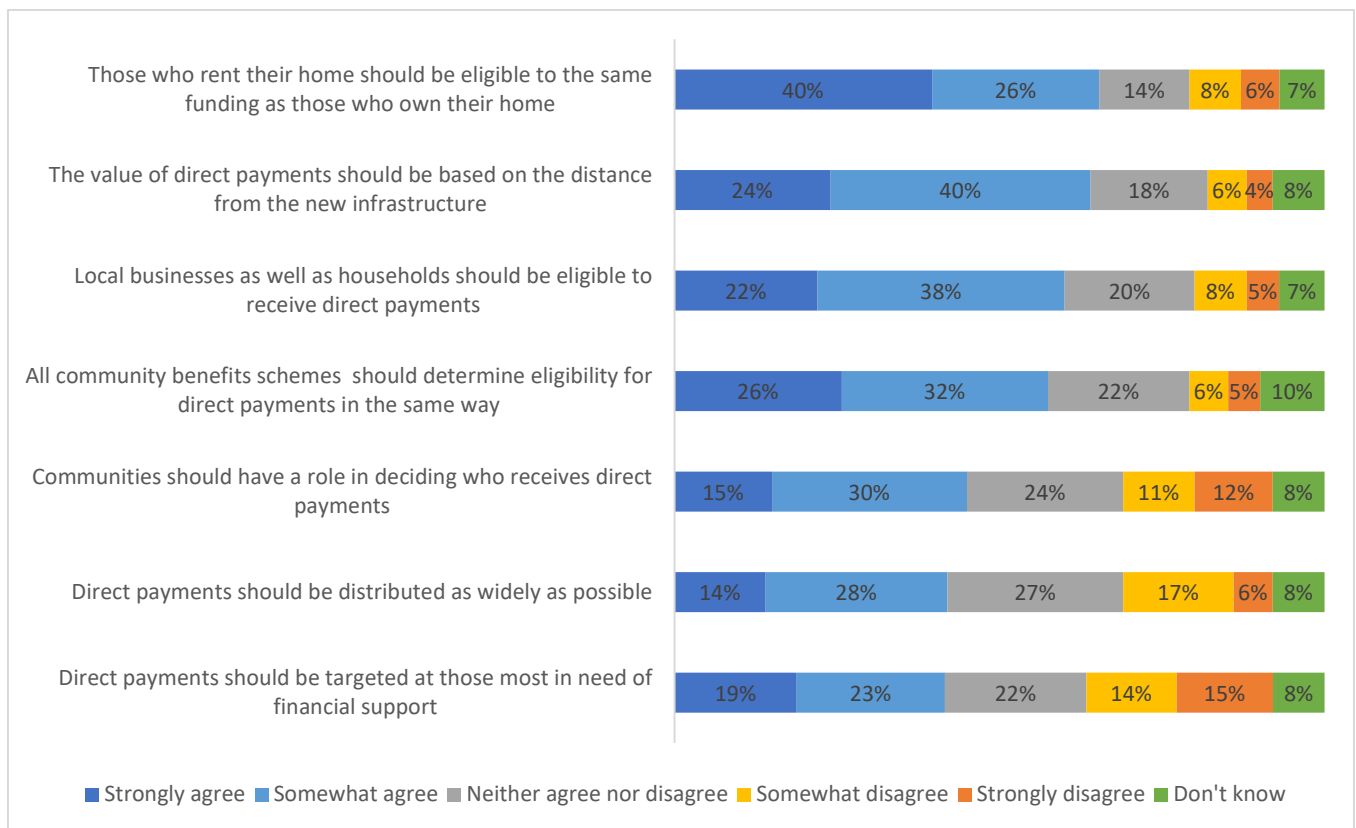
- Those with a household income above £60,000 (33%)
- Those who support the use of community benefits (33%)
- Those who find the building of infrastructure acceptable (29%)

There were no statistically significant differences between those who rent their homes and those who own them outright or via a mortgage.

Direct payment eligibility

Survey respondents' views towards the eligibility criteria for direct payments were explored. Respondents tended to agree that eligibility for payments should include anyone impacted by the development of infrastructure, including renters (65%) and businesses (60%). They were also likely to agree that the value should be based on the distance from the new infrastructure (63%).

Figure 11: Groups respondents think should be eligible for direct payments



Source: G1. To what extent do you agree or disagree with the following statements regarding direct payments?
 Base: All respondents (2359)

Further discussion on direct payment eligibility criteria based on residents' distance from infrastructure and the level of visual impacts is on page 54.

Workshop insights

Workshop participants struggled to reach a consensus on eligibility when the question of who should benefit in the event a property is rented versus owned. Participants in the group who owned a property believed that the owners should receive direct payments. This was because these participants felt the transmission infrastructure project would affect the property's value and resale opportunities. Other participants believed that renters should be eligible for a

percentage because the inhabitants of the property, no matter their owner/renter status, would be the ones who suffered the impact of construction disruption and any perceived negative health impacts.

Workshop participants felt that direct payments should be applied automatically to those eligible through their energy supplier connection because they believed their addresses already existed in these organisations’ systems. Participants struggled to distinguish between energy suppliers and developers, often conflating the two. Thus, participants expected that they should be automatically registered by the developers or energy suppliers.

Community fund eligibility

Survey participants were asked about their views on eligibility criteria for a hypothetical community fund set up as part of new transmission infrastructure projects. This covered views on what distance from new infrastructure should residents receive community funds and also which groups, if any, should benefit. When asked within how many miles of the infrastructure should the community funds be spent within, the mean distance provided by respondents was 4.8 miles. Over half (57%) of respondents reported that funds should be spent within 5 miles or less, whilst 20% reported funds should be spent within 6 or 10 miles.

Those surveyed in Inverness/Keith (50%) were less likely than those in East Suffolk/Thanet/Dover (58%) or Lincolnshire (64%) to report that funds should be spent within 5 miles or less – this may be driven by the geographic differences between the areas.

Table 4: Within how many miles of the infrastructure the funds should be spent

Distance	Total (%)	Lincolnshire (%)	East Suffolk/ Thanet/Dover (%)	Inverness/ Keith (%)
1 to 5 miles	57	64	58	50
6 to 10 miles	20	18	20	22
Don't know	19	17	20	22

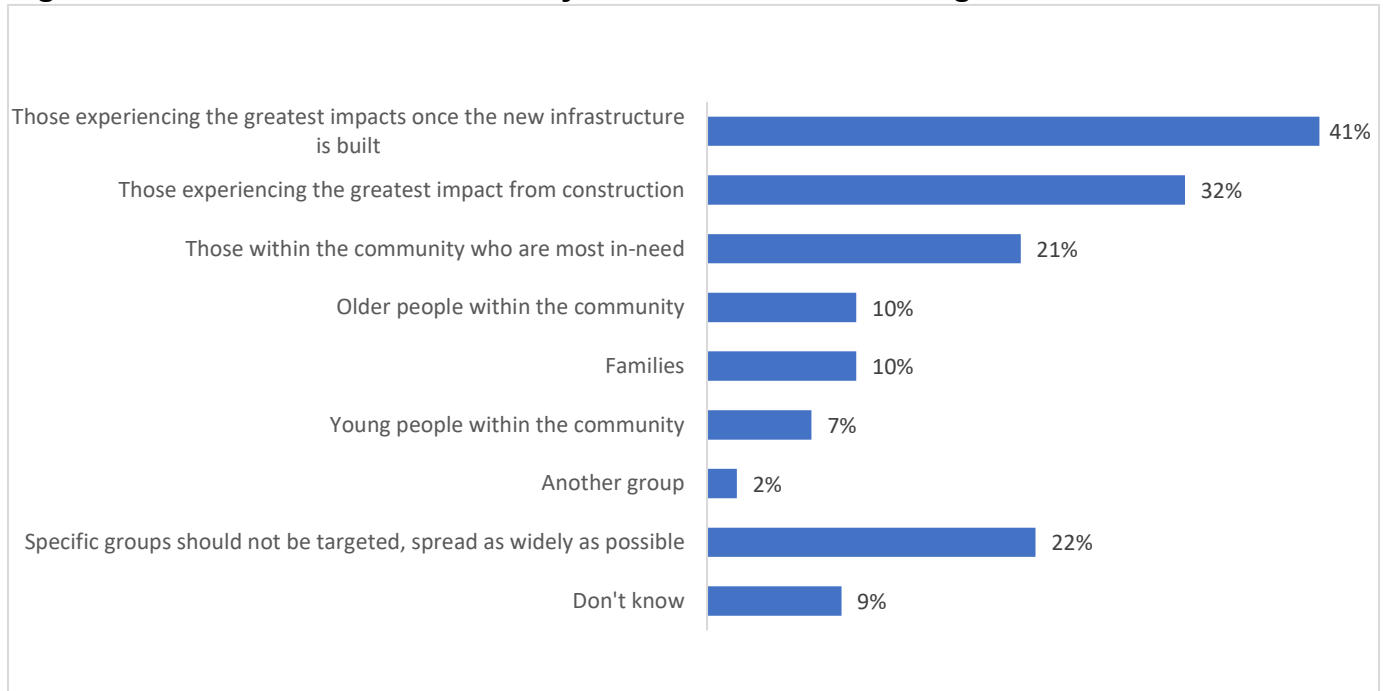
Source: G10A In the case of a community fund, within how many miles of the substation/lattice pylons should the funds be spent? Base: All respondents (2359).

When asked about which groups should be targeted within this area, respondents were most likely to report those experiencing the greatest impacts once the new infrastructure is built (41%) and during construction (32%). There was less support for spreading benefits as widely as possible (22%) or targeting specific groups based on needs (21%). Results are shown in Figure 12.

Whilst the top two groups that should be targeted remain the same for those who reported building new transmission infrastructure in their area was acceptable and unacceptable, those

accepting of infrastructure were more likely to want schemes to target those within the community who are most in need (27% vs. 21%) than those who said new transmission infrastructure would be unacceptable.

Figure 12: Sections of the community that funds should be targeted towards



Source: G10B Within this area, are there any specific groups that community benefit funding should be targeted?
 Base: All respondents (2359).

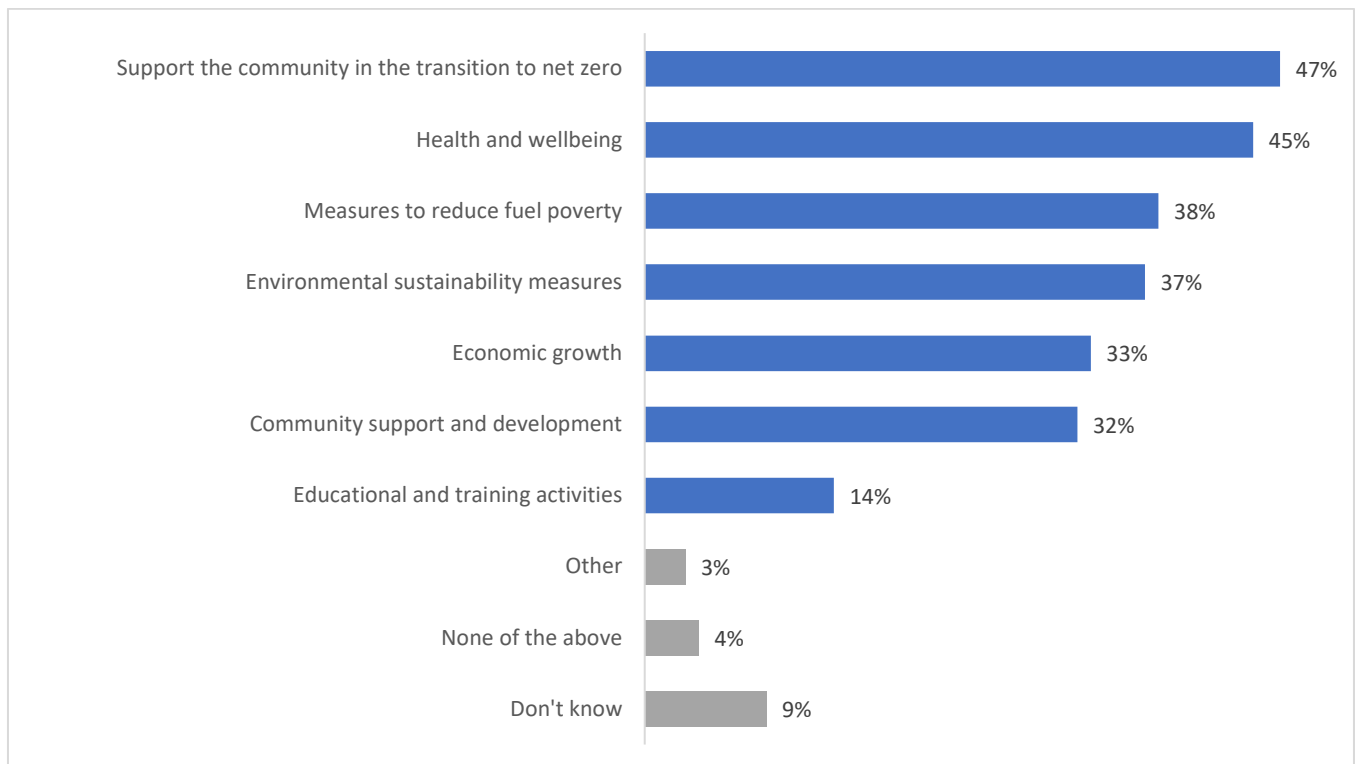
What objectives should community funds focus on?

Survey respondents were asked to select three objectives they would like a community fund to focus on if one was setup as part of a community benefit scheme for a new transmission infrastructure project in their area.

The most common option selected by participants was for the fund to support the community transition to net zero (47%). This was followed by health and wellbeing (45%), and measures to reduce fuel poverty (38%).

There were several differences between the three case studies. For example, those surveyed in Lincolnshire were more likely to prioritise community support and development (36%) than those in and Inverness/Keith (30%). Those surveyed in Inverness/Keith were more likely to prioritise health and wellbeing (47%) than those in East Suffolk/Thanet/Dover (41%) and those in Lincolnshire (42%). Those surveyed in Inverness/Keith were also more likely to prioritise measures to reduce fuel poverty (43%) than those in East Suffolk/Thanet/Dover (36%).

Figure 13: Objectives which community funds should be spent to achieve

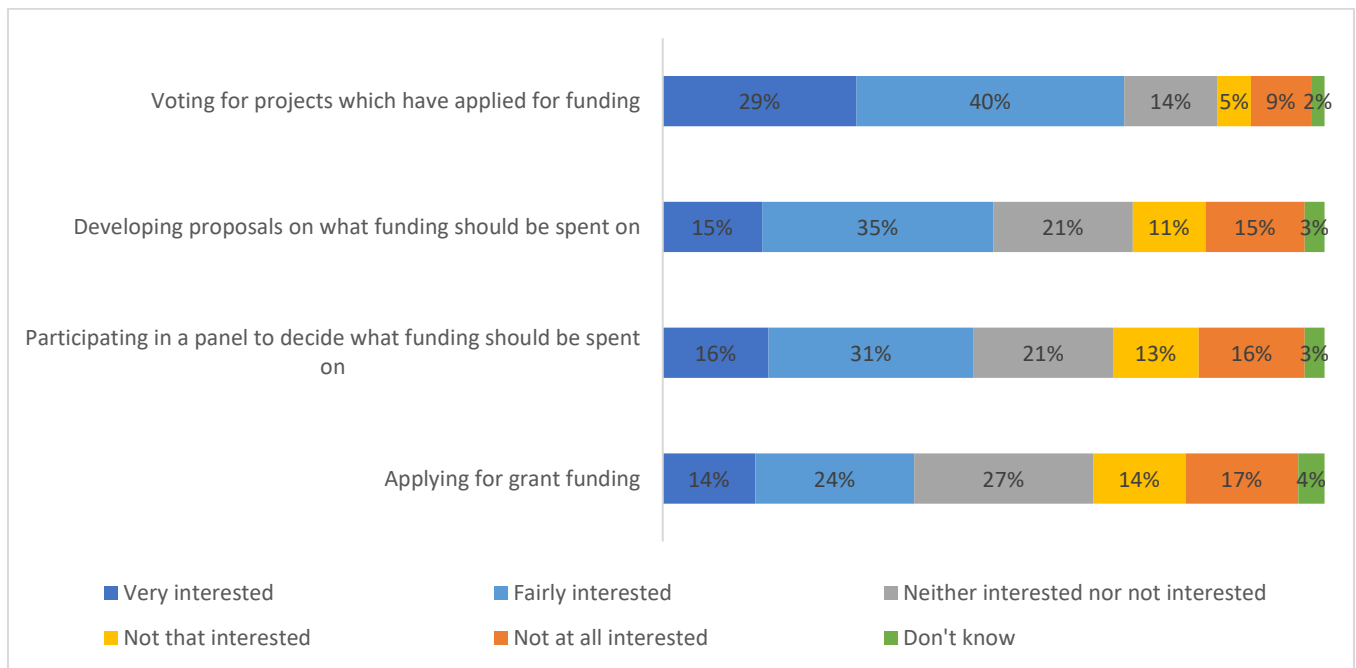


Source: G8a/b please select which 3 of the following objectives you would prefer the funds set out to achieve.
 Base: All respondents (2359).

How much interest is there in participating in developing and designing community benefit schemes?

Thinking about how they might get involved in schemes themselves, two-thirds (69%) of respondents reported they would be interested in voting for projects that have applied for funding, and half (50%) would want to be involved in developing proposals on what funding should be spent on. Slightly fewer (47%) were interested in participating on a panel to decide what funding should be spent on and 37% were interested in applying for grant funding. However, it should be noted that there is often over-claiming seen in questions of this nature, and actual participation is likely to be lower than this.

Figure 14: Interest in the design of community benefit schemes



Source: G11 How interested would you be in being involved in each of the following parts of a community benefits process in your area? Base: All who find a community benefit fund acceptable (1752).

Those surveyed who have a mortgage, and who live in rural areas were more likely to be interested in getting involved with community benefits schemes. For example, eight in ten (81%) of those who own their home with a mortgage were interested in voting for projects, compared to 66% of renters. Similarly, three-quarters (76%) of those who live in rural areas were interested in voting for projects compared with two thirds (66%) of those surveyed in urban areas.

Workshop insights

Workshop participants were asked for their views on how community funds should be administered, and how they can best meet communities’ needs.

There was an appetite for community involvement in selecting the projects that should receive money through community funds. This was because people wanted it to be suitable for the local community's needs. Environmentally-minded projects were well-liked, such as community gardens.

“I don’t want another community hall! We’ve got enough of those, thank you.” (Male participant, Inverness/Keith)

Across the workshops there was a desire for community funds to have a lasting legacy. People expressed concerns about how the projects would be administered and ensure that the funds did not end suddenly. There was uncertainty about how best to administer the funds, and participants were concerned that paying individuals to run the fund would take away from the total amount of money local groups could benefit from. Participants also highlight instances

where funding was either used up quicker than projected or where it ended suddenly, such as following the 2012 Olympics, leaving charitable groups with funding gaps.

“You need to ask what legacy will the fund be leaving? You need to make sure the legacy matches the [transmission network infrastructure project] impact.” (Female participant, East Suffolk/Thanet/Dover)

Some participants suggested existing funding application models such as the National Lottery or Tesco Community Grants would be appropriate ways for groups to access the community funds.

Some participants also wanted independent monitoring of the funds’ administration and recipients to ensure that funds were having an impact and to negate any possible misappropriation.

The impact of community benefits on infrastructure acceptability

This section explores to what extent evidence from this project suggested that community benefits could help increase the acceptability of transmission infrastructure.

Summary

- Over two-thirds (67%) of respondents supported the use of community benefits schemes as part of electricity transmission network infrastructure projects.
- Those who found building local electricity infrastructure unacceptable were more likely to oppose the use of community benefits (17% vs. 9% overall). For those that oppose them the most common reason was that this was seen as bribery (37% who oppose them stating this).
- Electricity bill discounts were identified as the type of community benefit that was able to help increase acceptance for a hypothetical new transmission infrastructure project for the most respondents (78%).
- This was followed by two-thirds (65%) saying the companies developing the infrastructure providing jobs, training, and apprenticeships for local residents to work in industry would make it more acceptable.
- Survey data suggests direct payments and community funds at the appropriate level could help increase acceptability, including among those who originally find new hypothetical transmission infrastructure projects unacceptable. However, there is likely a limit where further increases in the level of benefit lead to minimal further increases in acceptability.
- For both direct payments and wider benefits, those originally opposed to new transmission infrastructure were less likely than average to report these benefits would help them find transmission infrastructure more acceptable
- Around one in ten (6%-13%) respondents said no amount of direct payment or community funding would help them find the transmission infrastructure more acceptable across the scenarios tested.

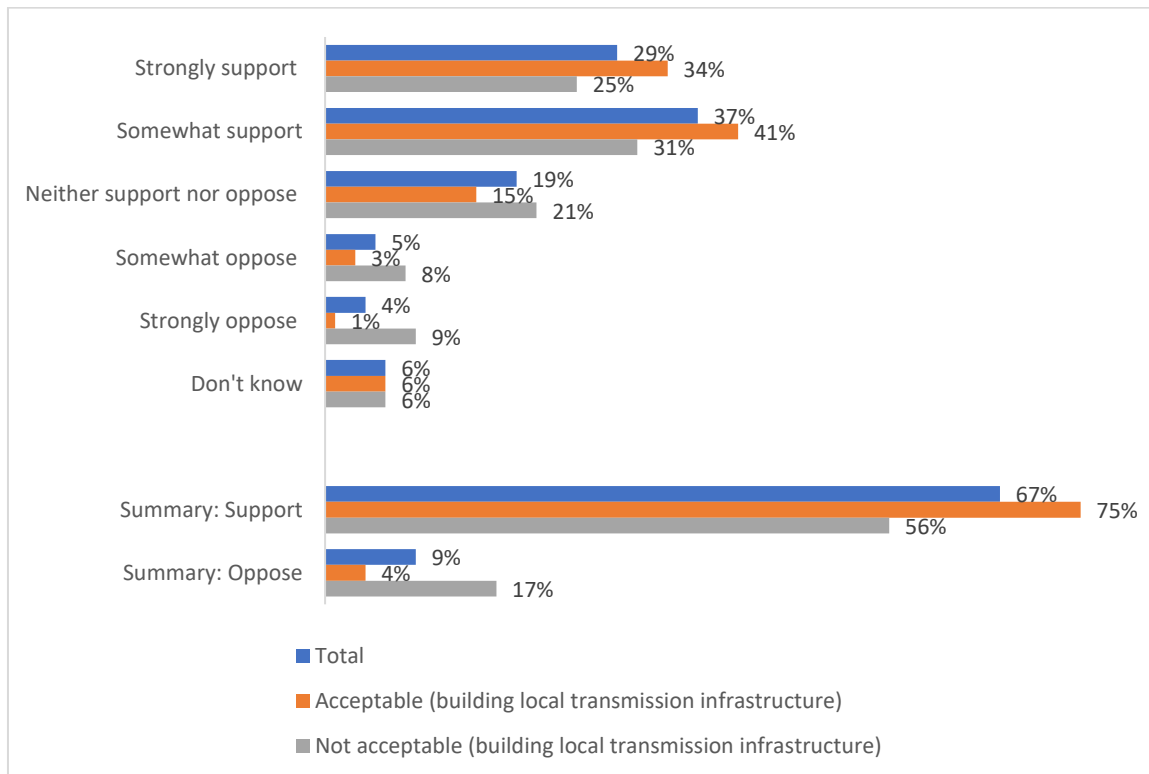
Support for use of community benefits

Respondents who had heard of the term community benefits were asked whether they supported or opposed the use of community benefits as part of transmission infrastructure

projects. Over two-thirds (67%) supported the use of community benefits with just 9% opposing the use of them. Close to a fifth (19%) neither supported nor opposed their use.

Those respondents who said the building of a hypothetical local transmission infrastructure project would be acceptable were significantly more likely to support the use of community benefits (75% vs. 56% who said not acceptable). Whereas those who said the building of local transmission infrastructure was not acceptable were significantly more likely to oppose the use of community benefits (17% vs. 4% who said acceptable).

Figure 15: Support for use of community benefits



Source: F2. Generally, do you support or oppose the use of community benefits as part of transmission infrastructure projects? Base: Those aware of community benefit schemes = 1204

Reasons for supporting and opposing community benefits

Survey respondents who reported they were aware of community benefits schemes and indicated that they supported or opposed their use (i.e. did not respond “don’t know”) were asked an open question about why they supported or opposed community benefits.

Reasons for supporting

Close to a third of those who were asked this question (30%) were unable to provide a particular reason for their support. For those that did, the main themes for their support related to views that communities should be compensated or given something in return for the environmental damage caused (16%), or the fact that it will help/support/benefit the local residents/community/area (12%).

Among those asked this question who previously indicated a hypothetical transmission infrastructure project in their local area would be unacceptable, 22% shared views relating to compensation for environmental damage caused, compared with 13% for those who earlier said a hypothetical infrastructure project would be acceptable.

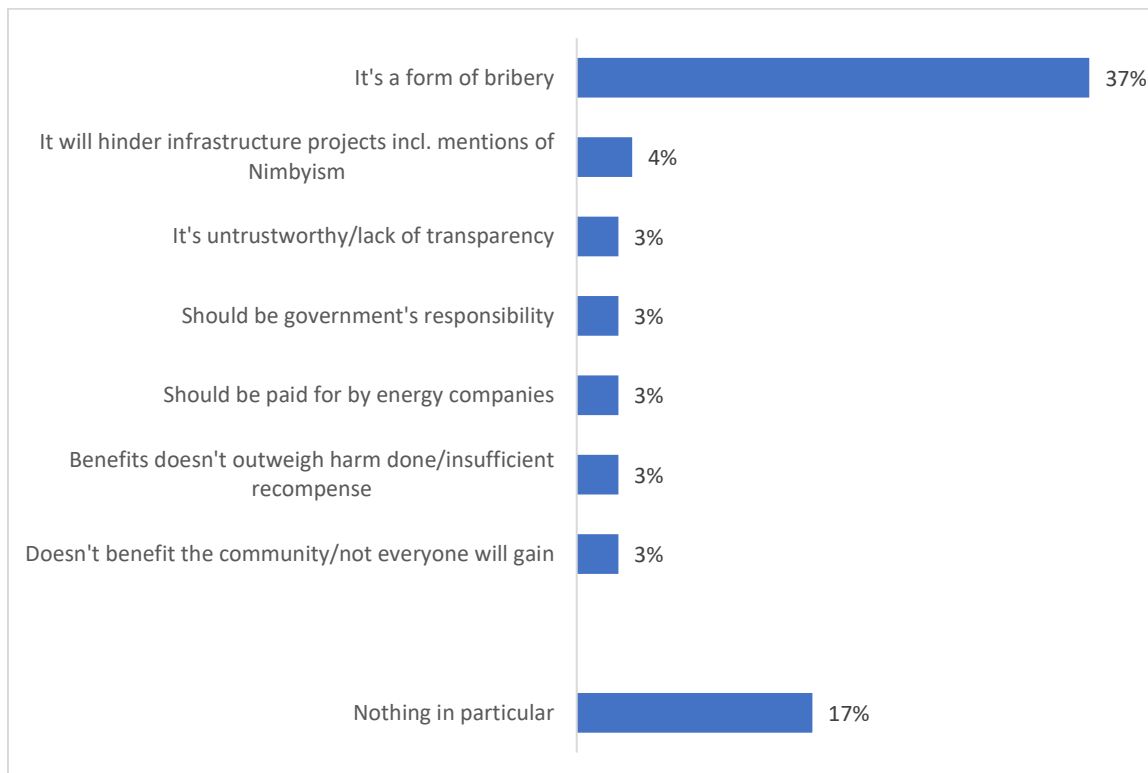
Workshop participants reiterated these themes, with some participants outlining how they felt local communities should receive some benefit for hosting electricity transmission infrastructure because of the construction disruption, visual impact, and damage to the environment.

Reasons for opposing

Overall, only 9% of respondents who had heard of community benefits opposed their use. Of those opposed to community benefits, reasons for opposing were much more focused. Over a third (37%) opposed them because they saw this as a form of bribery. Close to a fifth of respondents (17%) did not mention a particular reason why they opposed the use of community benefits.

It is notable that some workshop participants spontaneously negatively described community benefit schemes as bribery or compensation. These participants felt such schemes were cynical and designed as a “box ticking” exercise.

Figure 16: Reasons oppose (Mentions of 3% or more)



Source: F2A. Why do you oppose the use of community benefits as part of transmission infrastructure projects?
 Base: Those who oppose the use of community benefit schemes = 103

How did different types of community benefits affect acceptability?

The survey was used to understand to what extent different types of community benefits could help participants find a hypothetical transmission infrastructure project in their local area (constructed within a 15-minute walk from their home but not visible from their home) more or less acceptable.³³

Participants were split into two groups. One group was asked to imagine the project involved new lattice pylons and the other a new substation. Participants were then also shown either an image of example lattice pylons or a substation.

Image 9: Substation



Image 10: Lattice pylon



Lattice pylon image courtesy of National Grid

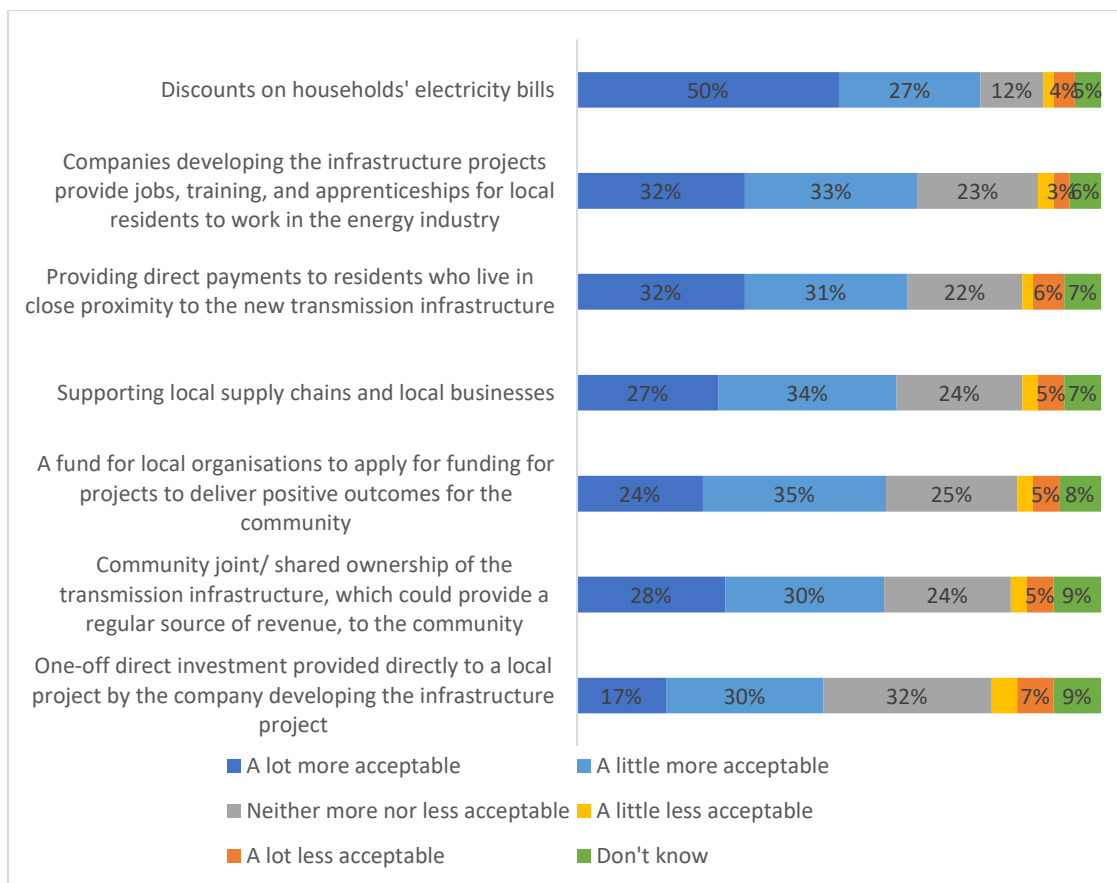
³³ Full question wording: Imagine that there are plans for new electricity network infrastructure to be constructed within a 15-minute walk from your home. This would include building substations/lattice pylons such as those shown. In this scenario imagine you cannot see the new infrastructure from your home, however you live near enough that you see it often when out and about in your local area. During construction, imagine you experienced some short-term impacts including some noise, road closures and increased traffic from construction vehicles. As part of the plans for this new infrastructure, the developer is offering various types of community benefits to the local community. To what extent would each of the following types of community benefits help make the transmission infrastructure project more or less acceptable to you?

The community benefit which respondents most frequently reported would help them find the hypothetical project more acceptable was discounts on their household electricity bills. Close to four-fifths (78%) stated bill discounts would help make the project more acceptable. This included 50% who reported it would make the project a lot more acceptable. 6% stated bill discounts would make the project less acceptable.

The second most frequently reported benefit to help participants find the hypothetical project more acceptable was if the companies developing the infrastructure projects provide jobs, training, and apprenticeships for local residents to work in the energy industry (65%). A further 32% reported that this would help make the project a lot more acceptable.

The benefit that was least reported to make the project more acceptable was a one-off direct investment to a local project in the area, with under half (47%) stating this would make it more acceptable. A breakdown of benefit types is provided in Figure 17.

Figure 17: Impact of individual aspects of community benefit schemes on acceptability



Source: F3. To what extent would each of the following types of community benefits help make the transmission infrastructure project more or less acceptable to you? Base: all respondents = 2359

Those who originally reported that a new hypothetical transmission infrastructure would be acceptable were more likely than those who said it would be unacceptable to say any type of community benefit scheme would further increase their acceptance. Amongst those who said building new hypothetical transmission infrastructure would be unacceptable, over half still agreed that community benefits schemes would make infrastructure more acceptable if it

included discounts on electricity bills (69%), or if it provided direct payments (56%). Results are outlined in Table 5.

Table 5: Impact of individual different types of community benefits on acceptability split by acceptability towards a new hypothetical transmission infrastructure project

Community benefit (% stating this would make it more acceptable)	Building local transmission infrastructure is acceptable (%)	Building local transmission infrastructure is neither acceptable nor unacceptable (%)	Building local transmission infrastructure is unacceptable (%)
Discounts on households' electricity bills	88	71	69
Providing direct payments to residents who live in close proximity to the new transmission infrastructure	72	55	56
Companies developing infrastructure projects provide jobs, training, and apprenticeships for local residents to work in the energy industry	78	58	51
A fund for local organisations to apply for funding for projects to deliver positive outcomes for the community	71	53	48
Community joint/ shared ownership of the transmission infrastructure, which could provide a regular source of revenue, to the community	71	48	46
Supporting local supply chains and local businesses	76	54	46
One-off direct investment provided directly to a local project by the company developing the infrastructure project	59	42	33

Workshop insights: the preference for bill discounts

The workshops were used to understand why survey respondents may have shown a preference for bill discounts.

Corroborating the preference of survey respondents, generally workshop participants also preferred bill discounts. When discussing drivers for this preference a common theme given was pressures on household budgets as a consequence of high inflation and increases in energy bills over the last year, meaning bill discounts would be welcomed.

A further reason given for supporting bill discounts was the clear connection between the new infrastructure being built, and the type of benefit received as a result.

“It’s probably because people would be hosting the means of electricity production [and transmission] and people think they should get lower bills as a result.” (Female participant, Inverness/Keith)

“We’ve had these improvements and then I look, ah, now my electricity bill has gone down. That makes sense to me.” (Female participant, Lincoln)

Direct payments were seen to be a short-term benefit to individuals, and community funds were difficult to conceptualise as a benefit for themselves. Participants expected that the bill discounts would be ongoing, thus resulting in an overall reduction in monthly expenditure. As such, the (desired) ongoing nature of bill discounts created a feeling of a longer-term benefit to local residents and business owners.

Workshop insights: employment and supply chain benefits

Training, apprenticeships, and long-term job opportunities were spontaneously mentioned as important community benefits by workshop participants. Workshop participants in East Suffolk/Thanet/Dover and Inverness/Keith both highlighted the use of local suppliers as beneficial to the community. These two approaches to employment schemes emphasise the importance of longevity and supporting ongoing employment opportunities.

However, in East Suffolk/Thanet/Dover and Inverness/Keith, some participants noted the job opportunities promised by past large infrastructure projects had been short-lived and filled by non-residents. This perception in Inverness/Keith was, in part, driven by past experiences with electricity generation projects, such as wind farms.

What level of direct payment could help improve acceptability?

To support understanding of communities’ expectations of direct payments for transmission infrastructure projects several questions were asked to establish views on eligibility and the level of payments required to help improve acceptability.

Firstly, all respondents were provided with four scenarios and asked whether they felt a direct payment was needed in each of them (scenarios listed in Table 6). The different scenarios were designed to test different levels of proximity to the infrastructure as well as visual impact. Results from this showed that direct payments were more likely to be expected from participants in situations where the infrastructure was closer to residents and most visually impactful.

In the closest and most impactful scenario where the participants were told “you live right by the infrastructure (lattice pylon/substation) and can see it clearly from your home”, the large majority (80%) stated a direct payment was needed. This compares with 14% of participants who reported a direct payment was needed in the least visually impactful scenario where participants were told “powerlines have been undergrounded so there are no visible lattice pylons in your local area”. Table 6 provides a breakdown of results across the different scenarios, split by participants’ views on whether a new transmission infrastructure project would be acceptable in their local area.

Respondents who originally reported that building new transmission infrastructure in their local area would be unacceptable, were more likely than those who said it would be acceptable to say a direct payment was needed in all scenarios, except where powerlines were undergrounded. Whilst it appears a direct payment was less likely to be needed amongst those who said building local transmission infrastructure was neither acceptable nor unacceptable, this was due to the fact that they were more likely to answer “don’t know”, rather than a direct payment is not needed.

Table 6: Scenarios and whether a direct payment is needed, split by acceptability towards a new hypothetical transmission infrastructure project

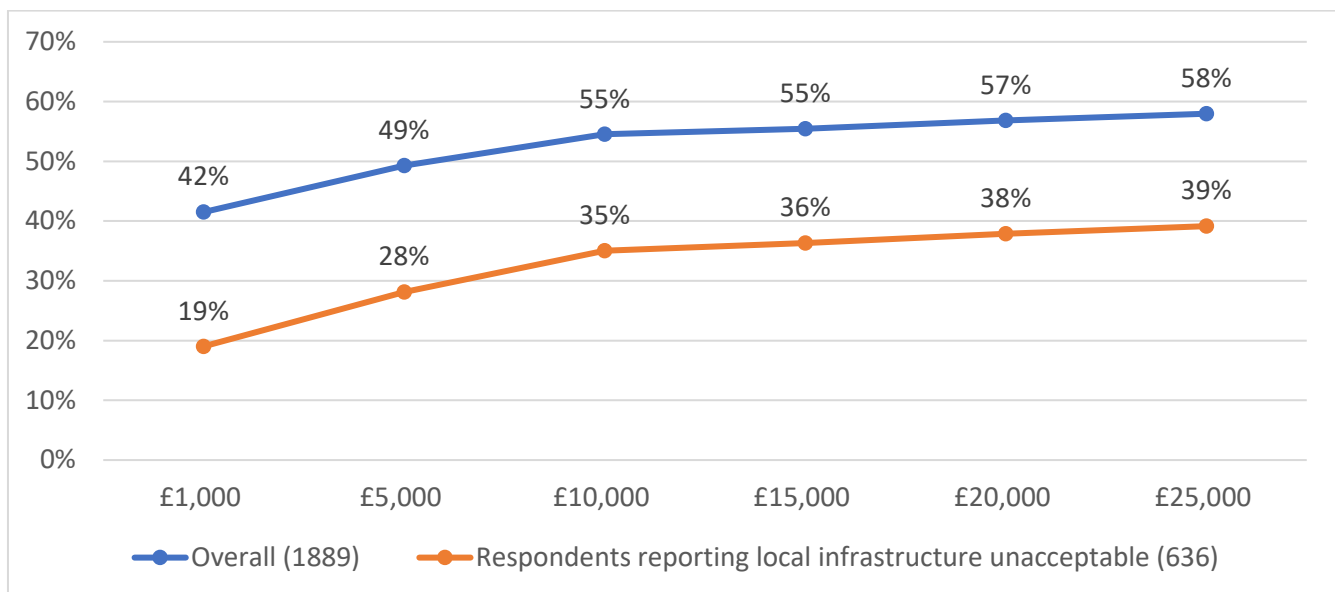
Scenario (% stating direct payment needed)	Total (%)	Building local transmission infrastructure is acceptable (%)	Building local transmission infrastructure is neither acceptable nor unacceptable (%)	Building local transmission infrastructure is unacceptable (%)
Scenario 1: You live right by the infrastructure (lattice pylon/substation) and can see it clearly from your home	80	82	72	85
Scenario 2: You live near but not right by the infrastructure (lattice pylon/substation) and can see it in the distance	50	44	48	62
Scenario 3: You cannot see the infrastructure (lattice pylon/substation) from your home, however, you live near enough that you see it often when out and about in your local area	23	18	22	34
Scenario 4: The powerlines have been undergrounded so there are no visible lattice pylons in your local area	14	15	17	14

Those who said a direct payment was needed were then asked what amount would be required to help them find the project more acceptable in each scenario. This started with the lowest amount (£1,000) and increased incrementally until participants either agreed the value was sufficient, or they rejected the highest level tested (£25,000). If the highest level was rejected, they were asked to provide a figure in open text or report no amount would be sufficient. There were no notable differences in findings between the groups of participants in the lattice pylon or substation group.

For respondents who reported a direct payment was needed, in all scenarios over two-fifths said a £1,000 direct payment would be enough to help make the infrastructure more acceptable. Across all scenarios, increases in the number of participants reporting the direct payment amount would be sufficient was steepest between £1,000 and £10,000; beyond £10,000 smaller increases in acceptance were seen. For example, in scenario 1, acceptability of an additional 13% of participants was secured between £1,000 and £10,000. However, between £10,000 and £25,000 only a further 3% of acceptability was secured.

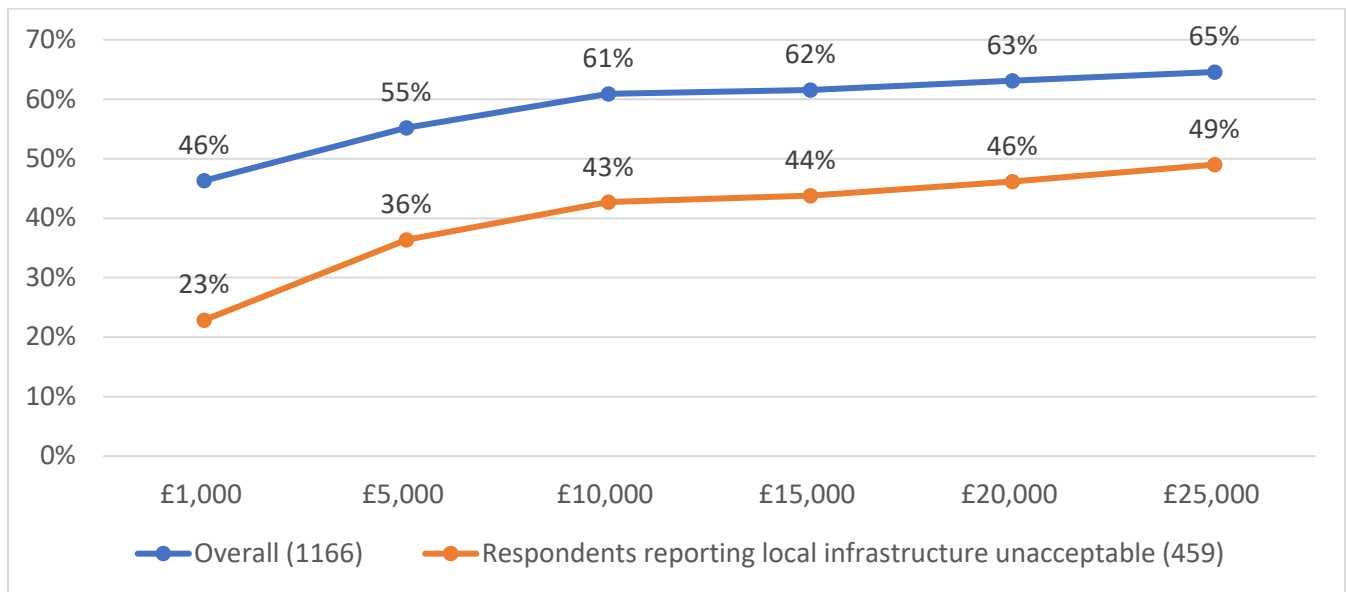
This same trend is observed in all scenarios apart from scenario 4 (where sample sizes are much smaller) for participants who originally reported they would find a new local transmission infrastructure project unacceptable. However, for this group, across all scenarios direct payments of £10,000 were sufficient for 35%-43% to report they would now find the project more acceptable, which compares with 55%-67% of the overall sample who report payments are needed in each scenario. This suggests that whilst direct payments may be able to help increase acceptability for many, they may be less effective for those already opposed to transmission infrastructure. Figures 18-21 summarise results across these scenarios.

Figure 18: Direct payment amount required for scenario 1 (cumulative % yes would help make infrastructure more acceptable)



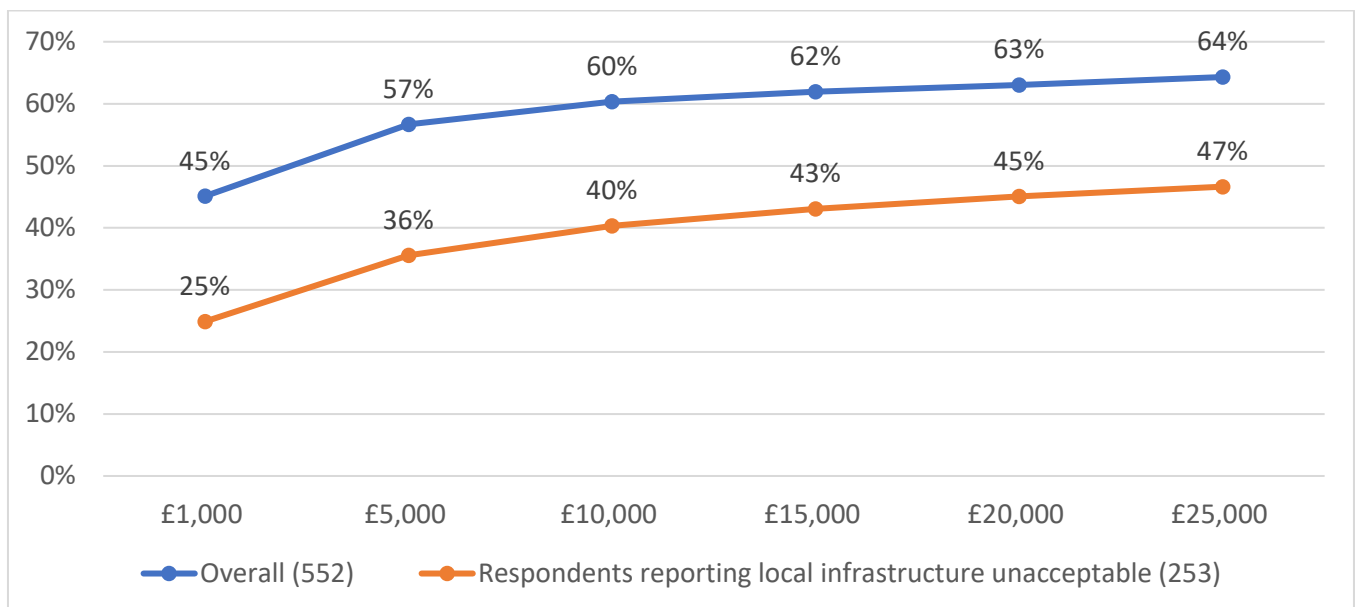
G4. Base = Those who said a direct payment was needed in each scenario (see figure labels for base sizes). Scenario 1: You live right by the infrastructure (lattice pylon/substation) and can see it clearly from your home

Figure 19: Amount of direct payment needed for scenario 2 (% yes would help make infrastructure more acceptable)



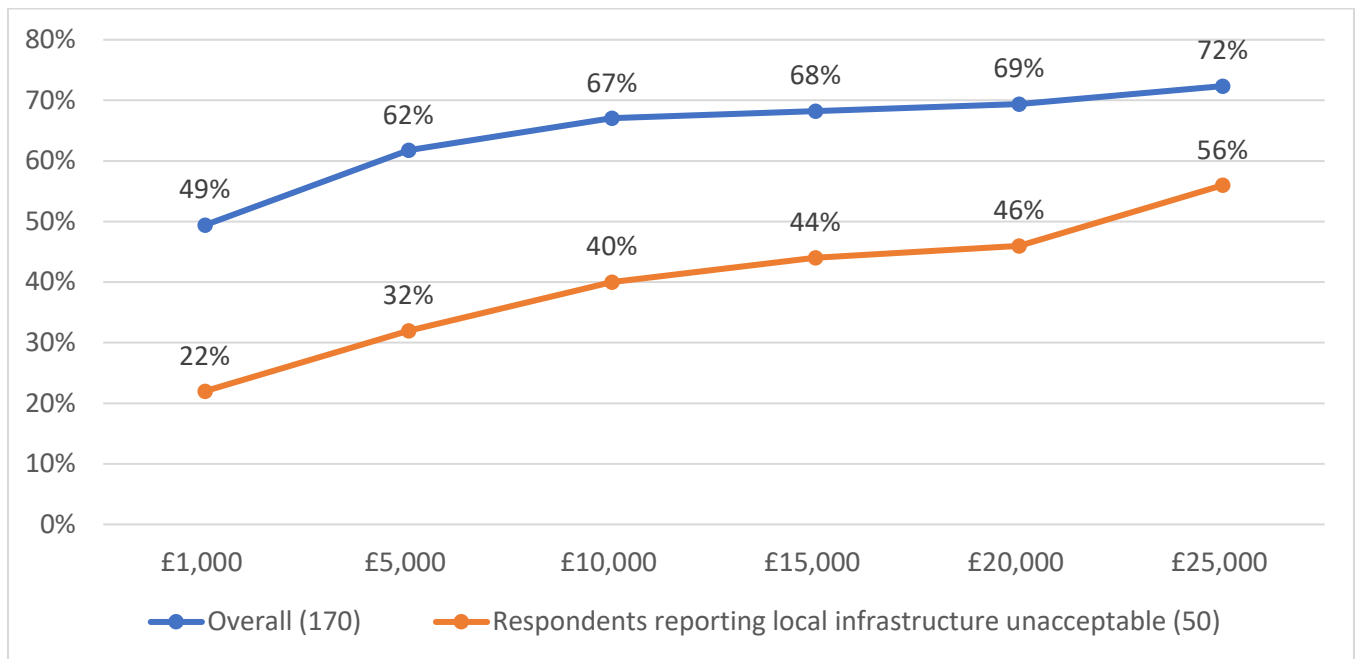
G4. Base = Those who said a direct payment was needed in each scenario (see figure labels for base sizes).
 Scenario 2: You live near but not right by the infrastructure (lattice pylon/substation) and can see it in the distance.

Figure 20: Amount of direct payment needed for scenario 3 (% yes would help make infrastructure more acceptable)



G4. Base = Those who said a direct payment was needed in each scenario (see figure labels for base sizes).
 Scenario 3: You cannot see the infrastructure (lattice pylon/substation) from your home, however, you live near enough that you see it often when out and about in your local area.

Figure 21: Amount of direct payment needed for scenario 4 (% yes would help make infrastructure more acceptable)



G4. Base = Those who said a direct payment was needed in each scenario (see figure labels for base sizes).
 Scenario 4: The powerlines have been undergrounded so there are no visible lattice pylons in your local area.

Across the four scenarios, between 6% and 13% of respondents who said a direct payment was required went on to report that no amount would be sufficient to help them find the hypothetical project more acceptable. Those who originally reported new local transmission infrastructure being built was unacceptable were more likely to state no amount would be sufficient. Those who own their home outright or live in rural areas were also more likely to state this.

Also, those who opposed the use of community benefits in general were significantly more likely to state no amount was acceptable (see Table 7). Although it should be noted that the proportion opposing the use of community benefits in general was relatively small.

Table 7: Percentage who said no amount was acceptable

Scenario	Total (%)	Those who oppose community benefit (%)
Scenario 1: You live right by the infrastructure (lattice pylon/substation) and can see it clearly from your home	11	51
Scenario 2: You live near but not right by the infrastructure (lattice pylon/substation) and can see it in the distance	11	40
Scenario 3: You cannot see the infrastructure (lattice pylon/substation) from your home, however, you live near enough that you see it often when out and about in your local area	13	41
Scenario 4: The powerlines have been undergrounded so there are no visible lattice pylons in your local area	6	Base too small

Workshop insights

Workshop participants were asked why they thought around 40% of survey respondents would be happy with £1,000 as a direct payment if they lived near new transmission infrastructure. There was a feeling that people may have just accepted the first amount seen because they were afraid no payments would be given, and thus £1,000 represented at least some individual financial benefit. £1,000 was seen to be very low by some participants, potentially driven by perceptions that it represents compensation for the transmission infrastructure project.

Other participants suggested the direct payment provided should be tied to the value of the project, others suggested the amount should be tied to the value of the affected property.

What size community fund could help improve acceptability?

The survey was also used to establish participants' expectations for community funds, and what size funds would need to be to help participants find new transmission infrastructure projects in their local area more acceptable.

Participants were provided with the following scenario:

“Imagine a community benefit scheme is set up to provide funds for communities near the new [set a – substation/ set b – lattice pylons]. This community benefit scheme would provide a

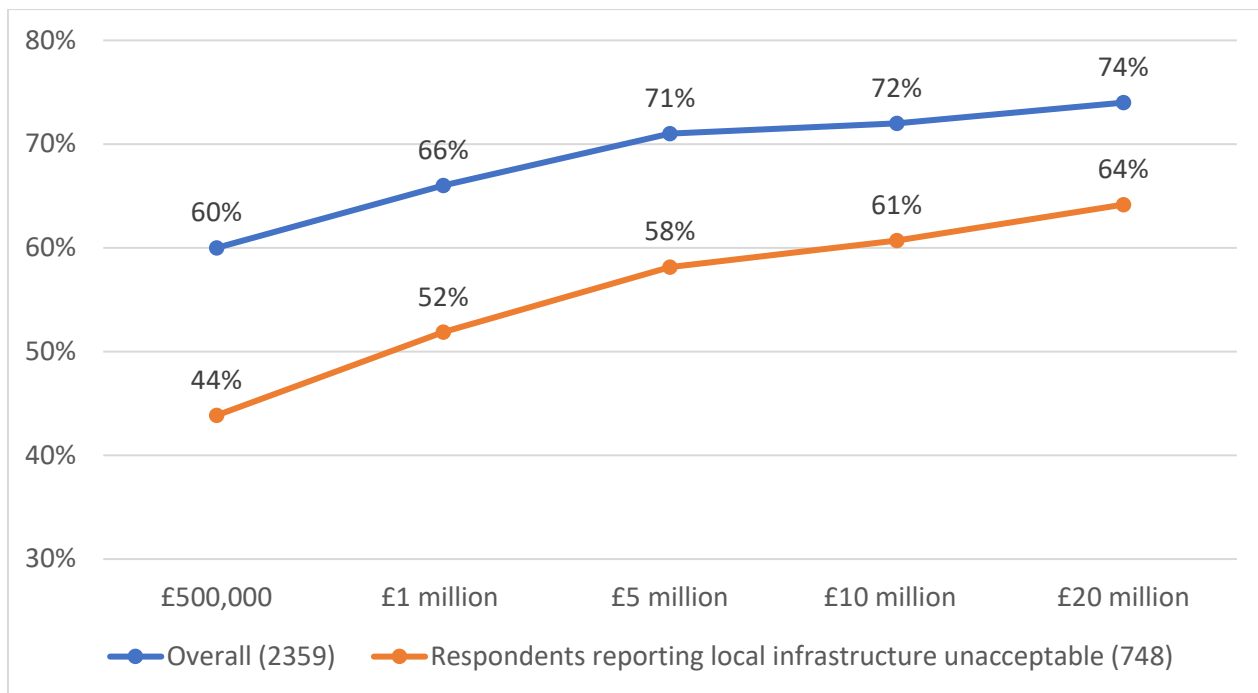
sum of money over 10 years to local projects and organisations which can deliver positive outcomes for the community.”

Participants were then asked the extent to which different amounts would help make the project more or less acceptable to them. This started at £500,000 and increased incrementally until participants either agreed the value was sufficient, or they rejected the highest level tested (£20,000,000). If the highest level was rejected, they were asked to provide a figure in open text or report no amount would be sufficient.

Three-fifths of respondents (60%) said a fund of £500,000 would help make the infrastructure more acceptable. This increases to 66% if the fund was £1 million and 71% if the fund was £5 million.

For those who originally reported new transmission infrastructure being built in their local area would be unacceptable, over two-fifths (44%) said a fund of £500,000 would help make it more acceptable. This rises to around half (52%) if the fund was £1 million and 58% if the fund was £5 million.

Figure 22: Fund amount required to help make a project more acceptable (% yes would help make infrastructure more acceptable)



Source: G10C. Imagine a community benefit scheme is set up to provide funds for communities near the new infrastructure. This community benefit scheme would provide a sum of money over 10 years to local projects and organisations which can deliver positive outcomes for the community. To what extent would the following amount help make the project more or less acceptable to you? Base: All respondents = 2359

As seen with direct payments some respondents reported that no amount would help make the project more acceptable (8%) and a further 18% said they did not know. Groups more likely to report no amount would help make the project more acceptable included:

- Those who find building local transmission infrastructure unacceptable (17%)

- Those who said they oppose the use of community benefits (40%).

Workshop insights

Workshop participants were asked why they thought almost 60% of people surveyed reported £500,000 over 10 years would help them find a new transmission infrastructure project more acceptable. Participants felt many accepted this value in the survey because they were not thinking about long-term funding. Participants also noted that it can be difficult for the general public to conceptualise large amounts of money and how much funding community projects would require in practice.

Following discussions, many workshop participants agreed that £500,000 over 10 years was too low because it would equate to £50,000 per year. Some feared that the total fund could be spent in a relatively short amount of time if not administered appropriately. Others felt that £50,000 annually would have only a small impact on local community projects.

It's not a huge amount, but it sounds big, but it's a drop in the ocean for the generators. Half a million pounds for a community sounds like it would solve all their problems but it won't really"

(Male participant, Inverness/Keith)

Conclusions

The research found that whilst only half of those surveyed would explicitly find new local transmission infrastructure in their local area acceptable, that a range of interventions may help improve acceptability for new projects. These interventions include community benefits, alternative transmission infrastructure (e.g. T-pylons, substation screening), information provision and engagement.

The research suggests that lower bills, long-term job creation, and increased energy security were all compelling factors which could help drive acceptability for hypothetical transmission infrastructure projects. Furthermore, environmental concerns about transmission infrastructure were critical for many in their decisions to oppose projects and when considering preferences for alternative transmission infrastructure such as underground and offshore cables.

The research identified that there may be limited awareness around how “net zero” and “decarbonisation” are related to the need for new transmission infrastructure. Workshop feedback suggested communicating why network infrastructure needs to be built and making clear potential benefits (e.g. energy security and enabling renewable energy) could also help increase acceptability. There was a desire for clear and transparent communication on this.

Electricity bill discounts were identified as the type of benefit that could increase acceptability for most respondents. Workshop feedback suggested they were appealing because of the perceived ongoing and long-term benefit, their clear connection to the infrastructure being built, and recent experiences of increasing energy bills.

Community funds were felt to be successful if they had longevity for the host community. Funds targeting local net zero and environment initiatives were seen to support the wider net zero objectives and thus helped to increase the acceptability of infrastructure projects. However, electricity bill discounts and direct payments were most compelling at increasing acceptability for respondents who were unaccepting of infrastructure projects.

Developing and agreeing community benefits schemes at the consulting phase also helped drive acceptability. Workshop participants suggested two-way communications, where those who contributed to local consultations receive updates after decisions are taken, would help support perceptions of accountability and transparency, and thus acceptability.

Evaluation of any future community benefits schemes and acceptability interventions will provide important further evidence of their impact on acceptability in real world settings.

Annex A: Quantitative survey questionnaire

Survey introductions

ONLINE INTRO

We are conducting a survey on behalf of the Department for Energy Security and Net Zero about your views towards electricity transmission network infrastructure (transmission infrastructure) projects. This includes how communities could be recognised for their role in hosting this infrastructure through community benefits, as well as other measures which could be implemented to help improve the acceptability of infrastructure. This is for research purposes and government intends to continue to develop policy and consult on policy proposals where appropriate. The survey will take around 15 minutes to complete.

Your responses will be treated in the strictest confidence. BMG Research abides by the Market Research Society Code of Conduct and data protection laws at all times.

You can find out more information about our surveys and what we do with the information we collect in our Privacy Notice which is here <http://www.bmgresearch.co.uk/privacy>

Click NEXT to begin the survey

By clicking the NEXT button, you agree to participate in the survey.

CAPI INTRO

We are conducting a survey on behalf of the Department for Energy Security and Net Zero about your views towards electricity transmission network infrastructure (transmission infrastructure) projects. This includes how communities could be recognised for their role in hosting this infrastructure through community benefits, as well as other measures which could be implemented to help improve the acceptability of infrastructure. This is for research purposes and government intends to continue to develop policy and consult on policy proposals where appropriate.

The survey will take around 15 minutes to complete.

Your responses will be treated in the strictest confidence. BMG Research abides by the Market Research Society Code of Conduct and data protection laws at all times. Please note consent is audio recorded.

You can find out more information about our surveys and what we do with the information we collect in our Privacy Notice which is on our website.

I can give you the website address (<https://www.bmgresearch.co.uk/privacy>).

Ensure calling card provided if request more detail about BMG including about privacy notice

INTERVIEWER: Confirm respondent happy to proceed with the survey

✓ Informed consent provided [TICK BOX, DO NOT ALLOW TO PROCEED WITHOUT TICKED]

Screening & Profiling (Section S)

INTRO TEXT

Firstly, some questions about you to ensure we are obtaining views from a cross section of people. Some of these questions may be perceived as sensitive such as age. Providing information in response to these questions is entirely voluntary and you may withdraw your consent at any time. Prefer not to say options are available for each question. The answers that you provide will be used only for market research analysis purposes.

Base: All respondents

SINGLE RESPONSE

S01. This survey requires respondents to give their full postcode. Are you happy to provide this?

This information will only be used for statistical purposes to analyse the results by specific areas, such as Local Authority, Constituency and Government areas. Asking for your postcode saves you time and helps us to report more accurate information. All answers will be treated entirely anonymously and postcode information will not be used for any other purpose and won't be shared with the Department for Energy Security and Net Zero.

Please select one only

Code	Answer list	Scripting notes	Routing
1	Yes		
2	No	SCREENOUT	

Base: All respondents

OPEN RESPONSE, POSTCODE FORMATTING & VALIDATION APPLIED

S02. Could you please provide your full UK postcode?

Please ensure to include a space where applicable, e.g. AB1 2CD

Please answer in the box below

[]

Base: All respondents

Open Response, Force Numeric, Screen out if < 16, Cap at 110

S03. Please can you tell me your age at your last birthday?

Please type your response in the box below

[]

Fixed codes	Answer list	Scripting notes	Routing
98	Prefer not to say	FIX, EXCLUSIVE	GO TO S04

Base: Where do not want to provide exact age (S03=98)

SINGLE RESPONSE

S04. ... Can you tell us which band your age falls within?

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
1	Under 16	SCREENOUT	
2	16 to 24		
3	25 to 34		
4	35 to 44		
5	45 to 54		
6	55 to 64		
7	65 to 74		
8	75+		
98	Prefer not to say		

FOR CAPI ONLY

Base: All respondents

SINGLE RESPONSE

S05. Do you have access to the internet either at home or at work or at some other location?

Please select one only

Code	Answer list	Scripting notes
1	Yes	
2	No	DIGITALLY EXCLUDED IF CHOOSE
3	Unsure	DO NOT READ OUT
96	Prefer not to answer	DO NOT READ OUT

Base: All CAPI who have access to the internet or are unsure (S05 = 1, 3, 96)

SINGLE RESPONSE

S06. Overall, how confident are you as an internet user?

Please select one only

Code	Answer list	Scripting notes
1	Not at all confident	DIGITALLY EXCLUDED IF CHOOSE
2	Not very confident	DIGITALLY EXCLUDED IF CHOOSE
3	Neither confident nor unconfident	
4	Fairly confident	
5	Very confident	
97	Don't know	
96	Prefer not to answer	

Base: All CAPI who have some confidence as an internet user (S06 = 3-5, 97, 96)

MULTI RESPONSE

S07. Thinking about the last six months, which of the following activities, if any, have you used the internet for?

Please select all that apply

Code	Answer list	Scripting notes
1	Email	DIGITALLY EXCLUDED IF only CHOOSE these
2	Generally browsing the internet	DIGITALLY EXCLUDED IF only CHOOSE these
3	Accessing news and sport websites	DIGITALLY EXCLUDED IF only CHOOSE these
4	Social networking websites (e.g. Facebook, Twitter)	DIGITALLY EXCLUDED IF only CHOOSE these
5	Online banking	screenout – CAPI
6	Buying goods or services online (e.g. books, CDs, tickets, groceries)	screenout – CAPI
7	Selling things on platforms such as eBay or Gumtree	screenout – CAPI
8	Downloading/streaming games, movies, TV shows etc.	screenout – CAPI
9	Using government services (e.g., TV license, road tax, passport etc.)	screenout – CAPI
95	Other	screenout – CAPI
99	None of these	exclusive - DIGITALLY EXCLUDED IF CHOOSE THIS

Section A: Views and awareness of key concepts

Base: Ask all

SINGLE RESPONSE, Reverse Scale

A1. How concerned, if at all, are you about climate change, sometimes referred to as 'global warming'?

(SOURCE: BEIS

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1140689/BEIS_PAT_Winter_2022_Paper_Questionnaire.pdf Q8)

Please select one only

Row Code	Row list	Scripting notes	Routing
1	Very concerned		
2	Fairly concerned		
3	Not very concerned		
4	Not at all concerned		
97	Don't know		

Base: Ask all respondents

SINGLE RESPONSE GRID, Reverse Scale

A3. To what extent do you support or oppose energy generation from the following sources?

Please select one per row

Row Code	Row list	Scripting notes	Routing
1	Renewables (e.g. wind, solar, biomass)		
2	Low carbon (e.g. nuclear)		
3	Fossil fuels (e.g. natural gas, coal)		

Column Code	Row list	Scripting notes	Routing
1	Strongly support		
2	Somewhat support		
3	Neither support nor oppose		
4	Somewhat oppose		
5	Strongly oppose		
97	Don't know		

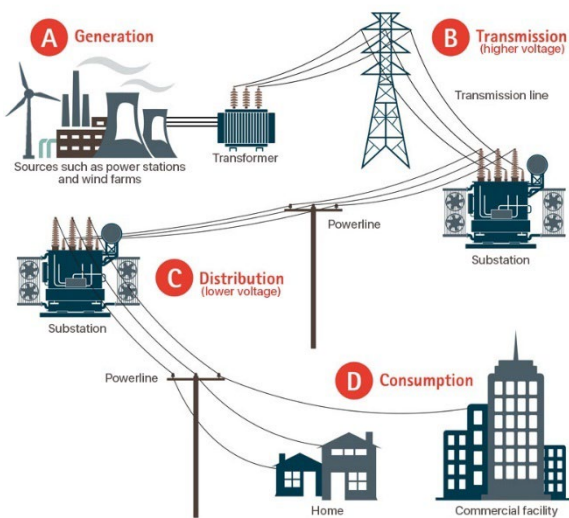
Section B: Awareness of Network and Infrastructure

INTRO

Two types of electricity networks are used to move electricity around Great Britain.

The ‘transmission network’ is used to transfer electricity at high voltages across long distances from sources such as wind farms and power stations, to regional substations.

Regional substations reduce the voltage to the lower levels needed by the ‘distribution networks’, which carry electricity to homes, businesses and anywhere else using electricity. Together these form the electricity grid which is outlined in the diagram below.



Caption: adapted from source Copper Development Association

Base: Ask all

SINGLE RESPONSE, Reverse Scale

B1. Before today how much, if anything, did you know about electricity networks?

Please select one only

Column code	Column list	Scripting notes	Routing
1	Never heard of this		
2	Hardly anything but I've heard of this		
3	A little		
4	A fair amount		

5	A lot		
---	-------	--	--

Base: Ask all

INTERACTIVE Multi Response, INSERT IMAGES

B2. Transmission infrastructure refers to the physical structures that carry, distribute and store electricity across the network from where it is generated to where it is needed most.

Here are some images of the different types of transmission infrastructure. Please click on the types of transmission infrastructure you were aware of before today.

Please select those images where you recognise the infrastructure shown (you do not need to name the image)

INSERT IMAGES

Image 1 – Substation

Image 2 –Lattice pylon

Image 3 – T-pylon

Row code	Row list	Scripting notes	Routing
97	None of these	Exclusive	

Base: Ask all respondents

Single Response, Reverse Scale

B3. As the UK increases the amount of electricity generated from low carbon and renewable sources, more infrastructure will be required to transfer electricity from where it is generated to where it is needed. This will include pylons, overhead power lines, and substations.

Examples of renewable sources include wind power, solar energy and biomass. Examples of low carbon sources includes nuclear power.

Before today how much, if anything, did you know about the need to build more transmission infrastructure as part of the UK’s transition to low carbon and renewable energy?

Please select one only

Column code	Column list	Scripting notes	Routing
1	I know a lot		
2	I know a fair amount		
3	I know a little bit		
4	Hardly anything, but I've heard of this		
5	Never heard of this		

Section C: Views towards hypothetical projects and testing the impact of mitigations

Base: Ask SET A

SINGLE RESPONSE, Split sample – set A

C1a. Now imagine that there are plans for a new substation to be constructed within a 15-minute walk from your home. This would look like the substation shown in the photo below.



In this scenario imagine you cannot see the new infrastructure from your home, however you live near enough that you see it often when out and about in your local area. During construction, imagine you experienced some short-term impacts including some noise, road closures and increased traffic from construction vehicles.

How acceptable or unacceptable would you find this being built within a 15-minute walk from your home?

Please select one

Column code	Column list	Scripting notes	Routing
1	Very acceptable		
2	Somewhat acceptable		
3	Neither acceptable nor unacceptable		
4	Somewhat unacceptable		
5	Very unacceptable		
97	Don't know		

Base: Ask SET B

SINGLE RESPONSE, Split sample – set B

C1B. Now imagine that there are plans for new lattice pylons supporting overhead powerlines to be constructed within a 15-minute walk from your home. This would look like the pylons shown in the photo below.



In this scenario imagine you cannot see the new infrastructure from your home, however you live near enough that you see it often when out and about in your local area. During construction, imagine you experienced some short-term impacts including some noise, road closures and increased traffic from construction vehicles.

How acceptable or unacceptable would you find this being built within a 15-minute walk from your home?

Please select one

Column code	Column list	Scripting notes	Routing
1	Very acceptable		
2	Somewhat acceptable		
3	Neither acceptable nor unacceptable		
4	Somewhat unacceptable		
5	Very unacceptable		
97	Don't know		

Base: Ask all who support electricity network infrastructure to be built in local area

MULTI RESPONSE, ROTATE

C2. You said you would find [SET A – a substation/ SET B – lattice pylons] being built within a 15-minute walk from your home acceptable. Why is this?

Please select all that apply

Column code	Column list	Scripting notes	Routing
1	It would enable more low carbon and renewable sources of power to be used		
2	Existing infrastructure needs updating/modernising		
3	It would lead to cheaper energy bills		
4	It would create jobs		
5	It would benefit the UK economy		
6	It would lead to lower dependence on foreign energy sources		
7	It would support the UK to meet net zero targets by 2050		
8	It would help deliver more electricity which is required due to increasing demand		

9	It reduces the chances of power cuts or outages across the electricity network		
10	I don't care whether it is built near my home		
95	Other (please specify)	OPEN TEXT	
97	Don't know	exclusive	

Base: Ask all opposing electricity network infrastructure to be built in local area

MULTI RESPONSE, ROTATE

C3. You said you would find [SET A – a substation/ SET B – lattice pylons] being built within a 15-minute walk from your home unacceptable. Why is this?

Please select all that apply

Column code	Column list	Scripting notes	Routing
1	It is not necessary as we don't need to reduce carbon emissions		
2	I am concerned that this will increase electricity bills		
3	I am concerned about the impact on local plant and animal life		
4	It would not benefit the local economy		
5	It would not benefit the local community		
6	I am concerned it would impact on the view/be unattractive		
7	I am concerned that the infrastructure will be noisy		
8	I am concerned it might affect house prices in my area		
9	I am concerned about the impact on my health		
10	I am concerned about disruption caused by the construction of the infrastructure		

11	The infrastructure should be built elsewhere		
12	I am concerned that the infrastructure would be dangerous		
13	Other (please specify)	OPEN TEXT	
97	Don't know	exclusive	

Base: Ask all who neither support or oppose electricity network infrastructure to be built in local area

OPEN RESPONSE

C3A. You said you would find [SET A – a substation/ SET B – lattice pylons] being built within a 15-minute walk from your home neither acceptable nor unacceptable. Why is this?

Please type your response in the box below

[_____]

Fixed codes	Answer list	Scripting notes	Routing
97	Don't know		

Base: Ask all respondents

SINGLE RESPONSE

C4. If pylons carrying overhead powerlines were constructed within a 15-minute walk of your home, to what extent would T-pylons or lattice pylons be more acceptable to you (see images below for an example of each)?

Image on the left is a lattice pylon Image on the right is a T-pylon



Please select one only

Row Code	Row list	Scripting notes	Routing
1	A T-pylon is much more acceptable		
2	A T-pylon is slightly more acceptable		
3	No preference – both are equally acceptable/unacceptable		
4	A lattice pylon is slightly more acceptable		
5	A lattice pylon is much more acceptable		
97	Don't know		

Base: Ask all respondents

SINGLE RESPONSE per row

C7. If there were plans to construct lattice pylons carrying overhead powerlines within a 15-minute walk of your home, to what extent would the plans be more or less acceptable to you if the overhead powerlines were buried underground or moved offshore through subsea cabling?

Please note that lattice pylons, underground powerlines, and offshore powerlines would all still require some overground infrastructure including large substations.

Please select one per row

Row Code	Row list	Scripting notes	Routing
1	Buried underground		
2	Moved offshore through subsea cabling		

Column Code	Row list	Scripting notes	Routing
1	A lot more acceptable		
2	A little more acceptable		
3	Neither more nor less acceptable		
4	A little less acceptable		
5	A lot less acceptable		
97	Don't know		
98	Not applicable		

Base: Ask all respondents who are supportive

SINGLE RESPONSE per row

C8. Thinking about environmental impacts only, would you still find the plans for this infrastructure acceptable given the potential that...?

Please select one per row

Row Code	Row list	Scripting notes	Routing
1	Powerlines buried underground can cause a greater loss of trees, shrubs and hedgerows than overhead powerlines		

2	Powerlines moved offshore through subsea cabling can cause physical damage or loss of seabed habitats with possible implications for marine ecosystems including fish and mammals.		
---	--	--	--

Column Code	Row list	Scripting notes	Routing
1	Yes		
2	No		
97	Don't know		

Base: Ask all respondents

SINGLE RESPONSE per row

C9. The cost of building and maintaining transmission network infrastructure is paid through electricity bills. In Great Britain last year, around £3.75 of every household's monthly electricity bills contributed towards these costs (equivalent to £45 per year).

If T-pylons, underground and subsea cables were more expensive than overhead powerlines and lattice pylons to install, how much more would you be willing to pay as part of your monthly electricity bill to cover these extra costs?

T-pylons, underground and subsea cables are more expensive than overhead powerlines to install. In Great Britain last year, around £3.75 of every household's monthly electricity bills contributed towards these costs (equivalent to £45 per year).

How much more would you be willing to pay as part of your monthly electricity bill to cover the extra cost of these projects to...?

This would be on top of the £3.75 per month already paid. This would be on top of the £3.75 per month already paid, and would be added to all electricity bills in Great Britain going forwards, including yours.

Please select one per row

Row Code	Row list	Scripting notes	Routing
1	Bury new powerlines underground		
2	Move new powerlines offshore through subsea cabling where feasible		

Row code	Row list	Scripting notes	Routing
	More than £8.00 per month (equivalent to more than £96 per year)		
1	Up to £8.00 per month (equivalent to £96 per year)		
2	Up to £7.00 per month (equivalent to £84 per year)		
3	Up to £6.00 per month (equivalent to £72 per year)		
4	Up to £5.00 per month (equivalent to £60 per year)		
5	Up to £4.00 per month (equivalent to £48 per year)		
6	Up to £3.00 per month (equivalent to £36 per year)		
7	Up to £2.00 per month (equivalent to £24 per year)		
8	Up to £1.00 per month (equivalent to £12 per year)		
9	No costs should be added to bills		
10	Don't care how much is added to bills		
97	Don't know		

Base: Ask all respondents

SINGLE RESPONSE

C11. Analysis suggests that building more transmission infrastructure will help to:

Lower bills for consumers in the long term

Support jobs through building and maintaining powerlines

Increase energy security

Enable the roll out of new renewable and low carbon energy sources

Support the UK achieving net zero carbon emissions

To what extent would this make the plans more or less acceptable to you if it was proposed to be built in your local area?

Please select one only

Code	Row list	Scripting notes
1	A lot more acceptable	
2	A little more acceptable	
3	Neither more nor less acceptable	
4	A little less acceptable	
5	A lot less acceptable	
97	Don't know	

SECTION D: AWARENESS AND PERCEPTIONS OF PROPOSED PROJECTS – SUFFOLK/KENT and SCOTLAND PARTICIPANTS ONLY

Base: Ask Suffolk/Kent and Scotland respondents only

SINGLE RESPONSE

D1. Are you aware of any plans to build new transmission substations, higher voltage powerlines with pylons or underground cables within a 15-minute walk from your home?

Please select one only

Column code	Column list	Scripting notes	Routing
1	Yes		
2	No		
3	Not sure		

Base: Ask all who said yes to D1

SINGLE RESPONSE

D2. Overall, how acceptable or unacceptable do you find the proposed project/s in your area?

Please select one only

Column code	Column list	Scripting notes	Routing
1	Very acceptable		
2	Somewhat acceptable		
3	Neither acceptable nor unacceptable		
4	Somewhat unacceptable		
5	Very unacceptable		
97	Don't know		

Base: all who find acceptable/unacceptable

OPEN RESPONSE

D3. Why do find the proposed project/s [FEED IN RESPONSE FROM PREVIOUS Q]?

Please type your response in the box below

[_____]

Fixed codes	Answer list	Scripting notes	Routing
98	Prefer not to say	FIX, EXCLUSIVE	

Base: Ask all who said yes to D1

MULTI RESPONSE, ROTATE

D4. What concerns, if any, do you have about the new transmission infrastructure project/s that has been proposed in your area?

Please select all that apply

Column code	Column list	Scripting notes	Routing
1	It is not necessary as we don't need to reduce carbon emissions		
2	I am concerned that this will increase electricity bills		
3	I am concerned about the impact on local plant and animal life		
4	It would not benefit the local economy		
5	It would not benefit the local community		
6	I am concerned it would impact on the view/be unattractive		
7	I am concerned that the infrastructure will be noisy		
8	I am concerned it might affect house prices in my area		
9	I am concerned about the impact on my physical/ mental health		
10	I am concerned about disruption caused by the construction of the infrastructure (e.g. increased traffic and noise)		
11	The infrastructure should be built elsewhere		
12	I do not understand why the infrastructure is needed in my area		
95	Other (please specify)	open text	

96	Don't know	exclusive	
97	None of the above	exclusive	

Base: Ask all who said yes to D1

MULTICODE, ROTATE

D5. What, if any, potential benefits do you expect from the proposed projects?

Please select all that apply

Column code	Column list	Scripting notes	Routing
1	It would enable more low carbon and renewable sources of power to be used		
2	I think existing infrastructure needs updating/modernising		
3	I believe it would lead to cheaper energy bills		
4	I think it would create jobs		
5	I think it would benefit the UK economy		
6	I think it would lead to lower dependence on foreign energy sources		
7	I think it would bring benefits to my area through schemes like community funds and payments to households living near the proposed projects		
95	Other (please specify)	open text	
96	Don't know	exclusive	
97	None of the above	exclusive	

SECTION E: ACTUAL PROJECT – PLANNING, ENGAGEMENT AND COMMUNICATION

INTRO

These questions focus on your awareness on how you can engage with the planning process for transmission infrastructure projects.

Base: Ask all

SINGLE RESPONSE

E1. Before today, were you aware that you can share your views on a proposed transmission infrastructure project through public consultations for that project?

Please select one only

Column code	Column list	Scripting notes	Routing
1	Yes		
2	No		
3	Not sure		

Base: Ask those in Suffolk/Kent/Scotland who said yes to D1 and yes to E1

SINGLE RESPONSE

E2. You said you were aware of proposed electricity transmission projects in your area. Have you shared your views on these proposals previously?

Please select one only

Column code	Column list	Scripting notes	Routing
1	Yes		
2	No		
3	Not sure		

Base: Ask all who said no to E2

MULTI RESPONSE, ROTATE

E3. What stopped you from sharing your views?

Please select all that apply

Column code	Column list	Scripting notes	Routing
1	I did not have the time		
2	I did not have an issue with the application I wanted to raise, so I did not engage		
3	I did not trust that my concerns would be acted upon		
4	I was not aware of any ways to share my views		
5	I did not understand the proposals		
6	It seemed too complicated to do so		
7	I did not feel confident sharing my views		
95	Other (please specify)	OPEN TEXT	
96	Don't know	EXCLUSIVE	
97	None of the above	EXCLUSIVE	

Base: Ask all who said yes to D1

MULTI RESPONSE

E4. How would you like to share your views on future transmission infrastructure developments?

Please select all that apply

Column code	Column list	Scripting notes	Routing
1	Attending a meeting		
2	Replying to a consultation		

3	Writing to/emailing the project developer		
4	Take part in a survey		
5	Help develop proposals		
95	Other (please specify)		
97	None of the above - I do not want to engage	EXCLUSIVE	

Base: Ask all who said yes to D1

multi RESPONSE

E5. Do you recall if you have been contacted by any of the following groups about the proposed projects in your local area?

Please select all that apply

Column code	Column list	Scripting notes	Routing
1	Local authorities/councils		
2	Members of the community (friends, neighbours, etc.)		
3	Those responsible for developing the infrastructure (Scottish and Southern Electricity Networks, and SP Energy Networks– if Scotland, National Grid Electricity Transmission – if England)		
4	Government		
5	Local campaign groups		
6	Landowner		
95	Other (please specify)		
97	None of the above		

Base: Ask all who have been contacted/ received information at E5 from 1 to 4

SINGLE RESPONSE per row

E7. Overall, to what extent do you agree or disagree with the following statements about the information you received from [Show from those seen at E5: PRIORITY OF SOURCES – Scottish and Southern Electricity Networks, and SP Energy Networks– if Scotland, National Grid Electricity Transmission – if England / Local authorities or councils / members of the community / Government[?]]

Please select one per row

Column code	Column list	Scripting notes	Routing
1	Overall, the information was useful		
2	The information improved my understanding of the project		
3	The information reduced my concerns about the project		
4	The information increased my support for the project		
5	The information increased my opposition for the project		

Row code	Column list	Scripting notes	Routing
1	Strongly agree		
2	Somewhat agree		
3	Neither agree nor disagree		
4	Somewhat disagree		
5	Strongly disagree		
96	Don't know/Can't remember		

Base: Ask those in Suffolk/Kent/Scotland

SINGLE RESPONSE per row

E8. Overall, how likely are you to trust information regarding proposed projects from the following sources?

Please select one per row

Column code	Column list	Scripting notes	Routing
1	Those responsible for developing the infrastructure (Scottish and Southern Electricity Networks, and SP Energy Networks– if Scotland, National Grid Electricity Transmission – if England)		
2	Organisations and bodies who are required to feedback on planning applications e.g. Natural England and Health and Safety Executive		
3	Local Authorities/councils		
4	Government		
5	Members of the community (friends, neighbours etc.)		
6	Local campaign groups		
7	Landowners		

Row code	Column list	Scripting notes	Routing
1	Very likely		
2	Somewhat likely		
3	Not very likely		
4	Not at all likely		
97	Don't know		

Base: Ask those in Suffolk/Kent/Scotland

MULTICODE, ROTATE

E11. You said you would like to receive more communication from project developers. Which of the following would you like more information on?

Please select all that apply

Row Code	Row list	Scripting notes	Routing
1	What infrastructure is being built		
2	How this will impact the local community in the short-term (within the next 5 years)		
3	How this will impact the local community in the long-term (within the next 5 to 25 years)		
4	Why my area has been selected		
5	How long the construction will be taking place		
6	What are the local benefits		
7	Clarification on any concerns		
8	What are the national benefits		
9	How I can get involved in consultations or engagement about the project		
95	Something else (please specify)	OPEN TEXT	

Base: Ask those in Suffolk/Kent/Scotland all who want more communication

MULTI CODE UP TO 3, RANDOMISE

E12. And in what three ways would you prefer to receive this information?

Please select up to three

Column code	Column list	Scripting notes	Routing
1	Letter		
2	Leaflet		
3	Email/ electronic newsletter		
4	Telephone call		
5	Word of mouth (e.g. someone knocking on your door)		
6	Social media message		
7	Webinars		
8	Through local press		
9	Consultations		
10	Town Hall events		
11	Workshops		
12	Community Liaison Groups		
13	Surveys		
14	Conferences/Events		
15	Website/Blogs		
95	Other (please specify)	open text	
97	Don't know	EXCLUSIVE	

Section F: Views and awareness of community benefits

High-level community benefits questions

SECTION f: Intro TEXT

We'd like to ask you some questions about community benefits. Examples of Community benefits can include funding for projects or initiatives decided by the local community to enhance the local economy, society and/or environment, or direct payments to individuals in a local area. It can also include funding that local groups can apply for to fund their own projects.

The types of community benefits explored in this survey would be separate from the planning process and would not be considered in planning decisions.

Please note this research is exploring views of community benefits and there is no guarantee of actual future benefits.

Base: All respondents

SINGLE RESPONSE

f1. Had you heard the term community benefits before taking this survey?

Please select one only

Code	Answer list	Scripting notes	Routing
1	Yes – knew the term and the definition / what it involved		route to next question
2	Yes – heard the term but didn't know much about the definition / what it involved		route to next question
3	Yes – didn't know the term but had heard of a scheme like this previously		
4	No – hadn't heard the term		

Base: all who are aware of community benefit schemes at F1

SINGLE RESPONSE

f2. Generally, do you support or oppose the use of community benefits as part of transmission infrastructure projects?

Please select one only

Code	Answer list	Scripting notes
1	Strongly support	
2	Somewhat support	
3	Neither support nor oppose	
4	Somewhat oppose	
5	Strongly oppose	
97	Don't know	

Base: all who support/ oppose

OPEN RESPONSE

F2A. Why do you [FEED IN RESPONSE FROM PREVIOUS Q] the use of community benefits as part of transmission infrastructure projects?

Please type your response in the box below

[_____]

Fixed codes	Answer list	Scripting notes	Routing
98	Prefer not to say	FIX, EXCLUSIVE	

Base: all respondents

SINGLE RESPONSE per row, ROTATE STATEMENTS

f3. Imagine that there are plans for new electricity network infrastructure to be constructed within a 15-minute walk from your home. This would include building [SET A – substations/ SET B – lattice pylons] such as those shown below.

SET A image



SET B image



In this scenario imagine you cannot see the new infrastructure from your home, however you live near enough that you see it often when out and about in your local area. During construction, imagine you experienced some short-term impacts including some noise, road closures and increased traffic from construction vehicles.

As part of the plans for this new infrastructure, the developer is offering various types of community benefits to the local community. To what extent would each of the following types of community benefits help make the transmission infrastructure project more or less acceptable to you?

Info pop out box for “community” in the wording above: “in this context, communities mean those living near by the infrastructure projects”

Please select one answer per row

Row	Answer list	Scripting notes	Routing
1	A fund for local organisations to apply for funding for projects to deliver positive outcomes for the community		
2	Providing direct payments to residents who live in close proximity to the new transmission infrastructure		
3	Discounts on households' electricity bills		
4	Supporting local supply chains and local businesses (e.g. companies developing the infrastructure projects provide opportunities for local businesses)		
5	Companies developing the infrastructure projects provide jobs, training, and apprenticeships for local residents to work in the energy industry		
6	One-off direct investment provided directly to a local project by the company developing the infrastructure project.		
7	Community joint/ shared ownership of the transmission infrastructure, which could provide a regular source of revenue to the community (e.g. a transmission infrastructure project is jointly owned by the transmission operator and the local community).		

Column Code	Row list	Scripting notes
1	A lot more acceptable	
2	A little more acceptable	
3	Neither more nor less acceptable	
4	A little less acceptable	

5	A lot less acceptable	
97	Don't know	

Base: Ask all

SINGLE RESPONSE

f4a. If a community benefit scheme in your area was able to provide financial benefits, how do you think these benefits should be prioritised between direct payments to residents living in close proximity to the new infrastructure and wider community benefits such as investments in local facilities, and creating community funds?

Please select one only

Code	Answer list	Scripting notes	Routing
1	Wider community benefits should be prioritised (e.g. community funds, investing in local facilities)		
2	Direct payments to local residents who live in close proximity to the new electricity transmission network infrastructure should be prioritised		
3	They should be split roughly evenly between both		
97	Don't know		

Base: Ask all respondents

SINGLE RESPONSE, SCALE

f5a. Regardless of what the community benefits scheme offers to a local area, which of the below statements comes closer to your view of how community benefits should be developed?

Please indicate where your own view lies on a 10-point scale where 0 means complete agreement with the statement on the left, 10 means complete agreement with the statement on the right, and 5 means you don't agree with either of the statements or that your views are mixed or balanced on the issue in question.

Please select one per row

Community Benefits for Electricity Transmission Network Infrastructure – Social Research

Pair	Statement A	Scale												Statement B
		Completely agree with left statement	1	2	3	4	5	6	7	8	9	Completely agree with right statement		
1	Community benefits should be consistent for every network infrastructure project across Great Britain. Every community should be offered the same.	0	1	2	3	4	5	6	7	8	9	10	Don't know	Community benefits should be flexible and consider each area that is being impacted by a network infrastructure project individually. Every community should have the opportunity to negotiate specially designed benefits with developers
	Whether developers of network infrastructure projects provide community benefits should be voluntary and up to developer	0	1	2	3	4	5	6	7	8	9	10	Don't know	Whether developers of network infrastructure projects provide community benefits should be mandatory

Base: Ask all respondents

SINGLE RESPONSE

f5b. It is most likely that community benefits will be paid for through electricity bills. If electricity bills across Great Britain were to increase to pay for community benefit schemes in certain areas across the country, what is the maximum amount you would be willing to pay as part of your monthly electricity bill to fund community benefit schemes?

Row code	Row list	Scripting notes	Routing
	More than £8.00 per month (equivalent to more than £96 per year)		
1	Up to £8.00 per month (equivalent to £96 per year)		
2	Up to £7.00 per month (equivalent to £84 per year)		
3	Up to £6.00 per month (equivalent to £72 per year)		
4	Up to £5.00 per month (equivalent to £60 per year)		
5	Up to £4.00 per month (equivalent to £48 per year)		
6	Up to £3.00 per month (equivalent to £36 per year)		
7	Up to £2.00 per month (equivalent to £24 per year)		
8	Up to £1.00 per month (equivalent to £12 per year)		
9	No costs should be added to bills		
10	Don't care how much is added to bills		
97	Don't know		

Direct payments

Base: Ask all respondents

SINGLE RESPONSE per row, ROTATE STATEMENTS

G1. A form of community benefit could provide direct payments to those who live near new transmission infrastructure. To what extent do you agree or disagree with the following statements regarding direct payments?

Info pop out box for row 6: in this context, communities mean those living near by the infrastructure projects

Please select one only per row

Column Code	Statements	Scripting notes	Routing
1	The value of direct payments should be based on a household's distance from the new transmission infrastructure (i.e. the closer a household, the higher their payment)		
2	Direct payments should be distributed as widely as possible, even if this means less payment per household		
3	Direct payments should be targeted at those most in need of financial support		
4	Local businesses as well as households should be eligible to receive direct payments		
5	Those who rent their home should be eligible to the same funding as those who own their home (i.e. those with mortgages, or out-right owners).		
6	Communities should have a role in deciding who should receive direct payments for infrastructure projects in their areas		
7	Across Great Britain, all community benefits schemes for transmission infrastructure projects should determine eligibility for direct payments in the same way		

Row Code	Answer list	Scripting notes	Routing
1	Strongly agree		
2	Somewhat agree		
3	Neither agree nor disagree		
4	Somewhat disagree		
5	Strongly disagree		
97	Don't know		

Base: Ask all respondents

Single RESPONSE GRID, Split sample to SET A - 50% shown substation, SET B - 50% shown Lattice

G2. Now imagine that a community benefits scheme is offering direct payments to households living near new transmission infrastructure such as the one shown below. [Select image based on sample group]



Lattice pylon image courtesy of National Grid

For each of the following scenarios, we would like you to know whether you think a direct payment is required.

In all scenarios, imagine that during construction, you experienced some short-term impacts including some noise, road closures and increased traffic from construction vehicles.

Please select one only per row

Row Code	Scenarios	Scripting notes	Routing
1	You live right by the [lattice pylon/ substation] and can see it clearly from your home		
2	You live near but not right by the [lattice pylon/ substation] and can see it in the distance		
3	You cannot see the [lattice pylon/ substation] from your home, however you live near enough that you see it often when out and about in your local area		
4	The powerlines have been undergrounded so there are no visible lattice pylon in your local area	ONLY SHOW FOR THOSE ON LATTICE PYLON ROUTE	

Column Code	Options	Scripting notes	Routing
1	Direct payment needed		
2	Direct payment is not needed		
97	Don't know		

Base: those who say direct payment to any code at G2

Single RESPONSE GRID

G4. In each of the following scenarios, would payments of the following value help to make the infrastructure more acceptable to you?

Please select one only

Code	Scenarios	Scripting notes	Routing
1	You live right by the lattice pylon/ substation and can see it clearly from your home	where scenario selected at g2	
2	You live near but not right by the lattice pylon/ substation and can see it in the distance	where scenario selected at g2	
3	You cannot see the lattice pylon/ substation from your home; however you live near enough that you see it often when out and about in your local area	where scenario selected at g2	
4	The powerlines have been undergrounded so there are no visible pylons in your local area	where scenario selected at g2	

Code	Options	Scripting notes	Routing
1	Would a total payment of £1000 help make the infrastructure more acceptable to you?		
2	Would a total payment of £5000 help make the infrastructure more acceptable to you?	ONLY SHOW IF NO TO CODE 1	
3	Would a total payment of £10,000 help make the infrastructure more acceptable to you?	ONLY SHOW IF NO TO CODE 2	
4	Would a total payment of £15,000 help make the infrastructure more acceptable to you?	ONLY SHOW IF NO TO CODE 3	
5	Would a total payment of £20,000 help make the infrastructure more acceptable to you?	ONLY SHOW IF NO TO CODE 4	
6	Would a total payment of £25,000 help make the infrastructure more acceptable to you?	ONLY SHOW IF NO TO CODE 5	

97	Don't know	ONLY SHOW IF NO TO CODE 6	
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Base: those who say code no to code 6 at G4

Open Response

G4A. How much would the payment need to be to make it more acceptable?

Please type your response in the box below

£[_____]

Code	Scenarios	Scripting notes	Routing
96	No amount would make it acceptable		

Community fund questions

Base: Ask SET A

Rank top 3, Split sample – set A, Randomise

G8A. Now imagine that a community fund has been established as a result of a substation being constructed within 15-minute walk from your home. This would look like the substation shown in the photo below. The community fund could provide financing for work and services which could benefit the wider local community as a whole.

Using the same scenario as before (for full details see here), [pop out box with scenario: In this scenario imagine you cannot see the new infrastructure from your home, however you live near enough that you see it often when out and about in your local area. During construction, imagine you experienced some short-term impacts including some noise, road closures and increased traffic from construction vehicles.] please select which 3 of the following objectives you would prefer the funds set out to achieve, starting with the one you like the most.

Please select up to three

Code	Answer list	Scripting notes	Routing
1	Environmental sustainability measures (e.g. rewilding activities)		
2	Economic growth (including jobs, business advancement)		
3	Community support and development (e.g. building the capacity of community organisations, and regenerating spaces; maintenance of community buildings or facilities)		
4	Health and wellbeing (e.g. developing local leisure facilities and green spaces)		
5	Measures to support the community in the transition to net zero (e.g. energy efficiency measures for homes, low carbon transport or renewable energy schemes)		
6	Educational and training activities		
7	Measures to reduce fuel poverty [add popup box to define fuel poverty: "Households who would have insufficient funds remaining to maintain an adequate standard of living if they were to heat their homes to a minimum safe temperature"]		
95	Other (please specify)	FIX	
97	None of the above	FIX, EXCLUSIVE	
98	Don't know	FIX, EXCLUSIVE	

Base: Ask SET B

Rank top 3, Split sample – set B, Randomise

G8B. Now imagine that a community fund has been established as a result of lattice pylons supporting overhead powerlines being constructed within 15-minute walk from your home. This would look like the pylons shown in the photo below. The community fund could provide financing for work and services which could benefit the wider local community as a whole.

Using the same scenario as before (for full details see here) [pop out box with scenario: In this scenario imagine you cannot see the new infrastructure from your home, however you live near enough that you see it often when out and about in your local area. During construction, imagine you experienced some short-term impacts including some noise, road closures and increased traffic from construction vehicles.]

Please select which 3 of the following outcomes you would prefer the funds set out to achieve, starting with the one you like the most.

Please select up to three

Code	Answer list	Scripting notes	Routing
1	Environmental sustainability measures (e.g. rewilding activities)		
2	Economic growth (including jobs, business advancement)		
3	Community support and development (e.g. building the capacity of community organisations, and regenerating spaces; maintenance of community buildings or facilities)		
4	Health and wellbeing (e.g. developing local leisure facilities and green spaces)		
5	Measures to support the community in the transition to net zero (e.g. energy efficiency measures for homes, low carbon transport or renewable energy schemes)		
6	Educational and training activities		
7	Measures to reduce fuel poverty		
95	Other (please specify)	FIX	

97	None of the above	FIX, EXCLUSIVE	
98	Don't know	FIX, EXCLUSIVE	

Base: Ask all respondents

SLIDER RESPONSE

G10A. In the case of a community fund, within how many miles of the [SET A – substation/
SET B – lattice pylons] should the funds be spent?

Please select your answer by dragging the bar down the scale

Within...

Code	Answer list	Scripting notes	Routing
1	Slider scale, 1 mile to 10 miles, increment for each mile		
95	Other distance or area (please specify)		
97	Don't know		

Base: All respondents

Multi Response, select 2, ROTATE

G10B. Within this area, are there any specific groups that community benefit funding should be targeted?

Please select up to two

Code	Answer list	Scripting notes	Routing
1	Those experiencing the greatest impact from construction		
2	Those experiencing the greatest impacts once the new infrastructure is built		
3	Those within the community who are most in-need		

4	Young people within the community		
5	Older people within the community		
6	Families		
96	Specific groups should not be targeted, benefits should be spread as widely as possible across the area impacted by the new infrastructure	EXCLUSIVE	
95	Another group (please specify)		
97	Don't know	EXCLUSIVE	

Base: All respondents

SINGLE RESPONSE PER ROW, ONLY SHOW NEXT AMOUNT IF NOT ACCEPTABLE

G10C. Imagine a community benefit scheme is set up to provide funds for communities near the new [set a – substation/ set b – lattice pylons]. This community benefit scheme would provide a sum of money over 10 years to local projects and organisations which can deliver positive outcomes for the community. To what extent would a [VALUE] scheme help make the project more or less acceptable to you?

Please select one only

Row Code	Options	Scripting notes	Routing
	£500,000	SHOW FOR ALL	
1	£1 million	ONLY SHOW IF £500,000 NOT ACCEPTABLE IE CODES 3 TO 5	
2	£5 million	ONLY SHOW IF £1 MILLION NOT ACCEPTABLE IE CODES 3 TO 5	
3	£10 million	ONLY SHOW IF £5 MILLION NOT ACCEPTABLE IE CODES 3 TO 5	
4	£20 million	ONLY SHOW IF £10 MILLION NOT ACCEPTABLE IE CODES 3 TO 5	

Column Code	Row list	Scripting notes
1	A lot more acceptable	
2	A little more acceptable	
3	Neither more nor less acceptable	
4	A little less acceptable	
5	A lot less acceptable	
97	Don't know	

Base: those who say code 3-5 at G10C row 4 (£20 million)

Open Response

G10D. How much would the payment need to be to make it more acceptable? What value would the scheme need to be to help make the project more acceptable to you?

Please type your response in the box below

£[_____]

Code	Scenarios	Scripting notes	Routing
96	No amount would make it acceptable		

Base: those who say acceptable (1 or 2) to any of G10c or provide a value at G10d

SINGLE RESPONSE per row

g11. How interested would you be in being involved in each of the following parts of a community benefits process in your area?

Please select one per row

Row Code	Answer list	Scripting notes	Routing
1	Developing proposals on what funding should be spent on		
2	Voting for projects which have applied for funding		
3	Participating in a panel to decide what funding should be spent on		
4	Applying for grant funding		

Column Code	Answer list	Scripting notes	Routing
1	Very interested		
2	Fairly interested		
3	Neither interested nor not interested		
4	Not that interested		
5	Not at all interested		
97	Don't know		

Closing demographics (Section T)

INTRO TEXT

Thank you for your responses. Now some final questions about you to ensure we are obtaining views for a cross section of people. You may find some of these questions sensitive and each question has a prefer not to say option available should you not wish to answer it. The answers that you provide will be used only for market research analysis purposes.

Base: All respondents

SINGLE RESPONSE

t01. What is your sex?

A question about gender identity will follow

Please select one only

Code	Answer list	Scripting notes	Routing
1	Male		
2	Female		
98	Prefer not to say		

Base: All respondents

SINGLE RESPONSE

t02. Is the gender you identify with the same as registered at birth?

This question is voluntary.

Please select one only

Code	Answer list	Scripting notes	Routing
1	Yes		
2	No – please write in gender identity	SPECIFY	
98	Prefer not to say		

Base: All respondents

SINGLE RESPONSE

T03. Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
1	Yes		
2	No		
97	Don't know		
98	Prefer not to say		

Base: Ask if have a disability as defined by the Equality Act (T03 = 1)

SINGLE RESPONSE

T03A. Do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
1	Yes, a lot		
2	Yes, a little		
3	No		
97	Don't know		
98	Prefer not to say		

Base: All respondents

SINGLE RESPONSE

T04. What is your ethnicity?

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
	White	heading not Code	
1	Scottish/British/English/Welsh/Northern Irish		
2	Irish		
3	Gypsy, Traveller or Irish Traveller		
4	Any other white background		
	Mixed	heading not Code	
5	White and Black Caribbean		
6	White and Black African		
7	White and Asian		
8	Any other Mixed/ Multiple ethnic background		
	Asian and British Asian	heading not Code	
9	Indian		
10	Pakistani		
11	Bangladeshi		
12	Chinese		
13	Any other Asian background		
	Black and Black British	heading not Code	
14	African		
15	Caribbean		

16	Any other Black/ African/ Caribbean background		
	Other ethnic group	heading not Code	
17	Arab		
95	Other		
98	Prefer not to say		

Base: All respondents

Single Response

T05. What is your current employment status?

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
1	Full time paid job (31+ hours)		
2	Part time paid job (<31 hours)		
3	Doing paid work on a self-employed basis or within your own business		
4	Studying at school or college		
5	Studying at university		
6	Taking part in a training programme e.g. traineeship or apprenticeship		
7	Out of work (6 months or less)		
8	Out of work (more than 6 months)		
9	Looking after home / Homemaker		
10	Retired		
11	Not in work due to ill health or disability		

12	Unpaid work for a business, community or voluntary organisation		
98	Prefer not to say		

Base: All respondents

Single Response

T07. Which of the following best describes your total annual household income before tax?

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
1	Less than £5,000		
2	£5,000-£9,999		
3	£10,000-£14,999		
4	£15,000-£19,999		
5	£20,000-£24,999		
6	£25,000-£29,999		
7	£30,000-£34,999		
8	£35,000-£39,999		
9	£40,000-£44,999		
10	£45,000-£49,999		
11	£50,000-£59,999		
12	£60,000-£69,999		
13	£70,000-£84,999		
14	£85,000-£99,999		
15	More than £100,000		
98	Prefer not to say		

Base: All respondents

Open Response, Write in up to 20

t08. How many individuals including yourself currently live in your household?

Please input a number for each age group. Type 0 if there are none in that age group

Fixed codes	Answer list	Scripting notes	Routing
1	Adults aged 18 and over	INPUT NUMBER	
2	Children aged 17 years or under	INPUT NUMBER	
98	Prefer not to say		

Base: All respondents

Single Response

T09. What is the highest level of educational qualification you have received?

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
1	PhD		
2	Masters Degree or equivalent (NVQ level 5)		
3	Bachelors Degree or equivalent (such as HND or NVQ level 4)		
4	A levels or equivalent (such as Scottish Highers or NVQ level 3)		
5	5 or more GCSEs or equivalent (NVQ level 2)		
6	Up to 4 GCSEs or equivalent (NVQ level 1)		
7	Other qualifications		
96	No qualifications		
98	Prefer not to say		

Base: All respondents

Single Response

T10. Which of the following best describes the ownership of your home?

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
1	Being bought on a mortgage		
2	Owned Outright		
3	Rented (Local Authority/Council)		
4	Rented (Housing Association/Trust)		
5	Rented (Private)		
6	Shared ownership (part rent/part buy)		
97	Don't know		
98	Prefer not to say		

Base: All respondents

Single Response

T11. The Department for Energy Security and Net Zero are looking to do some follow up research in the next 12 months. This may take the form of an online survey, telephone survey, focus groups or in-depth interviews. Would you be willing to help them with this? This would involve taking your name and contact details which would be used by BMG Research to conduct further research on this topic. Your responses would still remain anonymous.

Please select one only

Fixed codes	Answer list	Scripting notes	Routing
1	Yes [COLLECT NAME AND CONTACT DETAILS]		
2	No		

Closing Text

You have reached the end of the survey. Thank you for taking the time to answer our questions. Your input is really appreciated.

Please click next to submit your responses.

Annex B: Qualitative topic guide

Welcome and briefing (5 mins)

Introduction:

Facilitator to introduce themselves

Thank participants for agreeing to take part in a half-day workshop about electricity transmission network infrastructure

Explain the objective of research and the value of their participation: to understand your views on electricity transmission network infrastructure projects and how best to engage with local communities on behalf of the UK Government Department for Energy Security and Net Zero. The purpose of research isn't to discuss current proposals, but rather to understand communities' perceptions and how to engage with communities.

Explain how the session will work: interactive session, the facilitator will guide the conversation. If things are going off track, the facilitator will try to steer the conversation back to the main focus of the discussion

There are no right or wrong answers

You don't have to answer any questions you do not feel comfortable answering

Please be respectful of others' opinions

Length: The session should take approximately three (3) hours

Confidentiality: All information you provide will be treated confidentially. We will not identify any individuals or share the personal details of those who took part. Your responses are strictly confidential which is required by the Market Research Society.

Views stated are not linked to individuals and the more open and honest you can be the better.

We may use some of the things you say in our reports, including in the final report that will be published on the gov.uk website, but we won't reveal who said them. This is in line with the Market Research Society Code of Conduct.

Some colleagues working on the project are observing/listening to the session remotely, the moderator may check for any questions/follow-up from time to time from them.

Ask permission to record and reassure that recording will not be shared outside of BMG and will be securely deleted within 6 months.

We will securely delete your contact details within 6 months.

Recording: We would like to audio-record the discussion to accurately capture all the information you share with us. The audio will be used for analysis purposes only and will not be shared with anyone outside of BMG research.

Section 1: Background and introduction (5 mins)

Invite all respondents to introduce themselves, and say what electricity supply means to them.

Some participants will have taken part in the quantitative survey, but remind everyone that all opinions are equally valid.

Section 2: Understanding the necessity of network infrastructure projects (20 mins)

What do you know about electricity transmission network infrastructure, if anything?

What do you associate with network infrastructure? Think about the infrastructure that transmits electricity from where it is generated such as power stations, wind and solar farms for use in your homes.

Moderator write up answers on the flipchart

Moderator to show and read aloud the Overview of Electricity Transmission Network Infrastructure slide

How do you feel about this?

What more do you need to know now?

What do you think about plans to build four times as much new transmission in the next seven years as was built since 1990? What do you think are the main benefits of this?

Who would you trust to communicate about the need for network infrastructure projects?

What makes you say that?

Who do you currently trust to communicate about these sorts of projects? Why?

What information do you think people in your local area need to know to support the national need for electricity transmission network infrastructure projects? How this should be done in a way to build trust and support?

What information would you want to know to support such projects?

How would you/your local community want to receive this information

Prompts: advertisements, news articles, social media posts, large events (e.g. roadshows), something else?

What are your concerns with infrastructure in the area?

Why is this your concern? What are the most important concerns?

Prompts: What are the health concerns? What are they safety concerns What are the environmental concerns? What are construction concerns? How do concerns differ for pylons/overhead lines, underground, and substations.

What are the most important concerns?

Could anything be done to make you less concerned?

Section 3: Engagement with the planning process (15 mins)

Have you engaged in any planning proposals for transmission network infrastructure?

If yes: how did they engage, what prompted them to engage?

If no: why not?

Moderator to explain how the current process works (stimulus: 6-step consultation and engagement process)

Limit discussion to broad overview of following prompts

Allow spontaneous responses. What do you think of this process?

How fair (or otherwise) do you think this process is currently?

In an ideal world, how would you like to engage with project proposals?

What makes you say that?

Prompts: In person meetings, replying to consultations, writing to/emailing the developer, taking part in a survey, help to develop proposals, something else?

What aspects of the project would you like to have a say on?

Prompts: routing options, infrastructure design (e.g. pylon type), underground vs. overground vs subsea, how construction impacts are managed (e.g. traffic, time of construction etc), substation design

Could changes be made to ensure processes are fair and transparent?

What makes you say that?

Section 4: Perceptions of different network infrastructure types and design options (35 mins)

Now we're going to explore different types of electricity transmission infrastructure projects. We'll split into groups shortly as well and work on a couple of group tasks. As we explored earlier benefits of network infrastructure projects can include [refer to list from Section 2] ...

Now let's look at examples of hypothetical network infrastructure that could be built in the local area.

Moderator to show images of other designs (t-pylons, and undergrounding/overhead lines).

Not all of these would be available in all areas, but let's think about these designs in general.

Typically, powerlines are carried overhead via pylons. However, in some cases, power cables can be buried underground or moved offshore through subsea cabling.

Moderator to show trade off slides.

What do you think about these different designs?

Ranking task: Let's put these in an order preference. Which one is your most preferred design?

Moderator to continue with ranking then probe.

Why did you put this one first?

Why this one last?

T-pylons: if preferred – why is this the case? What are their expectations around why this could be better for them than a lattice pylon?

Have you seen t-pylons in real life? If yes: Where? What did you think about them?

Moderator probe any changes in perception from initial responses to lattice pylons/substations

The cost of building and maintaining transmission network infrastructure is paid through electricity bills. In Great Britain last year, around £4.00 of every household's monthly electricity bills contributed towards these costs.

T-pylons, underground and subsea cables are currently more expensive options than lattice pylons. If these were more frequently used instead of lattice pylons, the additional costs would be paid for via households' electricity bills. How much would you be willing to add to your monthly electricity bill for each of these different types of infrastructure? Why are you/are you not willing to add costs to your electricity bills

What do you think now?

£4.00 a month equates to about 2.5% of annual bills. How much more would you be willing to add to your household bills if it improves transmission network infrastructure in your area?

Moderator to show images of other substation designs. Not all of these would be available in all areas, but let's think about these designs in general.

What do you think about these different designs?

Which one is your most preferred design? (options = contained in building/landscape screening/no preference)

Section 5: Community benefits schemes and guidance (60 mins)

Moderator to introduce the expert slides that explains community benefit schemes. Then relate to an imagined scenario that there are plans for the construction of new infrastructure within a 15-minute walk from their home.

Generally, would you support or oppose the use of community benefits schemes as part of a project like this?

What makes you say that?

What would be the best community benefits for your local area? Where do you think these sorts of initiatives could benefit your community/local area?

Thinking about the types of community benefits here, what order of preference would you set out these benefits in?

Moderator to write up on post-its initially, then use flipchart to build participants' preferred benefits.

Prompts: Why did you put this first? Why was this last?

If appropriate: What makes bill discounts, direct payments/community funds more preferable?

We are now going to examine two aspects of community benefits schemes further. In a bit we will talk about direct payments, but first we will start with community funds.

Community funds

First I'm going to give you an example where a community fund has been used

Moderator to show Eirgrid slides as an example of community benefit funds

What local projects would you like to see funded in your local area?

What would make this a successful investment? What does the funding need to achieve?

Prompts: Environmental sustainability measures (e.g. rewilding activities), economic growth (including jobs, business advancement), community support and development (e.g. building the capacity of community organisations, and regenerating spaces; maintenance of community buildings or facilities), health and wellbeing (e.g. developing local leisure facilities and green

spaces), measures to support the community in the transition to net zero (e.g. energy efficiency measures for homes, low carbon transport or renewable energy schemes), educational and training activities, measures to reduce fuel poverty

Why do you favour these types of projects?

How much would you want to see available in a fund like this?

In a recent survey respondents were asked to imagine a community fund set up to provide funds for communities near the new infrastructure. This community benefit scheme would provide a sum of money over 10 years to local projects and organisations which can deliver positive outcomes for the community. Almost 60% of people said they would be happy with a community benefit fund worth £500,000. – why do you think this is?

How does it change depending on the size/type of infrastructure project? *Prompt if necessary:* what if the size of fund could range from £500,000 to £2 million?

How locally to the network infrastructure should the funds be spent?

If we think about a boundary line, what distance do you think is appropriate?

How do we make this boundary fair?

What about pre-existing boundaries like the Local Authority area/wards?

How should these funds be split/allocated fairly?

How should the community be involved in the development and design of community benefits schemes?

How would you like to be involved?

How do you ensure all views of the community are representative?

In what different ways can communities be engaged with to ensure the consultation is representative?

How would disagreements/lack of consensus be resolved fairly?

Who should be responsible?

Who should govern the schemes?

Overall, how should decisions be made?

Direct Payments

Moderator to show direct payments expert slides

Who should be eligible for direct payments?

Would these payments vary for different individuals? Why/why not? (prompts for homeowners, renters, businesses)

If renters – how long should they have lived at property? What about landlords' eligibility?

How should different levels to different individuals be determined?

How would payments change for the different types of infrastructure (lattice pylons vs. substations)?

Prompts:

What if you live right by the [lattice pylon/ substation] and can see it clearly from your home?

What if you live near but not right by the [lattice pylon/ substation] and can see it in the distance?

What if you cannot see the [lattice pylon/ substation] from your home, however you live near enough that you see it often when out and about in your local area?

What if the powerlines have been undergrounded so there are no visible lattice pylon in your local area?

What level of payments should be offered for direct payments? *Prompt after a short wait:* Amounts generally fall between £1,000 to £25,000.

What impact does distance from someone's property boundary make?

Moderator: explain HS2 examples of different payments

What do you think now?

In a recent survey respondents were asked to imagine that a community benefits scheme is offering direct payments to households living near new transmission infrastructure such as a substation or lattice pylon. In this survey around 40% of people said they would be happy with £1,000 – why do you think this is?

What would be an acceptable application process be for those eligible for the direct payments?

What level of proof that they live at the address and meet criteria?

Use of solicitors?

How can it be easy and fair?

Role of developers – should they notify people who are eligible or should people be proactive?

A different benefit could be electricity bill discounts. What level of electricity bill discount would you expect for an electricity infrastructure project to be more acceptable to you? *Moderator see*

*if group can work towards a consensus then prompt: £200 over 12 months for example?
Moderator to establish a range between which participants could be satisfied.*

At what point is a bill discount too low that you would prefer different types of benefits such as a community fund?

What makes you say that?

Imagine there is one big pot of money, how would you allocate funds towards community funds, direct payments and electricity bill discounts, or other types of benefits? *Moderator have the group work together to select their priorities – does not need to be consensus.*

Lower priority: Do you think community benefits should be mandatory or voluntary? If prompt required: This means whether community benefits should be legally required (mandatory) for new electricity network infrastructure projects like pylons, substations etc or whether it is optional for developers to decide.

What makes you say that?

If the government were to set the terms for community benefits across the Great Britain, what would you think then? Why?

If time: Should there be flexibility over:

Types of projects to be funded (should communities say or stakeholders like gov or developers decide)

Who is eligible to receive benefits - mandated or flexible approach depending on community?

How schemes are managed - flexible or same across the country

What should be the overarching principles or recommendations for community benefits schemes for network infrastructure projects so they can be developed collaboratively with communities?

Principles if respondents are struggling – moderator to write headings on flipchart:

Fairness: Everyone should receive the same amount of compensation

Equality: Those closest to the infrastructure should receive more compensation than those furthest away

Immediacy: The scheme's impact should benefit people immediately

Longevity: The scheme's impact should benefit people over the long term, even if this means that people cannot feel benefits immediately

Democracy: The scheme's uses should be decided by members of the community

Delegation: The scheme's uses should be decided by the Council or another independent oversight body

Broad Scope: Making the scheme's benefits stretch as far as possible across projects and areas

Concentrated Scope: Targeting the scheme to specific, high-impact projects

Transparency: commitment to publishing information about the scheme's funds and how they are being spent

Accountability: mechanisms are in place to make sure the developer is accountable for the scheme.

It is most likely that community benefits will be paid for through electricity bills. If electricity bills across Great Britain were to increase to pay for community benefit schemes in certain areas across the country. How much would you be willing to add to your monthly electricity bill for each of two fund community benefits schemes? Why are you/are you not willing to add costs to your electricity bills?

Section 6: Summary and conclusion (5 mins)

Have your views changed over the course of this session?

If yes: In what ways?

If no: Why do you think that is?

After all we've discussed today, what are the biggest factors that drive your acceptance towards network infrastructure projects?

Some of the key themes we've discussed that could help drive people's acceptance towards these projects:

Explaining the need for infrastructure (public communications)

Involving and engaging communities in the planning process

Types of infrastructure that could be built

The different benefits that could be provided to communities and residents

How would you rank these from most important to least important to you in driving acceptance?

Anything else you'd like to tell the moderator about what we've discussed about electricity transmission network infrastructure today?

Thank and Close

Annex C: Example community benefits from the qualitative phase

Table 9. List of example community benefits described to workshop participants

Community benefits	
Community funds	For local organisations or projects to deliver positive outcomes for the community. For example, a community may want to fund local projects that can improve the local environment or provide leisure facilities for local people.
One-off direct investments	Provided directly to a local project by the company developing the infrastructure project. Rather than a long-term fund as above, these are single one-off investments from the developer.
Supporting local supply chains and local businesses	For example, a developer could make commitments to prioritise working with local suppliers to support local businesses and provide employment opportunities.
Jobs, training, and apprenticeships for local residents to work in the energy industry	Provided by companies developing infrastructure projects.
Electricity bill discounts	For residents in close proximity to the new transmission infrastructure.
Direct payments	Paid to residents who live in close proximity to the new transmission infrastructure.

This publication is available from: www.gov.uk/government/publications/community-benefits-for-electricity-transmission-network-infrastructure

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