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Planning for the future

FINDINGS FROM QUANTITATIVE RESEARCH WITH DOMESTIC & NON-DOMESTIC CUSTOMERS

Report prepared for NIE Networks

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Northern Ireland Electricity Networks

Report contents

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Key insights: an executive summary

Background

NIE Networks identified the need to better understand the attitudes, current experiences and relative priorities of consumers in relation to customer service, network performance, environmental performance and future strategy. To this end, NIE Networks commissioned Perceptive Insight, an independent market research agency, to undertake an on-going programme of research to ascertain the views and perceptions of NIE Networks' customers and stakeholders. This report represents the findings from the latest round of non-domestic and domestic quantitative research, which took place between May and July 2021.

Methodology

A telephone interviewing methodology was used to conduct the surveys. The survey of domestic customers was undertaken between May and June 2021, and during July 2021 for the non-domestic customers. Each interview took, on average, 10 to 15 minutes to complete and was carried out in compliance with the GDPR 2018 and the Market Research Society Code of Conduct. In total, 1,211 domestic and 507 non-domestic interviews were completed.

Key findings

A summary of the key findings from these surveys with domestic and non-domestic consumers are outlined below.

Domestic consumer findings

Views of NIE Networks

- The results show an upward trend in the proportion of respondents speaking highly of NIE Networks – from 52% in 2015, to 56% in 2019 and 69% in the most recent survey. However, those experiencing multiple outages or outages lasting more than three hours were more likely to be critical than the general population.
- There was also an increase from previous domestic customer research in the percentage reporting satisfaction with NIE Networks' services (up 5 percentage points to 91%).
- The 2021 survey produced an overall NPS score of 51 – a substantial increase from 12 in 2019. However, the difference in sample size and methodology between the two studies should be noted when interpreting this increase.
- Younger customers (aged under 35) were more likely to report no or little knowledge of NIE Networks (77%) than those in older age categories.

Recent experience with NIE Networks

- Almost three quarters (73%) of respondents could not recall a recent planned power cut, while 24% reported having experienced at least one in the preceding 12 months. This indicates a slight increase since 2015 (from 19%).
- Those in rural areas were more likely to have experienced a planned outage and to have been affected more frequently.
- In the event of planned maintenance, there was no clear preference for either one longer power cut (45%) or two shorter power cuts (44%), with one in 10 (10%) unable to decide. Analysis by those categories of respondent who may be more vulnerable found the following on balance:
    - those aged 65 and over showed a preference for two shorter planned outages (46%) rather than one longer outage (37%);
    - rural areas showed a preference for one longer power cut (53%) over multiple shorter power cuts (35%);
    - a similar proportion of C2DEs chose each option;
    - households with children also did not show a clear preference for one option over the other; and
    - those in which a member was dependent on electricity for their healthcare needs opted for two shorter cuts (53%) over one long one (41%).
- Three quarters (75%) of domestic customers had not experienced an unplanned power cut at their home in the last 12 months, while 22% had experienced at least one, with 8% having experienced multiple.
- One in ten (10%) respondents said that they were affected by excessive bird fouling from overhead powerlines at their home, with 7 respondents saying they had contacted NIE Networks about it.

Contact and communication

- Only 10% of respondents had tried to make contact with NIE Networks in the last 12 months. Only 4% or 5 respondents found it quite or very difficult to get a response.
- Those aged under 35 were the most likely age group to use online services (36% compared to 4% of over 65s). In relation only to those who had contacted NIE Networks to report a power cut, over two thirds 67%) had spoken to a staff member. This is an increase of 8 percentage points from 59% in 2015.

Future networks

Climate change

- While 88% agreed it is important to develop solutions to reduce impact on the environment, over three quarters (76%) of respondents are willing to change their behaviour and over half (51%) agree that they would pay extra to reduce climate impact. These findings indicate that while domestic customers see climate change as an important issue, this has not yet fully developed into intention to change behaviour and even less so into willingness to pay.
- Those aged under 35 were much more likely to agree with all statements (92%, 78% and 60% respectively) than those aged 65 and over (83%, 64% and 47% respectively).

- ABC1s (44%) were more likely than C2DEs (22%) to have made enquiries about the use of low carbon technologies, but having done so were also more aware of the high costs involved (over one third (34%) of ABC1s cited cost as a barrier compared to one quarter (24%) of C2DEs).
- Just over one fifth of respondents (21%) confirmed that someone in their household was working from home due to the Covid-19 restrictions. Of these 249 respondents, 37% expected at least one person in their household to be working fully from home after the Covid-19 restrictions are eased and employees are able to return to the workplace, with 39% expecting at least one person in the household to be working partially from home after easing of restrictions.

Undergrounding of overhead power lines

- 88% of domestic customers said they would be in favour of putting more of the electricity network underground for safety purposes. This fell slightly to 84% if undergrounding was for environmental reasons such as bird fouling and further to 83% if the main motivation was for aesthetics.
- Respondents were slightly more likely to rate undergrounding was a priority (4 or 5 on the scale) in areas where customers are excessively affected by bird fouling (77%) than in residential areas (such as housing developments) (76%) or rural villages and towns within 30 mile an hour limits (e.g. along main streets) (74%).

Smart meters

- When asked, over two third (68%) were in favour of having a smart meter installed in their home, while 15% were against.
- Those aged 65 and over were less likely to be in favour of having a smart meter installed (55%) than those in any other age category (74% of under 35s; 76% of 35 to 44s; and 72% of 45 to 64s). Almost three quarters (74%) of ABC1 respondents were in favour of having a smart meter installed in the home, but this fell to 65% of C2DEs.

Prioritisations

- When presented with four service areas, domestic customers were most likely to be in favour of investment to reduce power cuts and maintain supply with 70% lending their full support to additional spending in this area (5 on the scale). A further 14% gave this service attribute a support level of 4 on the scale, meaning that 84% of respondents deemed a reduction in power cuts and maintaining supply to be of high-level priority (4 or 5 on the scale).
- Respondents confirmed that their main priority is reducing the number of power cuts experienced by customers and maintaining supply; with 37% naming this as their most important area for improvement and 91% of respondents placing it as one of their top three.
- The findings were less clear in respect of the second ranked area for investment. While 28% defined ‘supporting the rising levels of renewable technology’ as their second most important area for improvement compared to 22% saying the same for ‘put overhead lines underground’; a slightly greater proportion of respondents placed the undergrounding of powerlines within their top three (83%) than did so for supporting renewable technology (80%).

Willingness to pay extra for investment

- When asked if they were willing to pay £1/£3/£5/£10/or more extra per year, 79% confirmed that they were willing to pay at least something towards investment, meaning 21% were not willing to pay anything extra. Sub-group analysis of those not willing to pay extra included the following:
  - 24% of people aged 65 plus compared to 15% aged under 35;
  - 22% of C2DEs compared to 18% of ABC1s;
  - 24% of those in rural areas compared to 19% of those in urban areas;
  - 23% of those who privately rent their home compared to 19% living in social housing and 18% who own their home; and
  - 22% of those in the least deprived areas would be unwilling to pay extra compared to 18% in the most deprived areas.
- While a similar proportion of respondents across key demographics were willing to pay an additional £1 per year on their electricity bills, disparities began to appear at £3 per year with those aged 65 and over and rural respondents less likely to be willing to pay this amount. Disparities grew further at £5 per year with C2DE respondents also showing reduced willingness to pay at this amount. Subgroup analysis reveals the following disparities above £10 per year:
  - 27% ABC1s are willing to pay more than £10 compared to 15% of C2DEs;
  - 23% of those in urban areas are willing to pay more than £10 compared to 16% of rural respondents;
  - 22% who own their home are willing to pay more the £10 per year compared to 17% in social housing; and
  - 30% of people living in the least deprived areas would pay this amount whereas only one third (20%) of those in the most deprived areas would be willing to do so.

Non-domestic consumer findings

Views of NIE Networks

- The majority of non-domestic consumers (61%) said they would speak highly of the services provided by NIE Networks, with 8% saying they would do so without being asked. Only 5% said they would speak critically about NIE Networks. These findings indicate an 8-percentage point increase since 2015 in the proportion of business customers who would speak highly of NIE Networks (up from 53%).
- The vast majority (90%) agreed with the statement that they were satisfied with NIE Networks' services with 18% strongly agreeing. Only 2% disagreed with the statement. At the overall level, satisfaction had increased since the 2015 survey (up 15 percentage points from 75%).
- Those in manufacturing, construction and motor trades (8%) and large businesses (50 plus employees) (4%) were more likely to disagree with this statement.
- Further subgroup analysis indicates that organisations who have experienced more than one planned (5%) or unplanned (7%) outage are more likely to express dissatisfaction. There is also clear disparity between organisations that have applied for a new connection in the last three years (79% satisfied) and those who have not (91% satisfied).

- In respect of likelihood to recommend, two fifths (40%) of respondents selected a 9 or 10 on the scale, while 18% gave a score of 0 to 6. This produces a Net Promoter Score of 22. The NPS is slightly lower than in 2019 (down from 24).

Recent experience with NIE Networks

- Almost two thirds (65%) of non-domestic respondents had not experienced a planned power cut in the last 12 months, while around 1 in 5 (18%) had experienced one outage, 10% had experienced this twice and 3% on three or more occasions.
- The proportion of non-domestic customers recalling a recent planned power cut has increased from 20% in 2015 to 32% in the most recent research. While the percentage of non-domestic customers experiencing one (up from 12%) or two (up from 5%) outages has increased, the percentage experiencing three or more has remained unchanged.
- At the overall level, non-domestic respondents did not show a strong preference for the format of planned outages for maintenance purposes. However at subgroup level, the following preferences were notable:
    - the agriculture sector displayed a strong preference for one long power cut (57% option A) over multiple shorter outages (32% option B);
    - the manufacturing, construction and motor trades responded similarly; 49% option A and 31% option B; and
    - this was reversed in the wholesale, retail and hospitality sector; 62% preferred multiple shorted outages over one long one (26%).
- Under two thirds (63%) could not recall having experienced an unplanned power cut in the last 12 months. Just under a fifth (18%) had experienced one, 9% had experienced two, and 7% had experienced three or more.
- These findings indicate an increase of 8 percentage points (from 26% to 34%) since 2015 in the proportion of non-domestic respondents recalling at least one recent unplanned power cut. There has been a clear reduction in the percentage of respondents reporting the longest duration of unplanned cuts (three hours or more) since 2015; down 11 percentage points from 31%.
- Non-domestic customers were asked if they had made an application for a new connection to the electricity network or to alter the existing connection within the last three years; 9% had done so. Of these 47 respondents, 10 said they were dissatisfied or very dissatisfied with the process. When asked why they were dissatisfied, 7 respondents explained that it was because of the time taken to arrange the new connection.

Contact and communication channels

- Less than 1 in 5 (18%) business respondents had tried to contact NIE Networks on behalf of their organisation in the last 12 months, while 82% had not. Those organisations who had experienced multiple unplanned outages (40%) or an unplanned outage lasting more than 3 hours (43%) were more likely to have contacted NIE Networks recently.
- Of those who had contacted NIE Networks in the last 12 months, 59% described getting a response as being easy, while 21% said this had been difficult.

Future networks

Climate change

- The majority (85%) agreed that it is important to develop solutions to reduce impact on the environment. A smaller proportion of respondents agreed to changing organisational behaviours because of concerns about climate change (78%). Agreement fell to under half of business respondents (42%) in relation to willingness to pay extra to reduce impact on the environment.
- Non-domestic customers are therefore approaching the issue of climate change similarly to domestic consumers; while they recognise the importance of addressing the issue, this does not translate fully into intention to change behaviour and even less so to willingness to pay for measures to reduce environmental impact.
- Overall, 16% of non-domestic customers currently use some form of low carbon technology while a further 19% have plans to implement in the next three years. Those in the agriculture sector were most likely to already have low carbon technologies in place (32%) while those in the manufacturing, construction and motor trades were most likely to have plans to introduce these measures in the next three years (26%).
- The majority (88%) did not generate and had no plans to sell self-generated electricity back to the grid; 7% currently do so while 3% have plans in place to do so in the future.
- Respondents were asked to identify the main barriers to making their organisation more energy efficient. For almost two fifths of businesses there were no barriers (38%). By far the largest proportion of respondents (32%) suggested that cost was the main issue; this was followed by not owning the property (11%).
- Around one fifth (18%) of respondent organisations reported to have employees in their organisation working from home due to the Covid-19 restrictions, while 82% did not. Those in transport and business services (30%) and public administration, health and education (40%) were most likely to have staff working from home.
- Of those non-domestic customers who had employees based at home due to Covid-19 restrictions, just under a quarter (23%) confirmed that most or all employees would continue to mainly work from home following the easing of restrictions and just over half (53%) plan to allow employees to work from home part of the time. For one fifth (20%), all employees will return to the workplace.

Undergrounding of overhead powerlines

- The majority are in favour of undergrounding for safety purposes (88%). Most were also in favour of undergrounding for environmental reasons (85%) and for aesthetics (83%), but the percentage in favour decreased for the latter two scenarios.
- The largest proportion of respondents rated undergrounding as a high priority (4 or 5 on the scale) in areas affected by bird fouling (61%), falling to 59% in residential areas and further to 56% in rural villages and towns.

Prioritisations

- When asked about the prioritisation of future investment, respondents were most likely to be in support of reducing power cuts and maintaining supply. Two thirds (66%) lent their full support to this attribute (5 on the scale); with a further 16% rating their support at 4 out of 5. Therefore, 82% were in support of investment in this area.

- Over half of non-domestic respondents said they would also lend full support to investment in the rising levels of renewable technology (55%) and improving the customer service experience (57%). A further 26% and 24% respectively would be in favour of support at a 4 on the scale, meaning that about four fifths (80%) support investment in these attributes.
- The percentage in full support of investment in putting overhead powerlines underground fell below half to 41%. With 69% total in support at a 4 or 5 on the scale.
- Respondents confirmed reducing power cuts and maintaining supply as their top priority with 44% selecting it as the most important area for improvement and 90% naming it as one of their three highest priority areas.
- 'Supporting the rising levels of renewable technology' ranked as second highest priority. One third (33%) of respondents named it as their top area for investment and 81% placed it within their top three.
- Next came putting overhead powerlines underground (12% top priority and 76% within highest three), followed by 'improving the customer service experience (11% top priority and 53% top three).

Willingness to pay for extra investment

- 59% were willing to pay something extra towards investment, meaning 41% did not express a willing to pay extra. Analysis of those not willing to pay extra highlighted the following:
    - 53% of public administration, health and education organisations and 51% of wholesale, retail and hospitality businesses were not willing to pay extra, compared to 23% operating in the agriculture sector;
    - 53% of business with 11 to 49 employees are not willing to pay, compared to 45% of those with 50 plus and 39% with 10 or fewer employees.
- Three fifths (60%) of non-domestic customers were willing to pay 0.1% extra, 52% were willing to pay 0.2% extra, 43% were willing to pay 0.5% extra and 37% were willing to pay an additional 1%. Only 7% would be willing to pay above 1% extra.

Introduction

Research background

Northern Ireland Electricity Networks (NIE Networks) commissioned Perceptive Insight, an independent market research agency, to undertake a programme of research designed to ascertain the views and perceptions of NIE Networks' customers and stakeholders.

The research is being overseen by NIE Networks in partnership with the Consumer Council, the Utility Regulator and the Department for the Economy. Representatives from these organisations form the Consumer Engagement Advisory Panel (CEAP). This joint panel provides advice and guidance throughout the research process.

Surveys with domestic and non-domestic consumers were conducted in 2015 and 2019. Comparisons with the results from these surveys are made throughout the report where relevant. However, for comparison purposes, differences in sample size and methodology should be noted. The 2015 domestic customer research was conducted using random sampling face-to-face interviewing in respondent households while the 2019 survey was conducted using on-street interviewing. As necessitated by Covid-19 restrictions, the 2021 survey was completed by telephone.

Research aims and objectives

The aims of the research were to:

- Quantitatively explore the range of views and behaviours that exist in the domestic and non-domestic customer population, to understand the impact of decisions on various customer segments, and inform NIE Networks' future investment priorities; and
- With a particular focus on matters related to (1) customer service, (2) network performance, (3) environmental performance and (4) future strategy.

Overview of the research programme

The diagram below provides an overview of the research programme for 2020/21:

PLANNING AND DESIGN

- **Planning meeting**
  - Discuss scope of research
  - Agree timetable and reporting outputs
- **Concise literature review**
  - Compile a short report providing an update on best practice in stakeholder engagement and willingness to pay methodologies

PHASE 1

Identify priorities for key stakeholders and customers

- 1 main engagement workshop with key stakeholders and 5 workshops on focused topics

PHASE 2

Explore the priorities for customers and assess impacts

- 8 focus groups with domestic customers
- 15 depth interviews with non-domestic customers

PHASE 3

- **Interviews with domestic customers**
  - 1,200 telephone interviews
- **Interviews with business customers**
  - 500 telephone interviews

This report presents the findings from the Phase 3 research.

Methodology

Perceptive Insight undertook a statistically representative survey of domestic and non-domestic consumers in Northern Ireland using a telephone interviewing methodology. Interviewing took place between May and July 2021, with each interview taking, on average, 10 to 15 minutes to complete. Interviewing was carried out in compliance with the GDPR 2018 and the Market Research Society Code of Conduct.

Questionnaire design

The questionnaires were designed in collaboration with the NIE Networks project team and the CEAP group. Both the domestic and non-domestic questionnaires broadly covered the same topic areas.

Sample design

Survey of domestic consumers

NIE Networks required a minimum of 1,200 surveys to be completed with a representative sample of domestic energy consumers from across NI. The survey was conducted with bill payers aged 18+. The table below details the demographic quotas applied, and the number of interviews achieved when carrying out the survey to ensure that the data is representative of the target population:

Table 2.1: Domestic consumer survey population quotas[1]

	Category	Percentage in NI population 18+	Target number of interviews	Achieved (n)	Achieved (%)
Age	18 - 34	18%	216	202	17%
	35 - 44	20%	240	207	18%
	45 – 64	38%	456	465	40%
	65 plus	25%	300	300	26%
Gender	Male	49%	588	596	49%
	Female	51%	612	615	51%
SEG*	ABC1	50%	600	558	46%
	C2DE	50%	600	555	46%
	Refused	-	-	98	8%
Urban/Rural*	Urban	60%	720	798	66%
	Rural[2]	36%	432	413	34%
	Mixed	4%	48		
Total		***100%***	***1200***	***1211***	***100%***

[1] Age, gender and urban/rural breakdown sourced from NISRA 2019 Mid-Year Population Estimates; SEG sourced from 2011 Census.
[2] Urban/rural is defined according to the system of classification used by NISRA.

We also monitored responses during data collection to ensure that it was representative of the population distribution across Northern Ireland by District Council Area. As part of the survey, we collected the postcode for each respondent, allowing us to analyse the data according to key location data breaks, including quintile of deprivation.

Survey of non-domestic consumers

NIE Networks also required 500 interviews to be conducted with a representative sample of non-domestic consumers. The sampling frame for this study included all non-domestic electricity consumers. Table 2.2 shows the current structure of VAT registered organisations in Northern Ireland from published government sources[3].

Table 2.2: Organisations in NI by employee size and sector

Broad Industry Group	Total	Percentage
Agriculture, forestry & fishing	18,520	25%
Production	5,235	7%
Construction	10,515	14%
Motor trades	2,650	4%
Wholesale	3,255	4%
Retail	6,065	8%
Transport & storage (inc. postal)	2,475	3%
Accommodation & food services	4,145	5%
Information & communication	2,040	3%
Finance & insurance	1,250	2%
Property	2,390	3%
Professional, scientific & technical	6,025	8%
Business administration and support services	2,745	4%
Public administration and defence	50	0%
Education	675	1%
Health	2,810	4%
Arts, entertainment, recreation and other services	4,640	6%
All Industries	**75,490**	**100%**
Employee size band	**Total**	**Percentage**
0 to 9	67280	89%
10 to 49	6530	9%
50 to 249	1370	2%
250 plus	310	0%
All sizes	**75,490**	**100%**

Stratification was applied to the sample by number of employees and sector to ensure that there were sufficient numbers for subgroup analysis. Data was then weighted when reporting at the overall level to reflect the NI population of non-domestic consumers.

[3] https://www.nisra.gov.uk/publications/historical-data-tables-idbr

When undertaking the interviews, we monitored the location of businesses to ensure representation by council area and by urban/rural breakdown. It should be noted that the survey was undertaken during COVID-19 restrictions, affecting the hospitality and non-essential retail sectors in particular.

Table 2.3: Non-domestic consumer survey proposed sample stratification

	Category	Target number of interviews	Achieved (unweighted)	%	Achieved (weighted)	%
Size	0 to 10	275	281	55%	446	88%
	11 to 49	150	150	30%	51	10%
	50 plus	75	76	15%	10	2%
Sector	Agriculture	100	100	20%	146	29%
	Manufacturing / construction / motor trades	100	102	20%	93	18%
	Wholesale / retail / hospitality	100	101	20%	82	16%
	Transport / services	100	104	21%	113	22%
	Public admin / health / education	100	100	20%	74	15%
	Total	***500***	***507***	***100%***	***507***	***100%***

Report structure

Findings from the domestic survey are addressed first, followed by those of the non-domestic survey. The report is structured under the following headings:

- **Views of NIE Networks** explores opinions of and satisfaction with the services provided by NIE Networks.
- **Recent experience with NIE Networks** explores incidence of planned and unplanned power cuts experienced by respondents in the last 12 months. Domestic consumer experiences of bird fouling from overhead power lines were also examined, while connection applications by non-domestic customers were addressed.
- **Contact and communication channels** focuses on consumer experiences and preferences in their interactions with NIE Networks.
- **Future networks** explores customers' awareness, opinions and actions in relation to renewable energy sources and climate change. Working from home during and after the pandemic, the undergrounding of overhead power lines and domestic consumers views of having smart meters installed were also covered.
- **Prioritisations** identifies areas where respondents believe NIE Networks should be focusing their investment in the network and how willing people would be to pay extra for these investments.

KEY FINDINGS – DOMESTIC CUSTOMERS

Views of NIE Networks

Those that took part in the domestic customer survey were asked a number of questions to capture their perceptions of NIE Networks. We asked three questions on consumers' general opinions of NIE Networks, as follows:

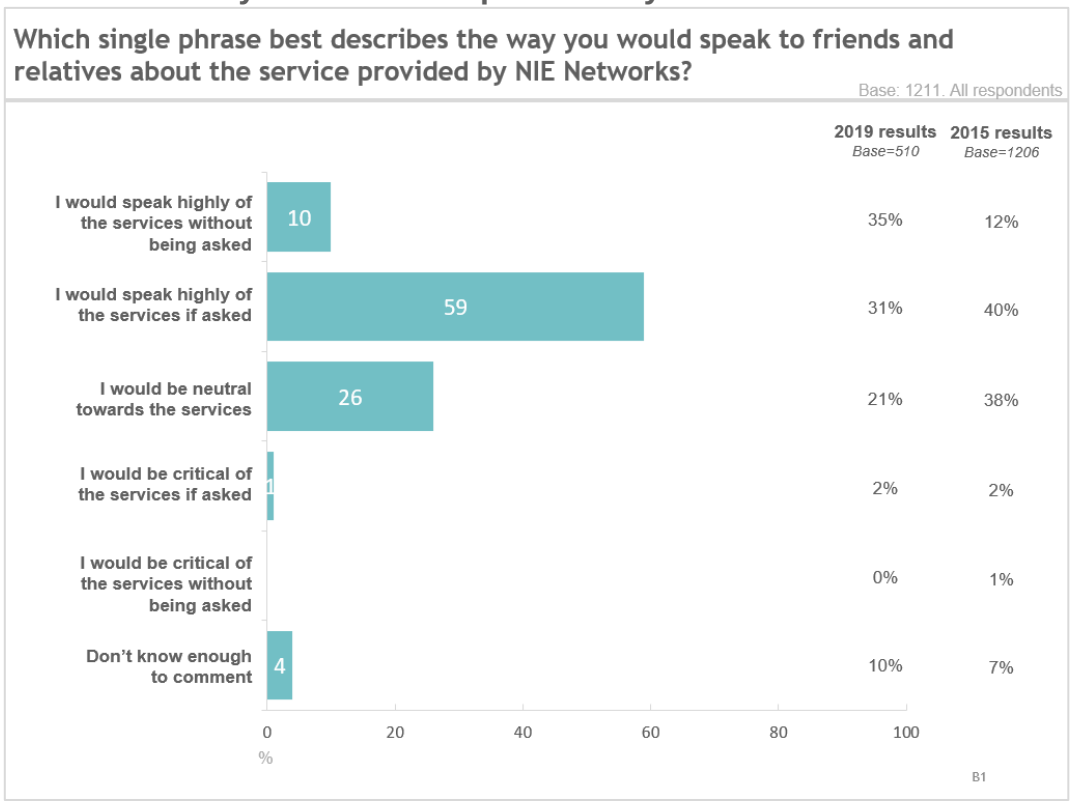
- What phrase describes the way you would speak to friends and relatives about the service provided by NIE Networks;
- Satisfaction with the service provided by NIE Networks;
- Likelihood of recommending NIE Networks; and
- Level of knowledge about the electricity network.

Advocacy of NIE Networks' services

Domestic customers were asked to describe how they would speak to friends and relatives about the service provided by NIE Networks. The majority reported that they would speak highly (69%) with 10% saying they would do this without being asked. Just over one quarter (26%) confirmed that they would be neutral towards the service provided and 1% indicated that they would be critical.

These findings compare favourably to those of previous domestic customers surveys, showing an increase of 17 percentage points in those reporting that they would speak highly of the service provided by NIE Networks since 2015 (up from 52%) and 13 percentage points since 2019 (up from 56%).

Figure 3.1: Advocacy of the service provided by NIE Networks



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Sub-group analysis shows that those aged 65 or older (75%) were more likely than younger customers aged under 35 (63%) to say they would speak highly of the services. Younger respondents were more likely to take a neutral stance.

Although the overall percentage of those who said they would be critical was low (1% or 13 respondents in total), these respondents were more likely to have experienced more than one outage in the last year and/or to have had an outage lasting more than three hours.

Table 3.1. Advocacy of NIE Networks by experience of planned and unplanned outages

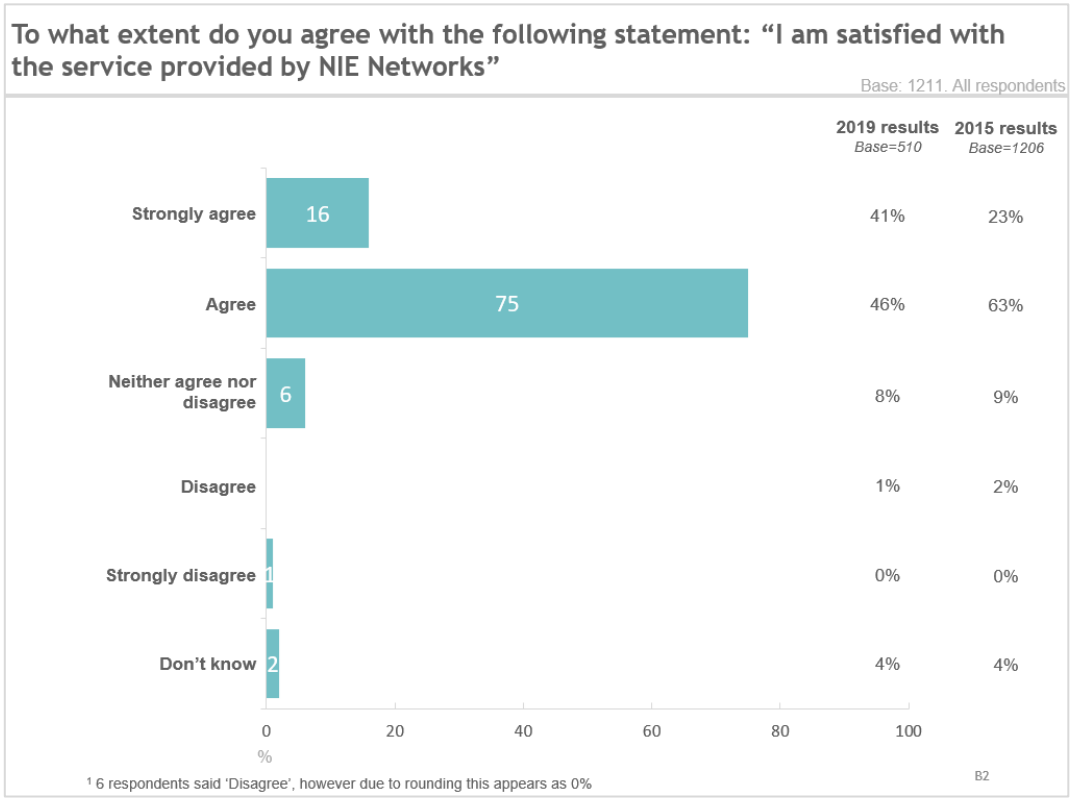
		Planned outages		Unplanned outages				Overview		
	All	One outage	>one outage	One outage	>one outage	<3 hours	>3 hours	Had planned outage	Had unplanned outage	No outages
Base	*1211*	*201*	*79*	*173*	*95*	*214*	*54*	*280*	*268*	*732*
I would speak highly of the services without being asked	10%	10%	16%	10%	17%	12%	17%	12%	13%	9%
I would speak highly of the services if asked	59%	65%	51%	59%	47%	56%	50%	61%	55%	59%
I would be neutral towards the services	26%	20%	27%	26%	28%	28%	22%	22%	27%	27%
I would be critical of the services if asked	1%	2%	4%	1%	5%	1%	7%	3%	2%	0%
I would be critical of the services without being asked	0%	-	-	-	-	-	-	-	-	0%
Don't know enough to comment	4%	2%	3%	4%	2%	3%	4%	3%	3%	4%
Total	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

Satisfaction with NIE Networks' services

Respondents were asked to what extent they agreed or disagreed with the statement 'I am satisfied with the services provided by NIE Networks'. Almost all (91%) said they agreed, with 16% saying they strongly agreed. Only 2% said they disagreed with the statement.

This finding demonstrates an increase in overall satisfaction by approximately 5 percentage points from previous domestic customer surveys. Up from 86% in 2015 and 87% in 2019.

Figure 3.2: Satisfaction with NIE Networks' services



Levels of agreement with the statement were broadly similar across key demographic characteristics, however those in the older age categories (45 to 64 and 65 plus) were more likely to disagree than younger respondents.

Table 3.2. Satisfaction with NIE Networks' services by key demographics

		Agree	Neither	Disagree	Don't know	*Total*
Overall	All *Base: 1211*	91%	6%	2%	2%	*100%*
Age	Under 35 *Base:202*	90%	7%	1%	1%	*100%*
	35-44 *Base:207*	93%	6%	-	1%	*100%*
	45-64 *Base:465*	91%	5%	3%	2%	*100%*
	65 plus *Base: 300*	91%	5%	3%	1%	*100%*
Gender	Male *Base: 596*	92%	5%	2%	1%	*100%*
	Female *Base: 615*	90%	6%	2%	2%	*100%*
SEG	ABC1 *Base: 596*	91%	5%	3%	1%	*100%*
	C2DE *Base: 615*	93%	5%	1%	1%	*100%*
Location	Urban *Base: 558*	91%	6%	2%	1%	*100%*
	Rural *Base: 555*	90%	6%	2%	2%	*100%*
MDM Quintile	1 - Most deprived *Base: 327*	92%	5%	1%	2%	*100%*
	2 *Base: 220*	90%	4%	3%	3%	*100%*
	3 *Base: 231*	90%	7%	1%	2%	*100%*
	4 *Base: 244*	91%	7%	2%	0%	*100%*
	5 - Least deprived *Base: 189*	93%	5%	2%	-	*100%*
Tenure	Owner occupied *Base: 851*	92%	5%	2%	1%	*100%*
	Social rented *Base: 178*	90%	4%	2%	3%	*100%*
	Private rented *Base: 131*	91%	6%	1%	2%	*100%*
Children	Have children *Base: 318*	93%	5%	2%	2%	*100%*
	No children *Base: 893*	90%	6%	1%	2%	*100%*
Outages	Had planned outage *Base: 280*	90%	5%	3%	3%	*100%*
	Had unplanned outage *Base: 268*	90%	5%	3%	2%	*100%*
	No outages *Base: 732*	92%	6%	2%	1%	*100%*

Although the percentage of those disagreeing with the statement was low (2% or 23 respondents in total), these respondents were more likely to have experienced more than one unplanned outage in the last year and/or to have had an unplanned outage lasting more than three hours.

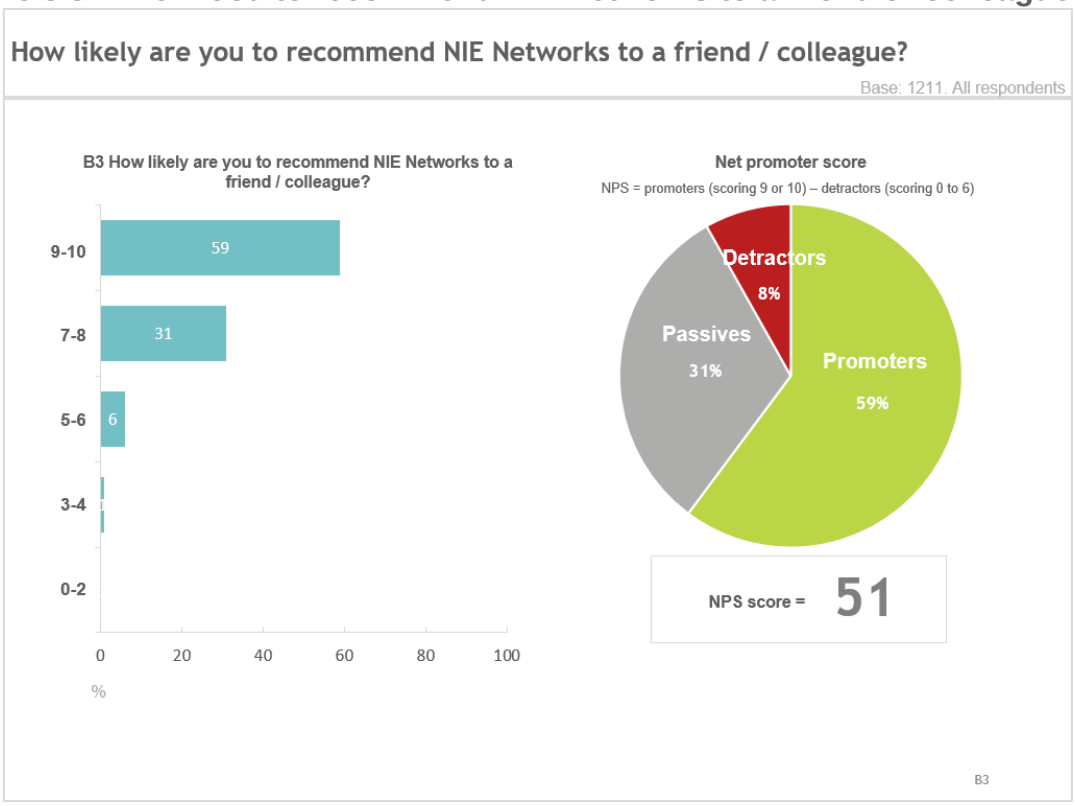
However, the percentage of respondents who had experienced an outage in the last year reporting dissatisfaction within NIE Networks had fallen slightly by 2 percentage points from 2015 for both planned and unplanned power cuts (3% down from 5% in the previous domestic customer survey).

Likelihood to recommend

Domestic customers were asked how likely they would be to recommend NIE Networks to a friend or colleague on a scale of 0 to 10 where 0 is 'definitely would not recommend' and 10 is 'definitely would recommend.' Almost three fifths (59%) gave a score of 9 or 10, while 8% gave a score of 0 to 6 on the scale. This produces a Net Promoter Score (NPS) of 51.

This marks a considerable improvement in the NPS score from 12 in 2019. However, it should be noted that the domestic customer research in 2019 consisted of face-to-face data collection using a smaller sample size and therefore the findings are not directly comparable. NPS was not calculated in 2015.

Figure 3.3: Likelihood to recommend NIE Networks to a friend or colleague

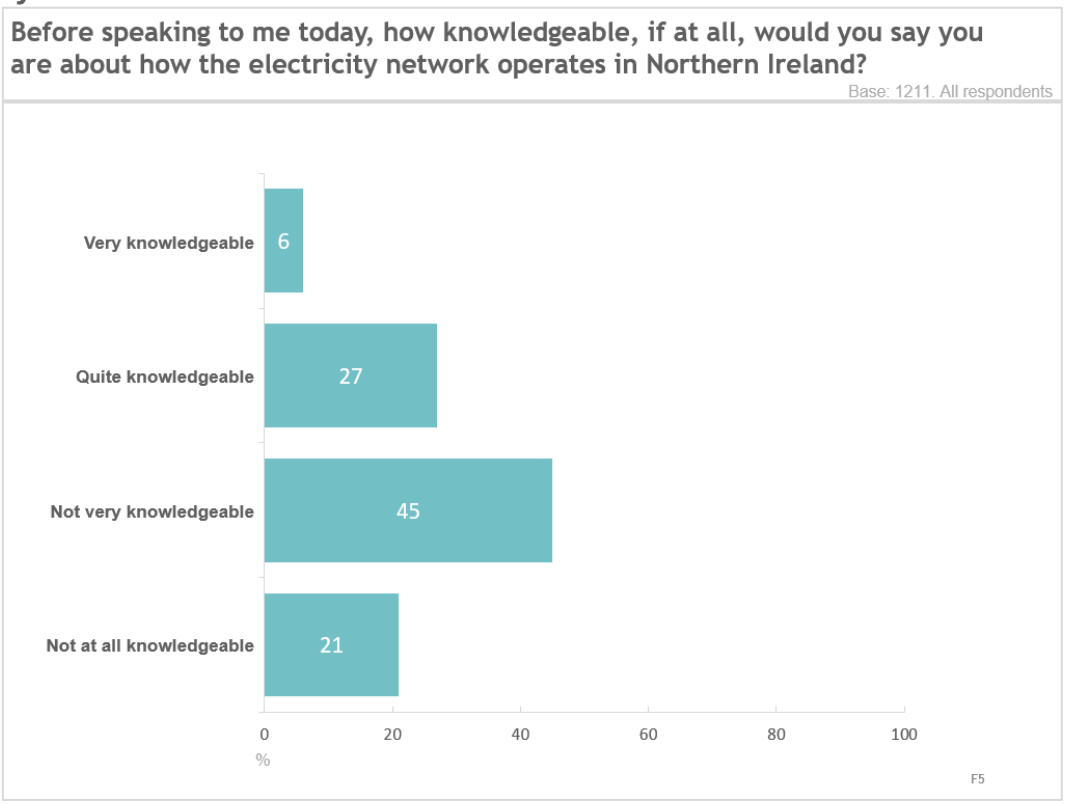


Female respondents (65%) were more likely to give a score of 9 or 10 on the scale than male respondents (53%). Those respondents living in the most deprived quintile (64%) were also more likely to select 9 or 10 compared to those in the least deprived quintile (51%), while those who had experienced multiple unplanned outages in the last year (45%) were considerably less likely to select 9 or 10 than those who had only experienced one (60%). There was also disparity across housing tenures with those in social housing the most likely to give a score of 9 or 10 (69%) compared to homeowners (58%) and private renters (54%).

Level of knowledge about the electricity network

Respondents were asked how knowledgeable they would say they were about how the electricity network operates in Northern Ireland. Around a third (34%) described themselves as knowledgeable, with 6% reporting to be very knowledgeable. The majority (66%) described themselves as lacking in knowledge, with 45% selecting 'not very knowledgeable' and 21% saying they were 'not at all knowledgeable.'

Figure 3.4: Knowledge about the electricity network prior to participating in the survey



There was a clear gender disparity with 45% of men saying they were at least quite knowledgeable compared to 23% of women. People aged under 35 (77%) were more likely than those in any other age group to say they were not very or not at all knowledgeable. Awareness was higher among those in the least deprived areas (40% saying they are quite or very knowledgeable) compared to those in the most deprived areas (28%)

Recent experience with NIE Networks

The survey explored respondents' recent experiences with NIE Networks in a number of key areas. Domestic consumers were asked the following questions:

On planned power outages

- Number of planned power cuts experienced in the last 12 months, where a notification was received in advance; and
- Preference between one longer or two shorter planned outages to allow for essential maintenance.

On unplanned power cuts

- Number of unplanned power cuts experienced in the last 12 months, where advance notice was not received;
- The longest time without power due to an unplanned power cut in the last year;
- Whether or not the unplanned power cut was reported; and
- If not, why the respondent had not done so.

On bird fouling

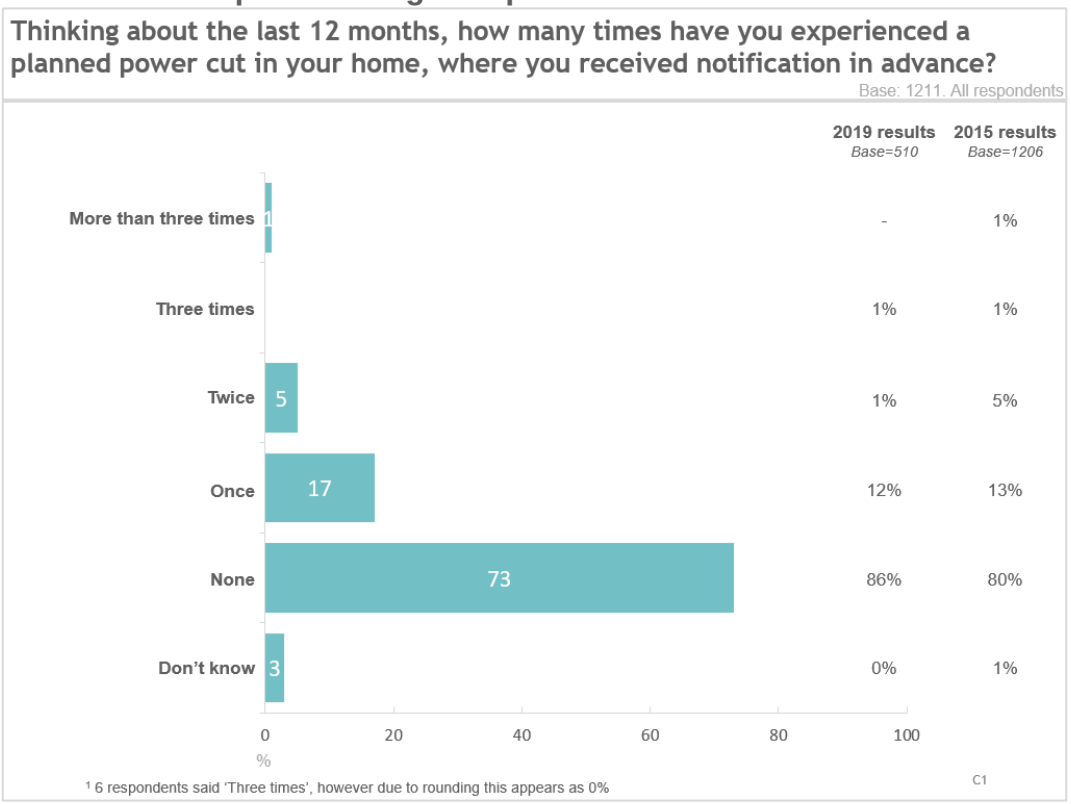
- Whether or not the home is affected by excessive bird fouling from overhead powerlines; and
- Whether the respondent has contacted NIE Networks about this.

Incidence and experience of planned power outages

Almost three quarters (73%) reported they had not experienced a planned power cut in the last 12 months, while 24% had done so and 3% were unsure. While 17% said they had experienced this once, 5% had experienced two planned outages and 1% had three or more.

These findings reveal an increase (5 percentage points) from 2015 in the proportion of domestic customers reporting to have experienced a planned power cut in the preceding 12 months (up from 19% in the previous survey). However the percentage of those experiencing more than one outage has not changed; in 2019, 14% of those asked could recall a recent planned outage compared to 24% in the most recent survey.

Figure 4.1. Planned power outages experienced in the last 12 months



Those living in rural areas were both more likely to have experienced a planned power cut in the last year (40% compared to 15% of urban residents) and more likely to have experienced these cuts more frequently (14% had experienced more than one compared to 3% of those living in urban locations).

Those rural respondents reporting a planned power cut in the last year had increased by 9 percentage points compared to the 2015 findings, while the proportion experiencing more than one outage remained similar (14% compared to 12% in the previous survey findings).

Table 4.1. Incidence and experience of planned power outages by location

	All	Urban	Rural
Base	*1211*	*803*	*408*
Yes in last year	24%	15%	40%
None in last year	73%	82%	57%
One outage	17%	12%	26%
More than one outage	7%	3%	14%

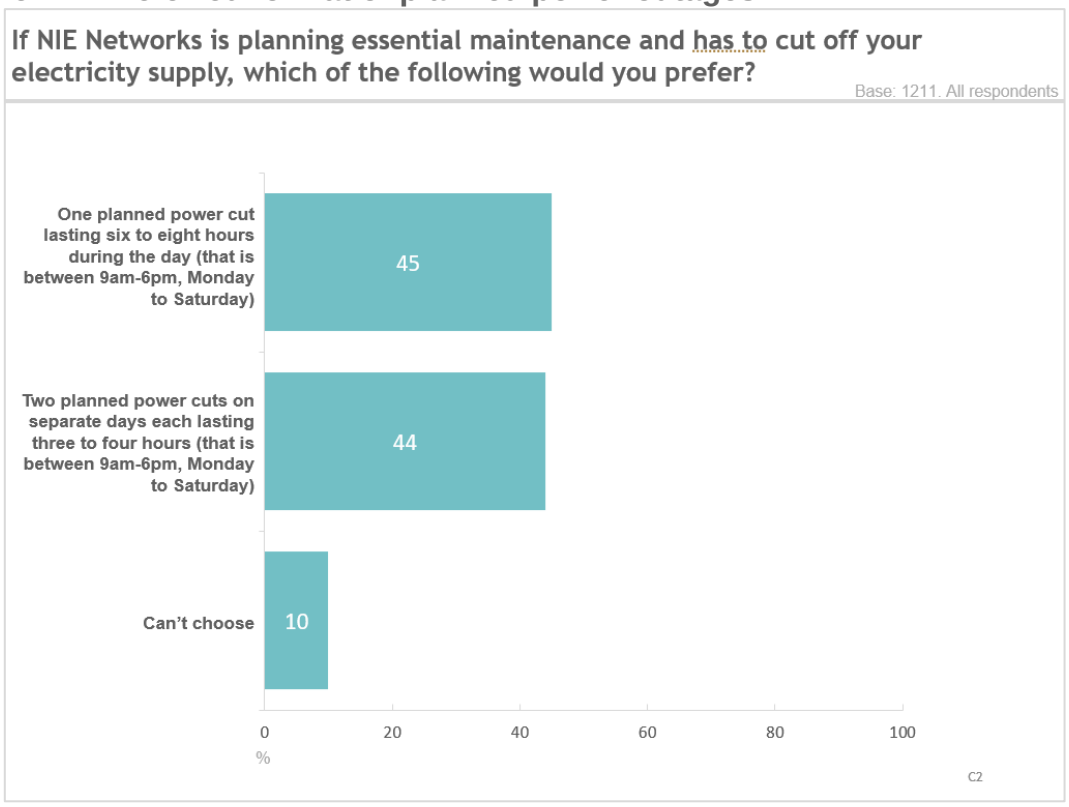
Preference between one longer or two shorter planned outages

Respondents were then asked to select their preference between the following two options where NIE Networks is planning essential maintenance and needs to cut off the electricity supply:

A. One planned power cut lasting six to eight hours during the day (that is between 9am – 6pm, Monday to Saturday); OR
B. Two planned power cuts on separate days each lasting three to four hours (that is between 9am – 6pm, Monday to Saturday).

At the overall level, a similar proportion of respondents selected each option (45% chose option A and 44% chose option B), while 10% could not choose.

Figure 4.2. Preferred format of planned power outages



Key findings at sub-group level were as follows:

- Those aged under 35 showed a distinct preference for one longer power cut (option A 54%) over multiple shorter power cuts (option B 39%);
- This was reversed for the 65 and over category with 46% selecting option B compared to 37% choosing option A;
- Those in rural areas showed a clear preference for one longer power cut (53%) over multiple shorter power cuts (35%);
- However, any preference was less pronounced for urban customers (42% chose option A and 49% chose option B);
- Similarly, ABC1 respondents preferred a single long power cut (51%) of multiple shorter outages (42%), but a similar proportion of C2DEs chose each option;

- Households with children also did not show a clear preference for one option over the other;
- Those in which a member was dependent on electricity for their healthcare needs opted for two shorter cuts (53%) over one long one (41%); and
- There was little preference shown by respondents who had experienced a planned (48% option A and 43% option B) or unplanned outage (48% option A and 43% option B) in the last year.

Table 4.2. Preferred format of planned power outages by key demographics

		One planned power cut lasting six to eight hours during the day (that is between 9am-6pm, Monday to Saturday)	Two planned power cuts on separate days each lasting three to four hours (that is between 9am-6pm, Monday to Saturday)	Can't choose	*Total*
Overall	All *Base: 1211*	45%	44%	10%	*100%*
Age	Under 35 *Base:202*	54%	39%	7%	*100%*
	35-44 *Base:207*	43%	45%	11%	*100%*
	45-64 *Base:465*	48%	45%	7%	*100%*
	65 plus *Base: 300*	37%	46%	16%	*100%*
Gender	Male *Base: 596*	47%	40%	12%	*100%*
	Female *Base: 615*	44%	48%	9%	*100%*
SEG	ABC1 *Base: 596*	51%	42%	7%	*100%*
	C2DE *Base: 615*	43%	45%	12%	*100%*
Location	Urban *Base: 558*	42%	49%	10%	*100%*
	Rural *Base: 555*	53%	35%	12%	*100%*
Tenure	Owner occupied *Base: 851*	49%	41%	9%	*100%*
	Social rented *Base: 178*	32%	60%	8%	*100%*
	Private rented *Base: 131*	42%	44%	14%	*100%*
Children	Have children *Base: 318*	44%	46%	10%	*100%*
	No children *Base: 893*	46%	43%	11%	*100%*
Electricity dependency	Electricity dependant *Base: 110*	41%	53%	6%	*100%*
	Not dependant *Base: 1101*	46%	43%	11%	*100%*
Outages	Had planned outage *Base: 280*	48%	43%	9%	*100%*
	Had unplanned outage *Base: 268*	48%	43%	9%	*100%*
	No outages *Base: 732*	45%	44%	11%	*100%*

Incidence and experience of unplanned power outages

Three quarters (75%) of domestic customers had not experienced an unplanned power cut at their home in the last 12 months, while 22% had done so and 3% were unsure. Addressing the frequency of unplanned power cuts; 14% had experienced one power cut of this type, 5% had experienced two, 1% had experienced three and 2% had experienced an unplanned power cut on more than three occasions. Of those respondents who had experienced an unplanned power cut in the last 12 months, the longest time without power due to such a cut was 'up to 1 hour' for 41% of customers, '1 to 3 hours' for 39%, '3 to 10 hours' for 18% and more than 10 hours for 2% or 5 individual respondents.

At the overall level, the likelihood of having experienced an unplanned power cut in the last year and frequency are unchanged from the 2015 domestic customer survey. Reports of the duration of the power cut are show a decrease in the proportion experiencing an outage of three or more hours (down 5 percentage points from 25%). There is a marked increase however since 2019 in the percentage of domestic customers recalling a recent unplanned outage (from 13% to 22%).

Figure 4.3. Unplanned power outages experienced in the last 12 months

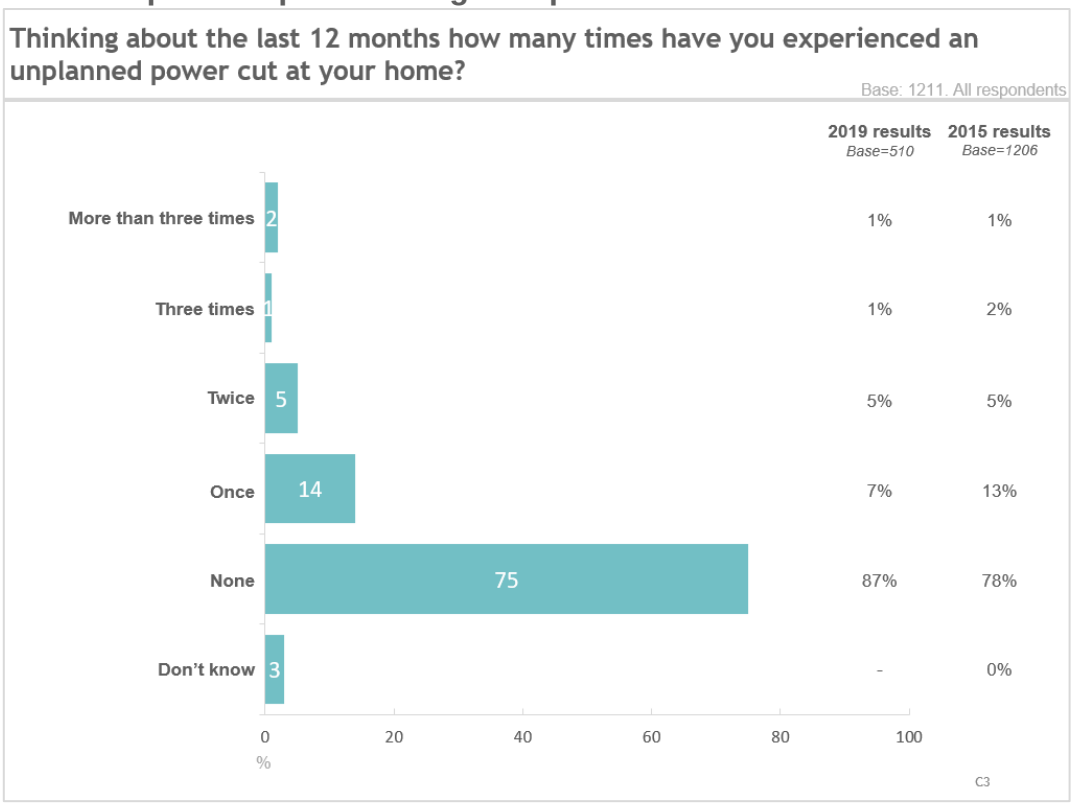
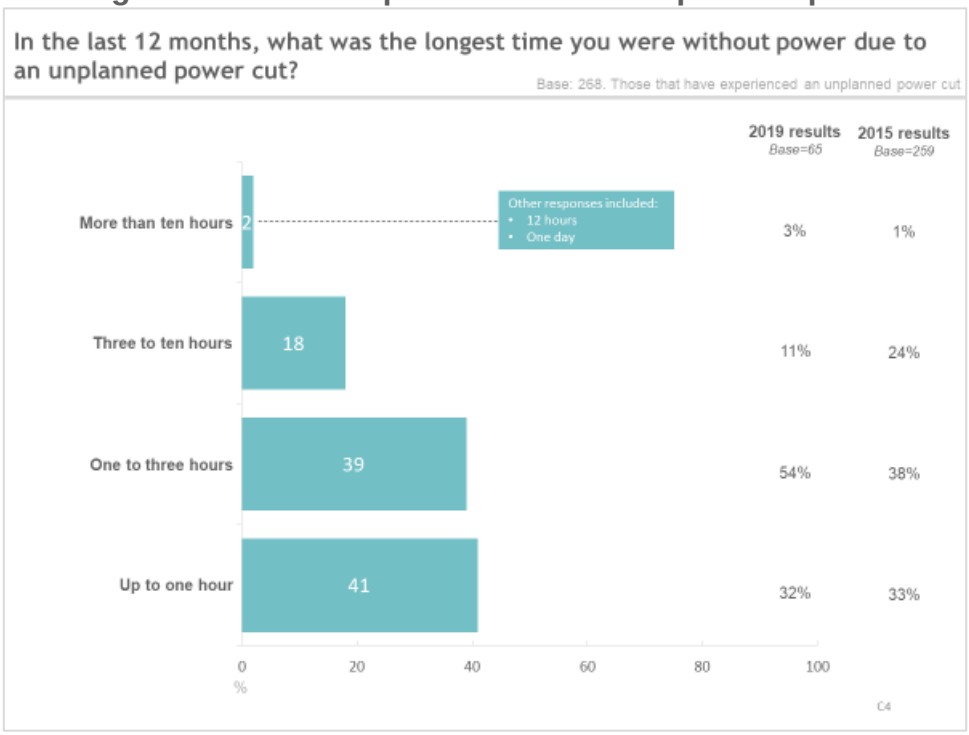


Figure 4.4. Longest time without power due to an unplanned power cut



As with planned power cuts, rural respondents were again more likely than urban customers to have experienced an unplanned power cut in the last year (33% compared to 17%), and also to have experienced these cuts more frequently (14% had experienced more than one compared to 5%) and of greater duration (7% reported the longest unplanned outage as lasting more than 3 hours compared to 3% of urban residents).

Table 4.3. Incidence and experience of unplanned power outages by location

	All	Urban	Rural
Base	*1211*	*803*	*408*
Yes in last year	22%	17%	33%
None in last year	75%	80%	63%
One outage	14%	12%	19%
More than one outage	8%	5%	14%
Less than 3 hours	18%	14%	26%
More than 3 hours	4%	3%	7%

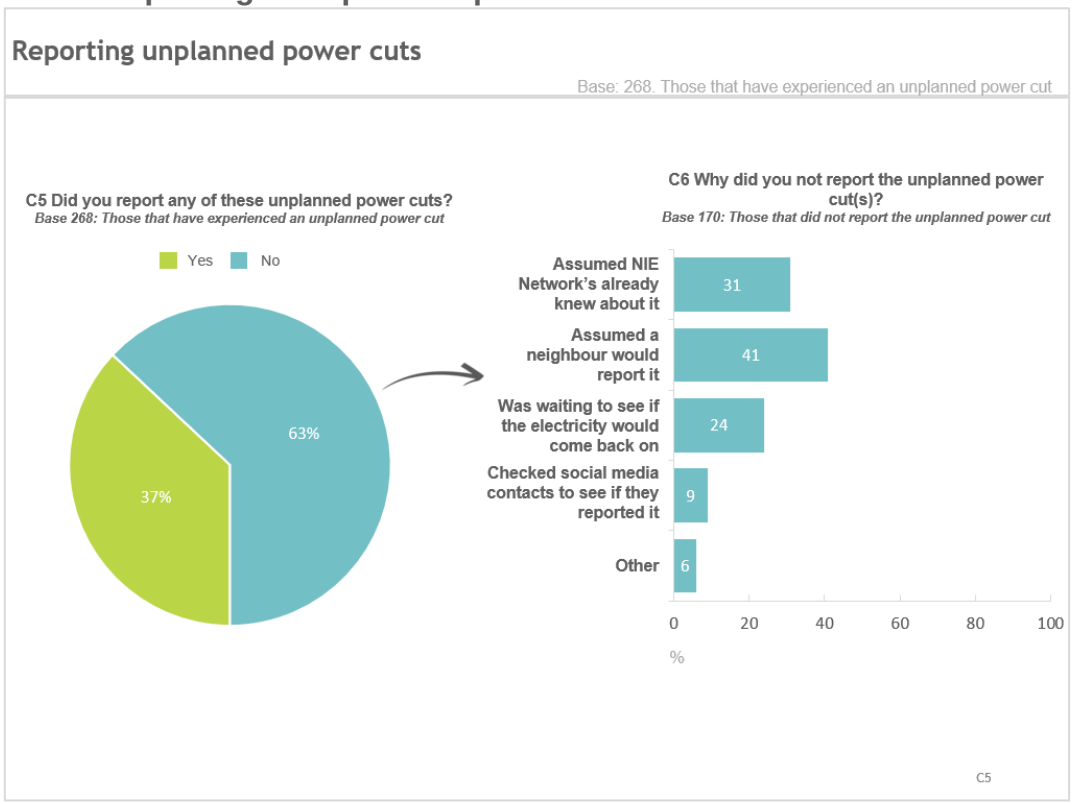
Reporting of unplanned power cuts

When asked if they had reported any of these unplanned power cuts, just over a third (37%) of respondents said that they had.

The proportion of respondents reporting unplanned power cuts is unchanged from 2015.

Over one quarter (27%) of those aged 65 and over said they had reported compared to 45% of those aged 45 to 64. ABC1 and C2DE respondents were equally likely to report, as were those in rural and urban areas (with just over a third in each group saying they had done so). Of the 170 customers that did not report, 31% said they believed NIE Networks already knew about it, 41% assumed a neighbour would report it, 24% said they were waiting to see if the electricity would come back on, and 9% checked social media contacts to see if they reported it. A number of other reasons for not reporting were given, including not knowing how to report (given by 2 respondents).

Figure 4.5. Reporting of unplanned power cuts



Those that experienced more than one unplanned outage (45%) were more likely to have reported at least one of them than people who had only experienced one power cut (32%). People in the least deprived areas (57%, compared to 23% in the most deprived areas) were more likely to assume NIE Networks already knew about the power cut.

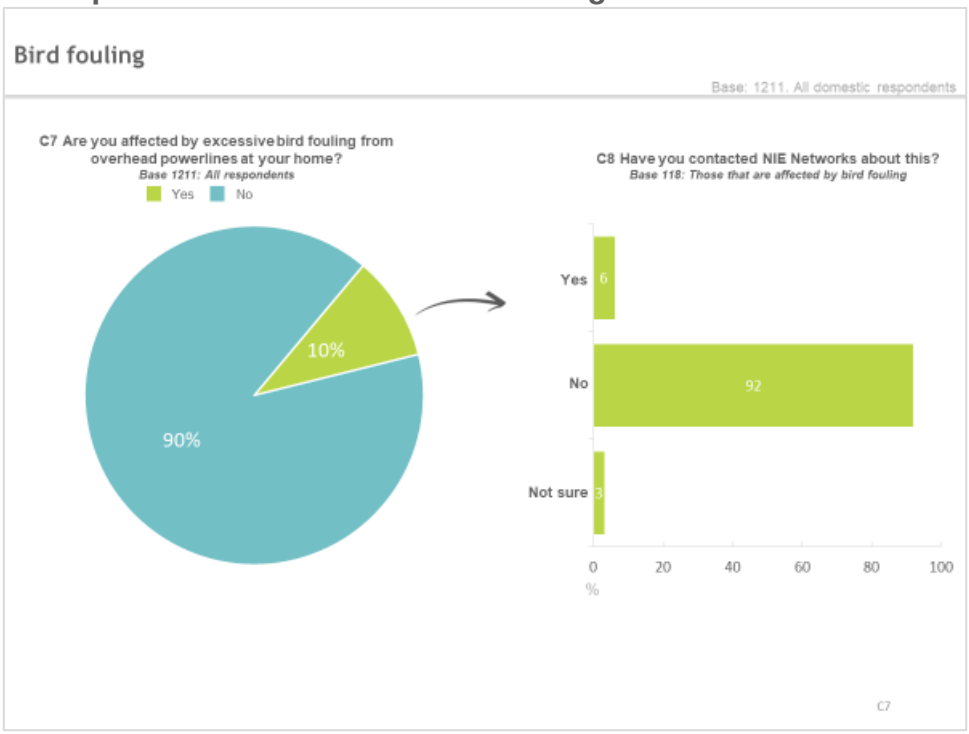
Bird fouling

One in ten (10%) respondents confirmed that they were affected by excessive bird fouling, that is, bird fouling that causes distress or to change their behaviour to avoid it, from overhead powerlines at their home.

This marks a slight increase since the 2019 customer research when 8% of respondents reported being impacted by this issue. This question was not asked in the 2015 research.

Those in rural areas (13%) were more likely to be affected than urban dwellers (8%). Of the 122 domestic customers impacted in this way, only 7 had contacted NIE Networks about it.

Figure 4.6. Experience of excessive bird fouling



Contact and communication channels

Domestic consumers were asked about their experiences of contacting and communicating with NIE Networks. This section covers the following areas:

- Contact with NIE Networks in the last 12 months;
- Reason for contact;
- Ease/ difficulty of getting a response;
- Type of service reached during contact; and
- Satisfaction with the outcome of the contact.

Contact with NIE Networks in the last 12 months

One in ten (10%) had tried to make contact with NIE Networks in the last 12 months. Rural customers (14%) were more likely to have tried to make contact than those in urban areas (8%). There was also disparity between deprivation quintiles; with those from the least deprived (13%) more likely to have attempted contact than those in the most deprived quintile (6%).

Attempts to contact NIE Networks were also more prevalent among those who had experienced planned and/or unplanned power outages in the last 12 months than those who had experienced neither. One fifth (19%) of those who had experienced a planned power cut had attempted to contact NIE Networks in the last year, rising to 31% of those who had had an unplanned power cut, compared to only 4% of those who had not had an outage of any kind.

Figure 5.1. Contact with NIE Networks in the last 12 months

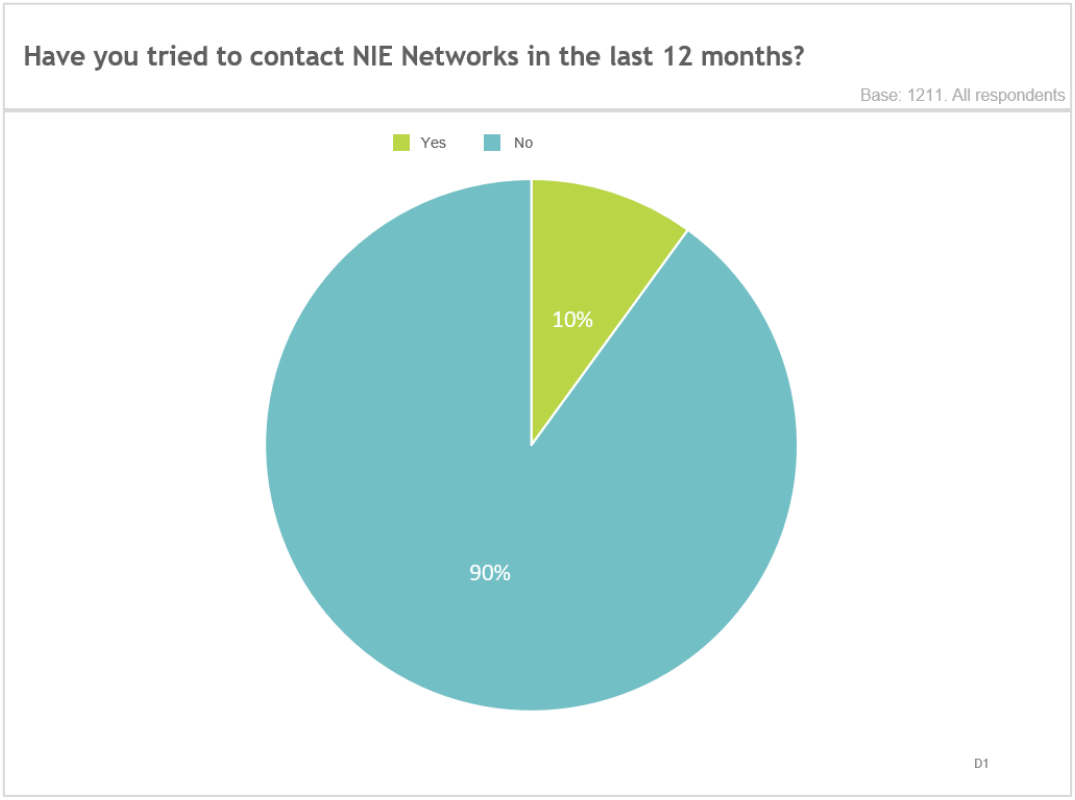
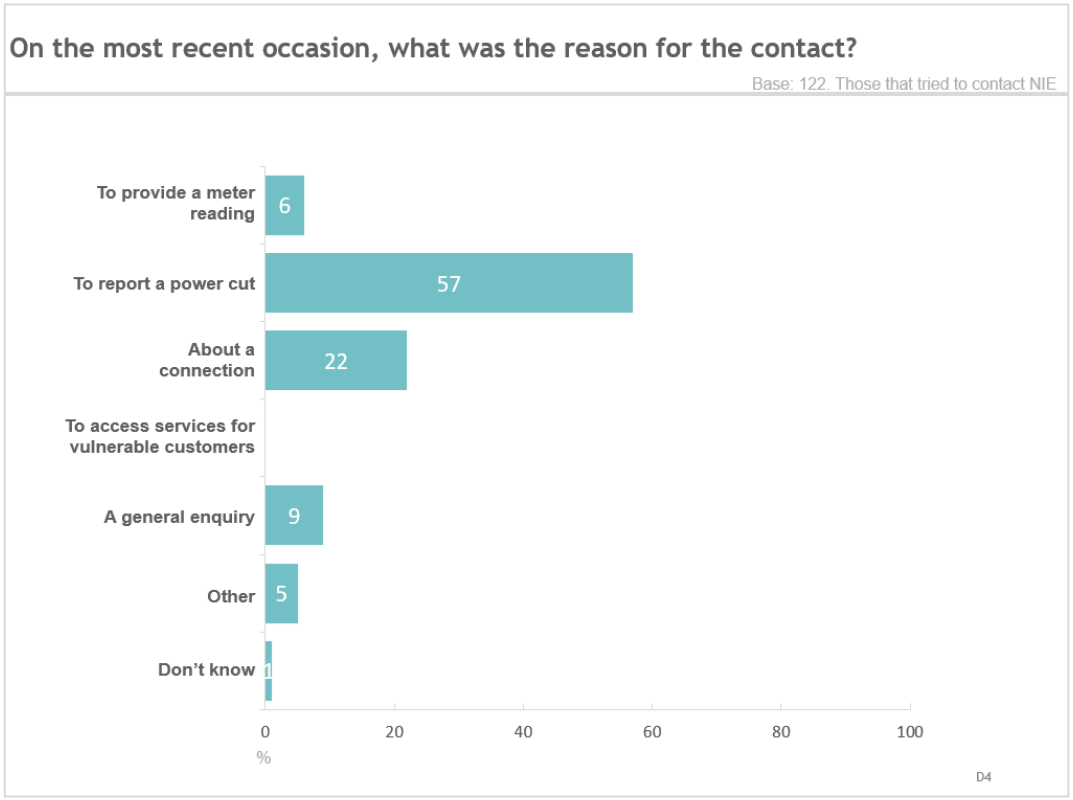


Table 5.1. Contact with NIE Networks in the last 12 months by overview of outages

	All	Had planned outage	Had unplanned outage	No outages
Base	*1211*	*280*	*268*	*732*
Yes	10%	19%	31%	4%
No	90%	81%	69%	96%
Total	*100%*	*100%*	*100%*	*100%*

Of those who had contacted NIE Networks in the last 12 months, in reference to their most recent contact, 57% had done so to report a power cut, 22% about a connection, 9% with a general enquiry, and 6% to provide a meter reading. Those in rural areas (71%) were more likely than urban customers (45%) to have contacted NIE Networks to report a power cut.

Figure 5.2. Reason for most recent contact with NIE Networks



Experience of most recent contact

When asked how easy or difficult it was to get a response to the most recent contact, almost all responded positively (90%), with over a third (37%) describing it as 'very easy'. Only 4% or 5 respondents found it quite or very difficult. Over two thirds (67%) had spoken to a NIE Networks staff member when they most recently tried to make contact, 13% had reached a tailored message or answering service, and 15% had used an online service (such as the website, meter reading app, Twitter or Facebook). Those aged under 35 were the most likely age group to use online services (36% compared to 4% of over 65s). Of the 5 respondents who said getting a response was quite or very difficult, 4 had reached a tailored message or answering service when attempting to make contact.

In relation only to those who had contacted NIE Networks to report a power cut, over two thirds (67%) had spoken to a staff member. This is an increase of 8 percentage points from 59% in 2015. One fifth (19%) had accessed a tailored message or answering service (down 5 percentage points from 24% in 2015), and 10% had used an online service (an increase of 6 percentage points from 4% in 2015).

Figure 5.3. Ease of getting a response to most recent contact

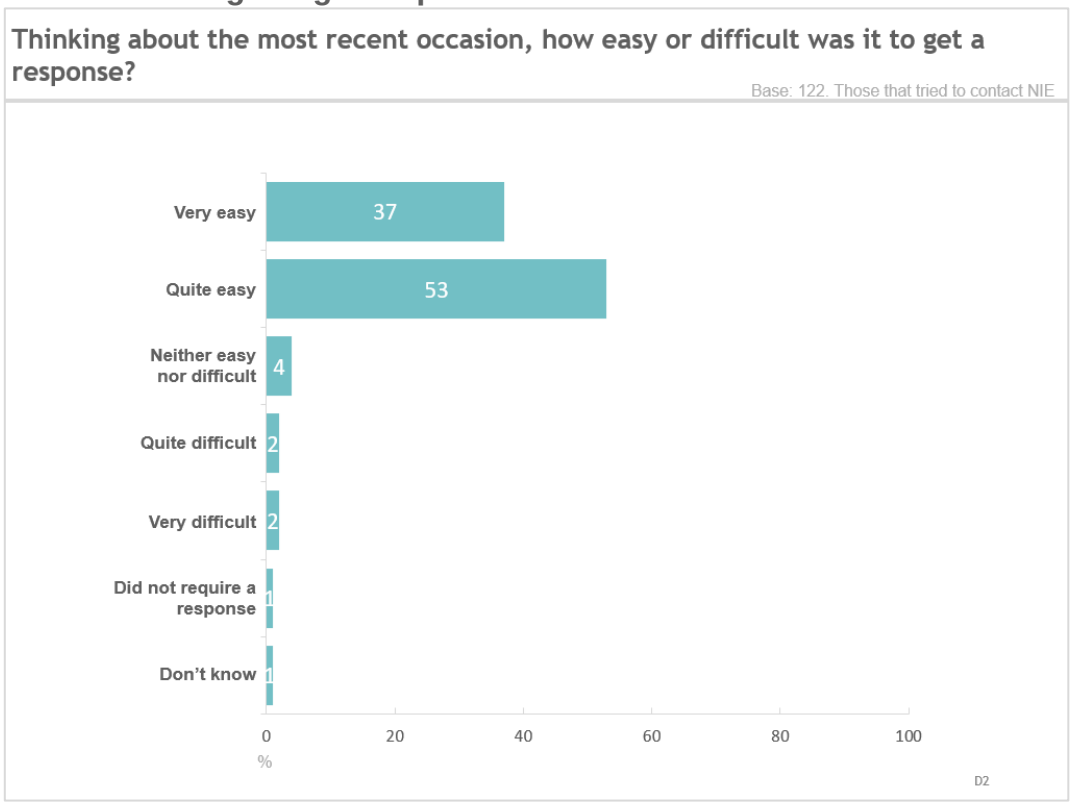


Figure 5.4. Service reached when attempting most recent contact

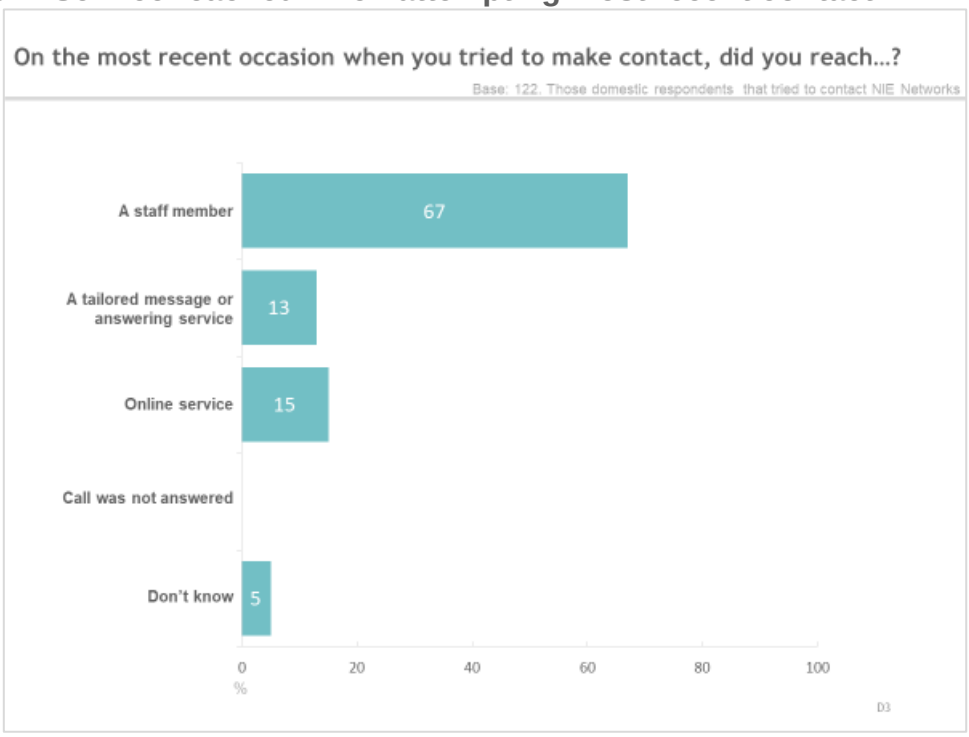
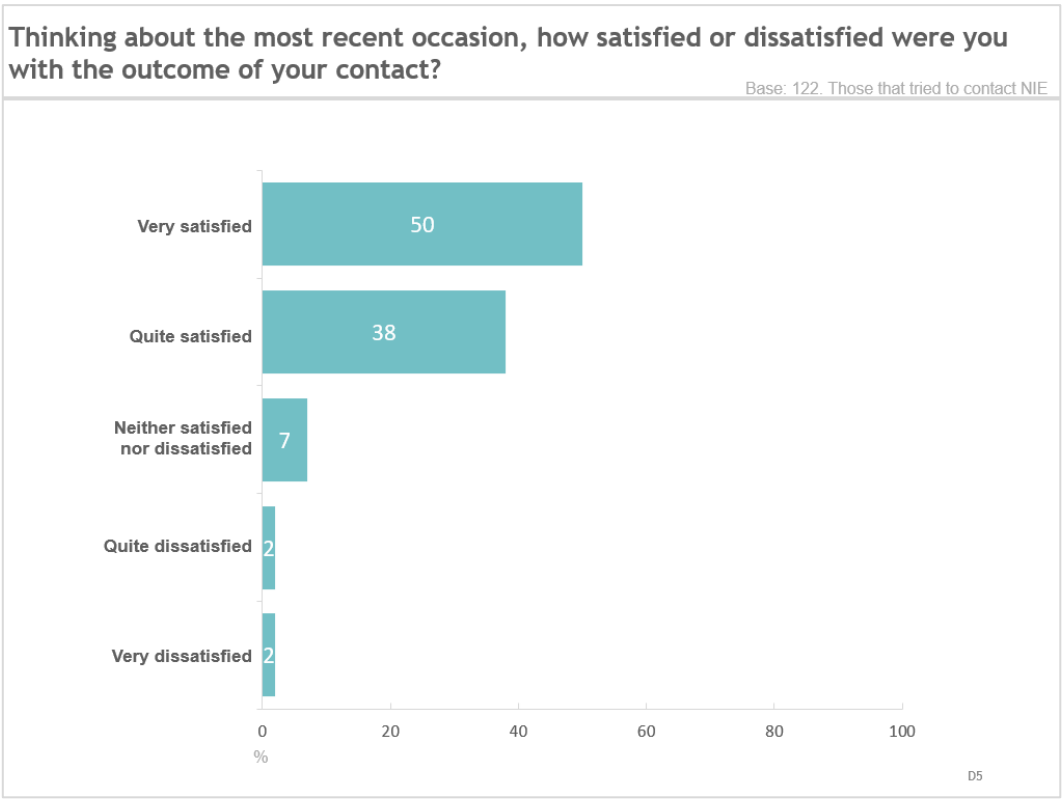


Table 5.2. Service reached by key demographics

		Staff member	Tailored message or answering service	Online service	Don't know	*Total*
Overall	All *Base: 122*	67%	13%	15%	5%	*100%*
Age	Under 35 *Base: 22*	45%	18%	36%	-	*100%*
	35-44 *Base: 22*	73%	5%	18%	5%	*100%*
	45-64 *Base: 53*	70%	13%	9%	8%	*100%*
	65 plus *Base: 23*	78%	13%	4%	4%	*100%*
Gender	Male *Base: 64*	67%	14%	13%	6%	*100%*
	Female *Base: 58*	67%	12%	17%	3%	*100%*
SEG	ABC1 *Base: 75*	63%	15%	20%	3%	*100%*
	C2DE *Base: 39*	74%	8%	8%	10%	*100%*
Location	Urban *Base: 64*	66%	9%	20%	5%	*100%*
	Rural *Base: 58*	69%	17%	9%	5%	*100%*

The majority (88%) of those who had made contact with NIE Networks in the last 12 months said they were quite or very satisfied with the outcome. 5% or 6 respondents reported to be 'quite' or 'very' dissatisfied. Of the 6 respondents who were dissatisfied with the outcome, 3 said this was because they were unable to talk to a member of staff, and 3 because their problem was not resolved.

Figure 5.5. Satisfaction with outcome of most recent contact



Future networks

A key aim of the survey was to assess the views of domestic customers towards the future of the electricity network. This section is structured as follows:

On climate change

- Views on importance of climate change as an issue;
- Interest in / adoption of low carbon technologies;
- Barriers to making households more energy efficient;
- Incidence of at-home working during and after the Covid-19 pandemic; and
- Keeping customers informed about plans for the network.

On undergrounding of overhead power lines

- Support for undergrounding power lines in various circumstances; and
- Prioritisation of undergrounding at different types of locations.

On smart meters

- Support for the use of smart meters in the home; and
- Use of varying electricity rates at different times of day and night.

Climate change

Reducing environmental impact

Respondents were asked to what extent they agree or disagree with three statements as follows:

- I think it is important to develop solutions to reduce impact on the environment.
- I am willing to change my behaviours because of concerns about climate change.
- I am willing to pay extra to reduce impact on the environment.

The first statement garnered the most positive response with 88% in agreement. Just over three quarters (76%) of respondents agreed that they are willing to change their behaviour while just over half (51%) agreed that they would pay extra to reduce climate impact. These findings indicate that while domestic customers see climate change as an important issue, this has not yet fully developed into intention to change behaviour and even less so into willingness to pay.

The proportion of respondents willing to change their behaviour or pay extra to address the impacts of climate change is unchanged from the 2019 survey.

Those aged under 35 were much more likely to agree with all statements (92%, 78% and 60% respectively) than those aged 65 and over (83%, 64% and 47% respectively). While urban and rural respondents answered similarly to the first statement, disparity grew in response to behaviour change (77% and 72% respectively) and willingness to pay (54% and 45% respectively) with urban respondents more likely to agree in both cases.

ABC1 respondents were more likely to agree to each of the statements (91%, 80% and 53%) than C2DEs (85%, 71% and 49%), however the percentage point difference was smaller in respect of willingness to pay than the preceding statements. Similarly, those in the least deprived quintile responded more positively to developing solutions (94% compared to 83%) and behaviour change (81% compared to 73%) than those in the most deprived areas; however just over half (54%) of respondents in both quintiles agreed to paying extra.

Figure 6.1. Changes to reduce environmental impact

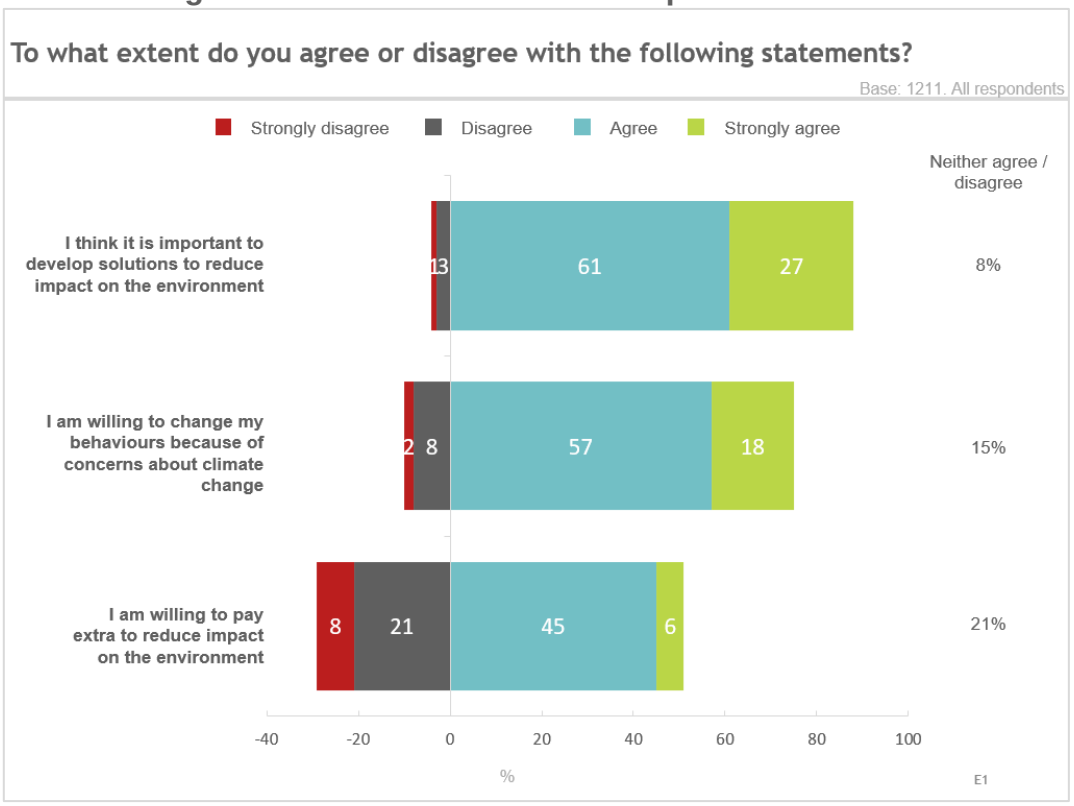


Table 6.1. Changes to reduce environmental impact (those saying 'Agree' or 'Strongly agree' by key demographics

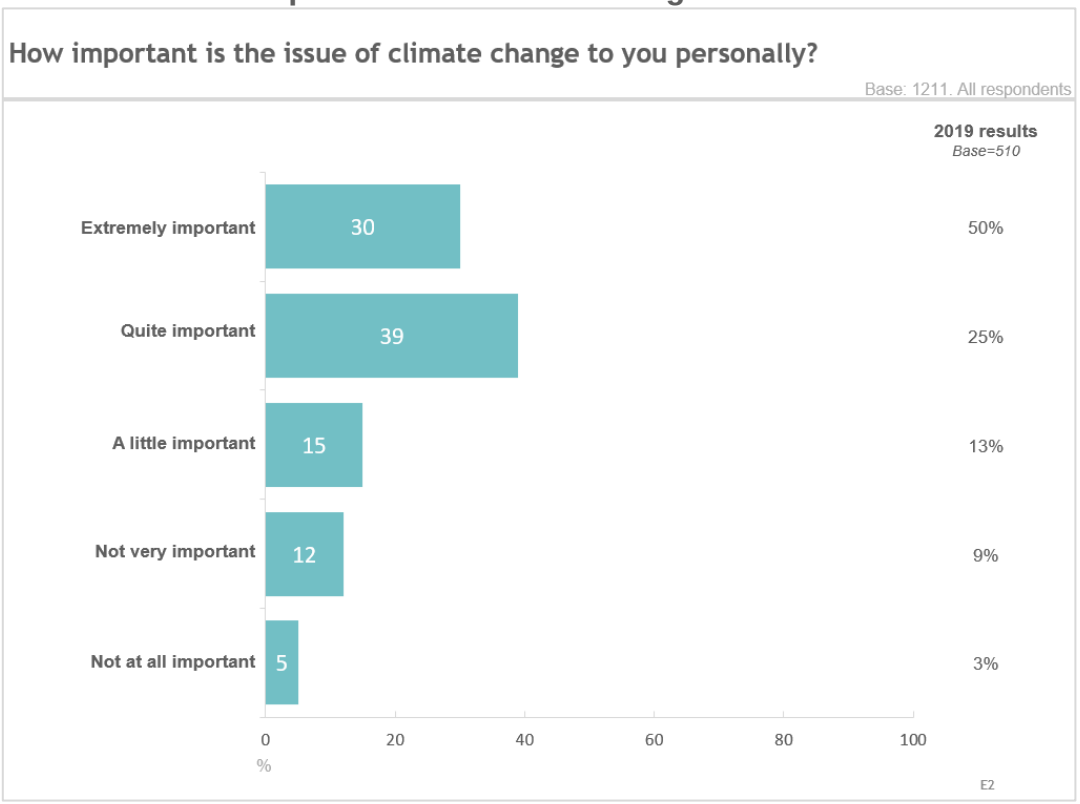
		I think it is important to develop solutions to reduce impact on the environment	I am willing to change my behaviours because of concerns about climate change	I am willing to pay extra to reduce impact on the environment
Overall	All *Base: 1211*	88%	76%	51%
Age	Under 35 *Base:202*	92%	78%	60%
	35-44 *Base:207*	84%	76%	50%
	45-64 *Base:465*	91%	82%	49%
	65 plus *Base: 300*	83%	64%	47%
Gender	Male *Base: 596*	87%	75%	50%
	Female *Base: 615*	89%	76%	51%
SEG	ABC1 *Base: 596*	91%	80%	53%
	C2DE *Base: 615*	85%	71%	49%
Location	Urban *Base: 558*	87%	77%	54%
	Rural *Base: 555*	88%	72%	45%
MDM Quintile	1 - Most deprived *Base: 327*	83%	73%	54%
	2 *Base: 220*	87%	75%	48%
	3 *Base: 231*	89%	74%	48%
	4 *Base: 244*	89%	77%	48%
	5 - Least deprived *Base: 189*	94%	81%	54%

Importance of climate change issue

Domestic customers were then asked how important the issue of climate change is to them personally. 69% saw the issue as extremely or quite important, 15% as a little important, and 17% as not very or not at all important. While there was little variation across age categories in the proportion of respondents ranking climate change as an issue of importance, those is the ABC1 grouping were more likely to describe the issue as extremely or quite important (75%) than C2DEs (63%).

When this question was asked in the 2019 survey, three quarters (75%) of respondents said climate change was quite or very important to them (marking a reduction of 6 percentage points in the most recent study).

Figure 6.2. Personal importance of climate change issue



Interest in / adoption of low carbon technologies

Research undertaken into low carbon options

This section of the survey aimed to better understand what changes, if any, domestic customers might want to make to their lifestyle going forward so that NIE Networks can plan to accommodate those changes. Respondents were asked if they had undertaken any research or made enquiries about a number of different low carbon technologies that can be used in the home. Just under a fifth (19%) had done so in relation to hybrid/ electric vehicles and solar panels, 3% about wind turbines and electric heat pumps, and 2% had looked into battery storage. Over two thirds (67%) had not investigated any of the listed technologies.

Those in the 35 to 44 and 45 to 64 age categories were more likely (38% each) to have made enquiries about low carbon technologies than those aged under 35 (27%) or 65 and over (26%). Men were more likely (40%) to have done so than women (26%) as were ABC1s (44%) compared to C2DEs (22%). There was also substantial disparity according to tenure type with homeowners (40%) more likely to have made enquires than private renters (20%) and those in social housing (14%).

Figure 6.3. Undertaken research or enquires into low carbon technologies

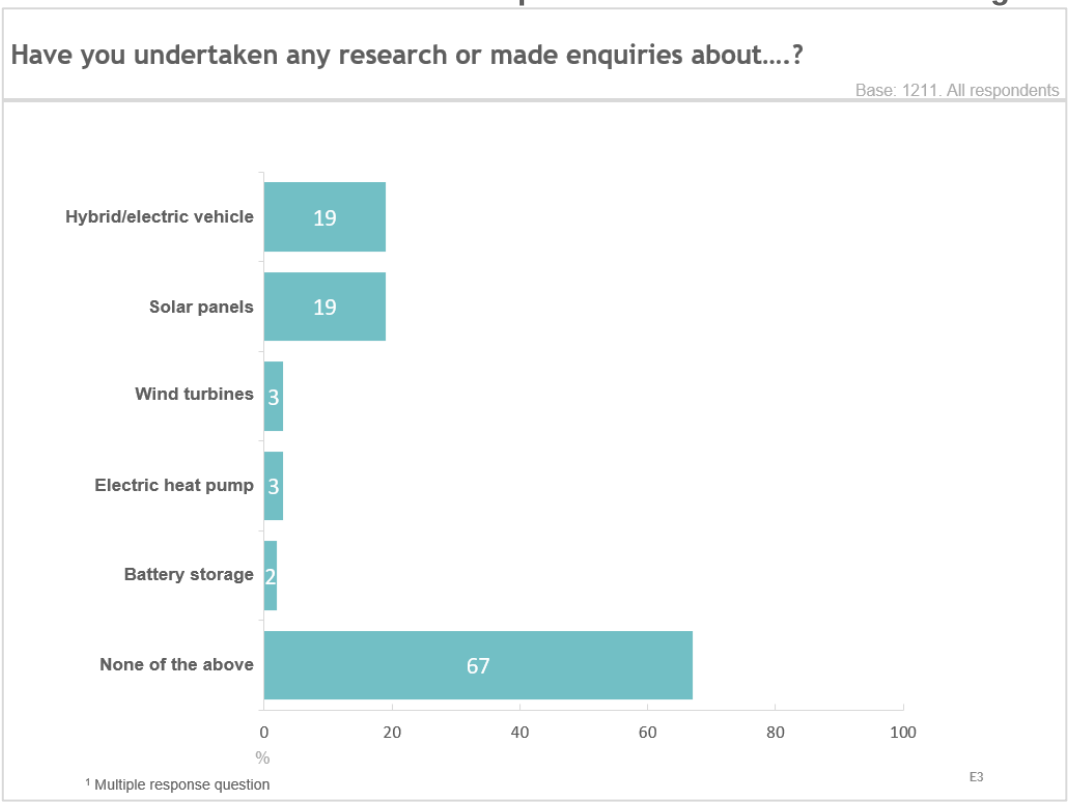


Table 6.2. Undertaken research or enquires into low carbon technologies by key demographics

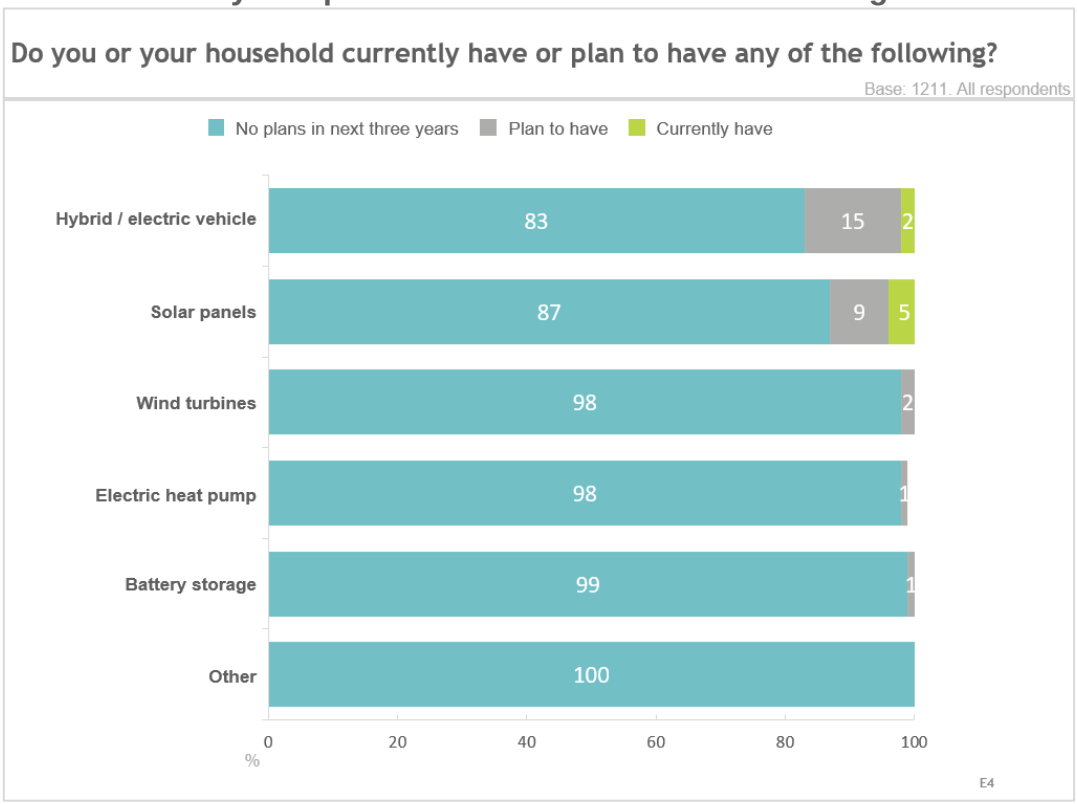
		Made enquiries	Have not made enquiries	*Total*
Overall	All *Base: 1211*	33%	67%	*100%*
Age	Under 35 *Base:202*	27%	73%	*100%*
	35-44 *Base:207*	38%	62%	*100%*
	45-64 *Base:465*	38%	62%	*100%*
	65 plus *Base: 300*	26%	74%	*100%*
Gender	Male *Base: 596*	40%	60%	*100%*
	Female *Base: 615*	26%	74%	*100%*
SEG	ABC1 *Base: 596*	44%	56%	*100%*
	C2DE *Base: 615*	22%	78%	*100%*
Location	Urban *Base: 558*	30%	70%	*100%*
	Rural *Base: 555*	38%	62%	*100%*
Tenure	Owner occupied *Base: 851*	40%	60%	*100%*
	Social rented *Base: 178*	14%	86%	*100%*
	Private rented *Base: 131*	20%	80%	*100%*

Current use of low carbon technologies or plans to implement

Respondents were then asked if they had any of these same technologies in their household currently or plan to have in the next 3 years. Very few respondents reported to already have any of these technologies in the home; 5% have solar panels and 2% have a hybrid or electric vehicle. One respondent reported to have wind turbines, and five respondents had an electric heat pump or battery storage. Again, the percentage of respondents planning to have any of the listed technologies within the next 3 years was also low, however 15% said they had plans to get a hybrid or electric vehicle and 9% had plans to install solar panels, dropping to 2% for wind turbines, 1% for an electric heat pump and 1% for battery storage.

Those reporting to have plans to obtain a hybrid or electric vehicle had increased by 9 percentage points from 2019 (from 6%). An increase was also apparent in relation to solar panels from 6% in 2019 (up 3 percentage points).

Figure 6.4. Currently and planned use of low carbon technologies



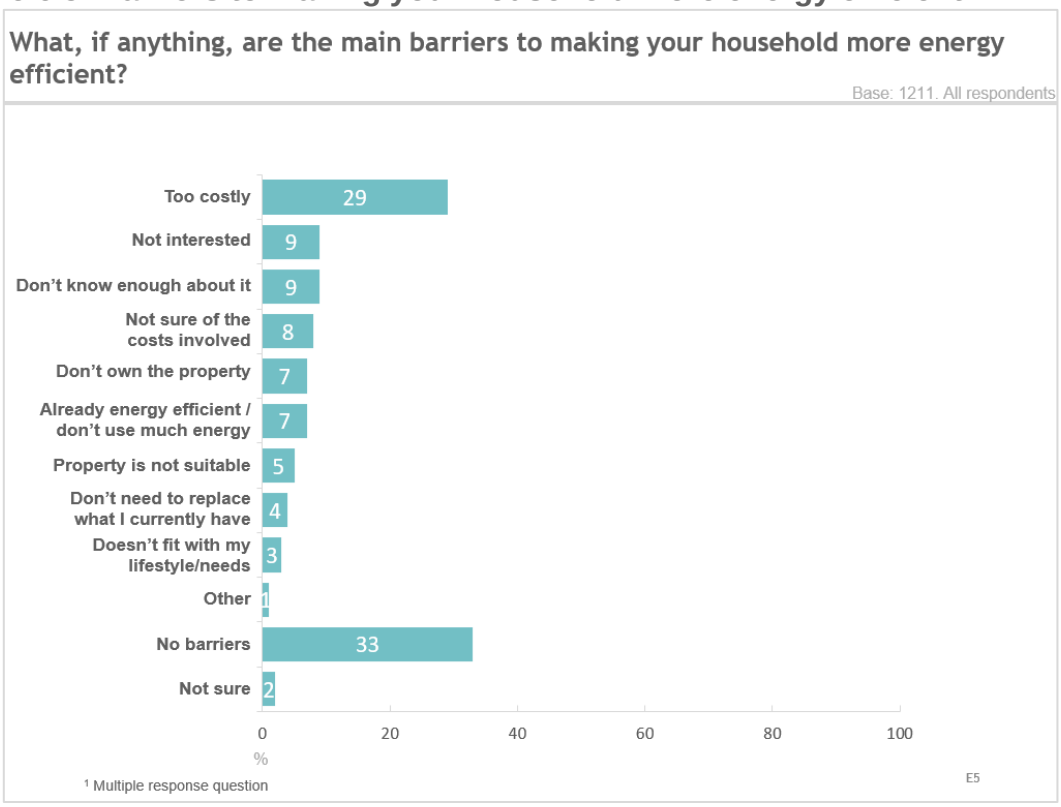
Those in socio-economic groups ABC1 were more likely to have plans for both hybrid or electric vehicles (21%) and solar panels (13%) compared to those in socio-economic groups C2DE (9% and 5% respectively).

Barriers to energy efficiency in the home

Respondents were then asked to identify the main barriers to making their household more energy efficient. While one third of respondents (33%) reported that there were no barriers to energy efficiency, the most commonly identified issue was that it is 'too costly' (29%). Just under one in ten (9%) said they were 'not interested' or 'don't know enough about it', followed by 8% who are 'not sure of the costs involved', 7% who 'don't own the property' or are 'already energy efficient/ do not use much energy', 5% for whom the 'property is not suitable', 4% who

'don't need to replace what I currently have' and 3% for whom it 'doesn't fit with my lifestyle/ needs.' Five respondents suggested that the technology is not sufficiently developed or raised other concerns about the utility of existing low carbon options.

Figure 6.5. Barriers to making your household more energy efficient



Those aged under 35 were much more likely (31%) than those aged 65 and over (16%) to say that making your household more energy efficient was too costly. Interestingly, over a third (34%) of ABC1s gave this response, compared to only a quarter (24%) of C2DEs. This reflects that ABC1s are more likely to have made enquiries about low carbon technologies and therefore may be more informed about the costs involved. Those aged 65 and over were more likely (12%) than any other age category to report that their household is already energy efficient or does not use much energy. C2DE respondents were more likely (38%) than ABC1s (28%) to suggest that no barriers exist to energy efficiency in the home. 14% of people living in the most deprived areas said they were not interested in making their home more energy efficient, compared to 7% of those in the least deprived areas.

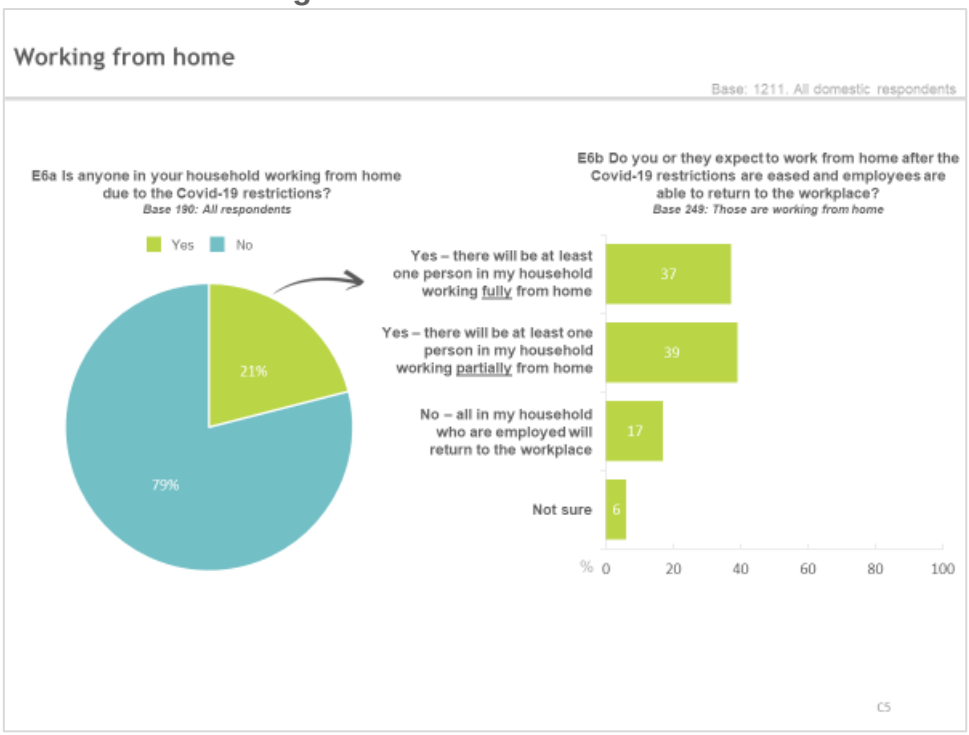
At home working due to Covid-19 restrictions

Just over one fifth of respondents (21%) confirmed that someone in their household was working from home due to the Covid-19 restrictions. Of these 249 respondents, 37% expected at least one person in their household to be working fully from home after the Covid-19 restrictions are eased and employees are able to return to the workplace, with 39% expecting at least one person in the household to be working partially from home after the easing of restrictions. Only 17% expected all employed members of the household to return to the workplace.

Those in the ABC1 socio-economic grouping were much more likely to say a member of their household was working from home due to Covid-19 (34%) than C2DE respondents (8%).

Similarly, 30% of those in the least deprived quintile answered in this way, falling to 15% of those in the most deprived quintile.

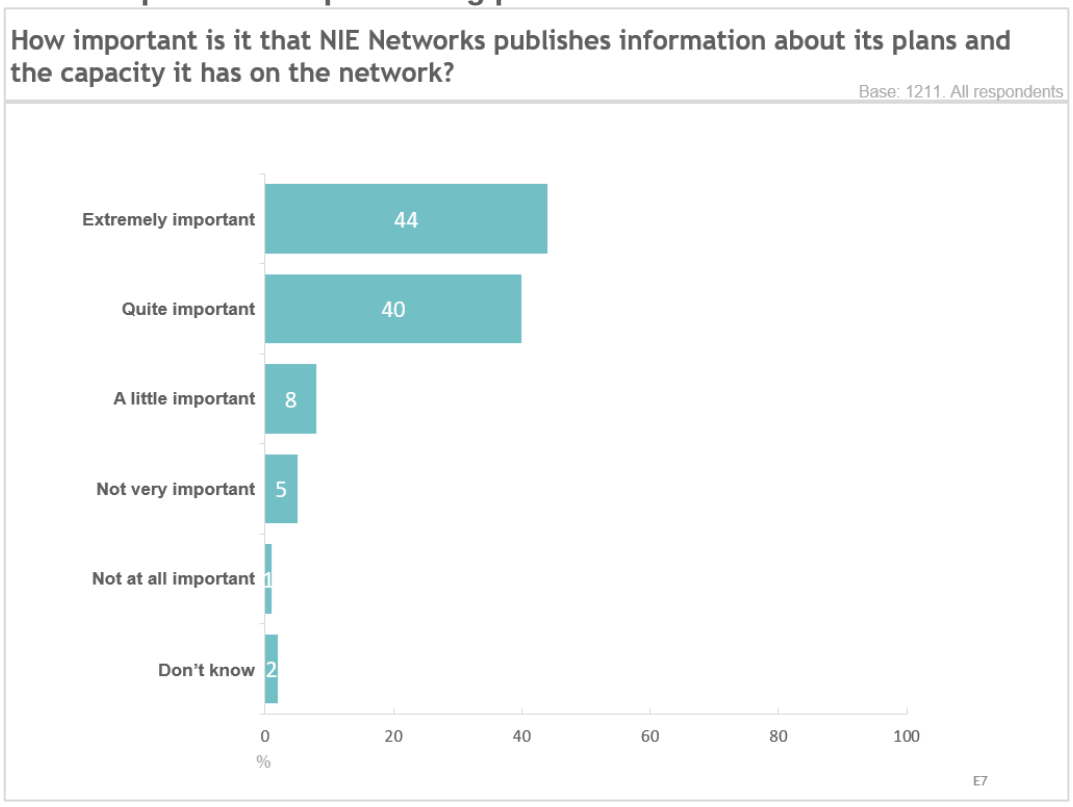
Figure 6.6. At home working due to Covid-19 restrictions



Keeping customers informed about plans for the network

Domestic customers were asked to rate how important it is that NIE Networks publishes information about its plans and the capacity it has on the network. The majority (84%) said it was 'extremely' or 'quite' important, 8% said it was 'a little important', 5% 'not very important' and 1% 'not at all important.' Those in the most deprived quintile were more likely to say this was 'extremely important' (50%) than respondents in the least deprived (38%).

Figure 6.7. Importance of publishing plans about the future of the network

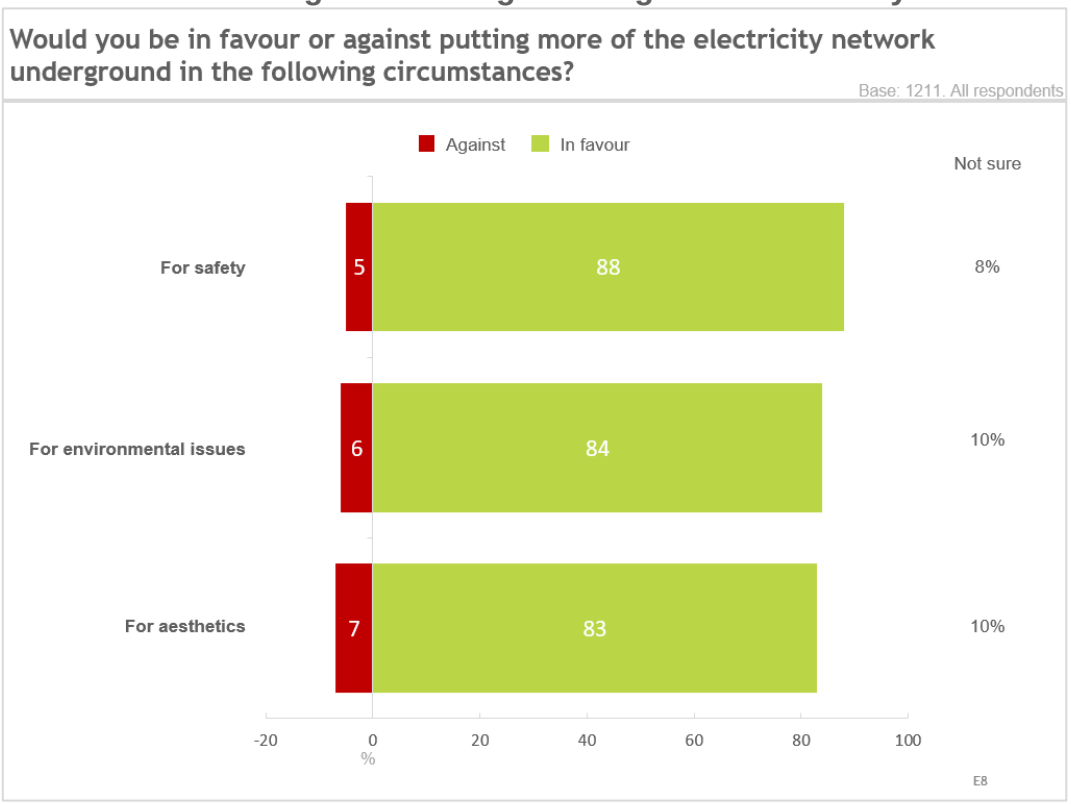


Undergrounding overhead power lines

Respondents were informed that one third of the electricity network in Northern Ireland is currently underground and that underground lines are less likely to be affected by issues such as bad weather but that it is more expensive to put powerlines underground. In this context, 88% of domestic customers said they would be in favour of putting more of the electricity network underground for safety purposes. This fell slightly to 84% if undergrounding was for environmental reasons such as bird fouling and further to 83% if the main motivation was for aesthetics.

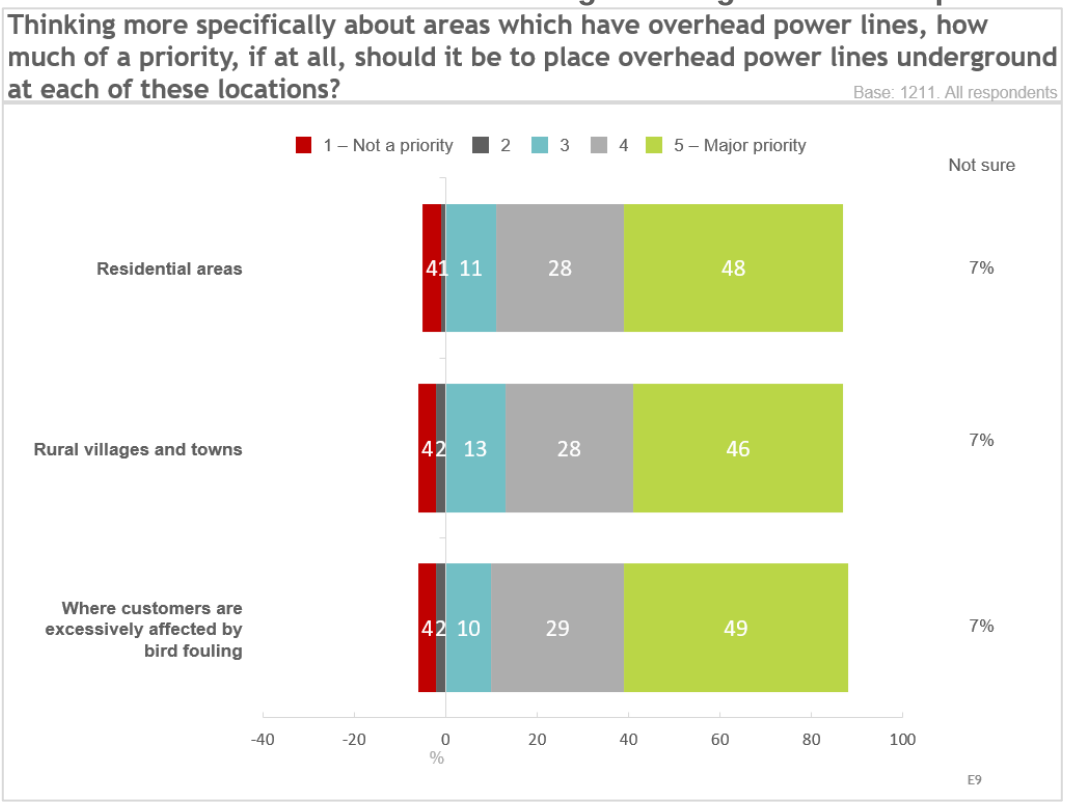
ABC1s were more likely to be in favour of undergrounding for safety purposes (91%) than C2DEs (86%), but there was little difference between the two groups in relation to environmental and aesthetic reasons.

Figure 6.8. In favour or against undergrounding of the electricity network



Respondents were then asked what level of priority should be given to the undergrounding of overhead power lines in specific types of areas, using a scale of 1 to 5, where 1 is not a priority and 5 is a major priority. There was little variation in responses to each location. Respondents were slightly more likely to say undergrounding was a priority (4 or 5 on the scale) in areas where customers are excessively affected by bird fouling (77%) than in residential areas (such as housing developments) (76%) or rural villages and towns within 30 mile an hour limits (e.g. along main streets) (74%).

Figure 6.9. Prioritisation of areas for undergrounding of overhead power lines



The level of priority attached to undergrounding in residential areas and rural villages and towns was similar for both socio-economic groupings, while C2DEs were more likely to be in favour of undergrounding in areas affected by excessive bird fouling (80% at 4 or 5 on the scale) than ABC1s (75%). Comparing those in the most and least deprived quintiles, responses were also similar for all locations. Those who had experienced a planned outage in the last 12 months were slightly more likely to be in favour of undergrounding than those who reported an unplanned outage or no outages in residential areas (78% compared to 76% and 77%r respectively) and rural villages and towns (76% compared to 72% and 75% respectively), but this was reversed in respect of locations affected by bird fouling (75% compared to 78% and 79% respectively).

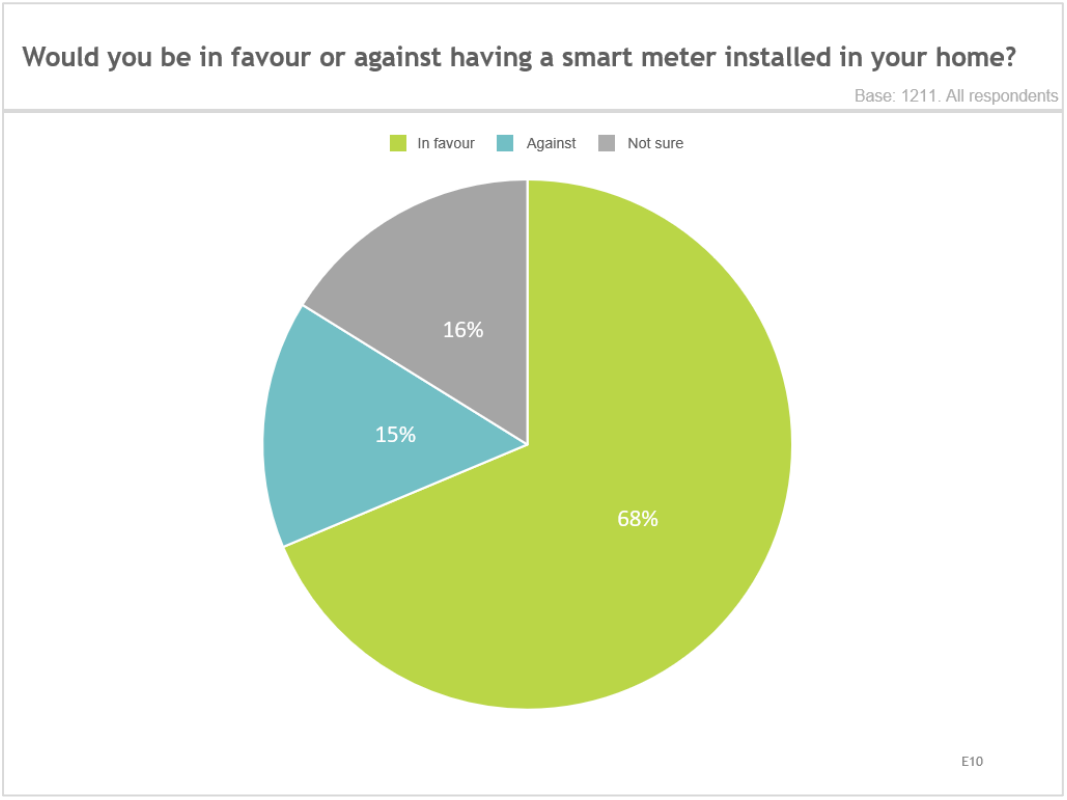
Table 6.3. Prioritisation of areas for undergrounding of overhead power lines by experience and incidence of outages (% rating 4 or 5 on the scale)

		Planned outages		Unplanned outages				Overview		
	All	One outage	>one outage	One outage	>one outage	<3 hours	>3 hours	Had planned outage	Had unplanned outage	No outages
Base	*1211*	*201*	*79*	*173*	*95*	*214*	*54*	*280*	*268*	*732*
Residential areas	76%	79%	77%	76%	76%	76%	76%	78%	76%	77%
Rural villages and towns	74%	76%	77%	71%	75%	71%	76%	76%	72%	75%
Where customers are excessively affected by bird fouling	77%	77%	72%	77%	78%	78%	76%	75%	78%	79%

Smart meters

In the future, as we change the way we generate and use electricity, NIE Networks will need more real-time information about how electricity is being used. Domestic customers were informed that this can be done using smart meters. Respondents were further told that smart meters are different from those currently installed in their homes and would provide information on household energy usage and what it is costing. These meters are already being rolled out in Great Britain and the Republic of Ireland.

Figure 6.10. In favour or against having a smart meter installed in the home



When asked, over two third (68%) confirmed that they would be in favour of having a smart meter installed in their home, while 15% are against. Those aged 65 and over were less likely to be in favour of having a smart meter installed (55%) than those in any other age category (74% of under 35s; 76% of 35 to 44s; and 72% of 45 to 64s). Almost three quarters (74%) of ABC1 respondents were in favour of having a smart meter installed in the home, but this fell to 65% of C2DEs. Households with children were also more likely (81%) than those without (64%) to be in favour of smart meters in the home.

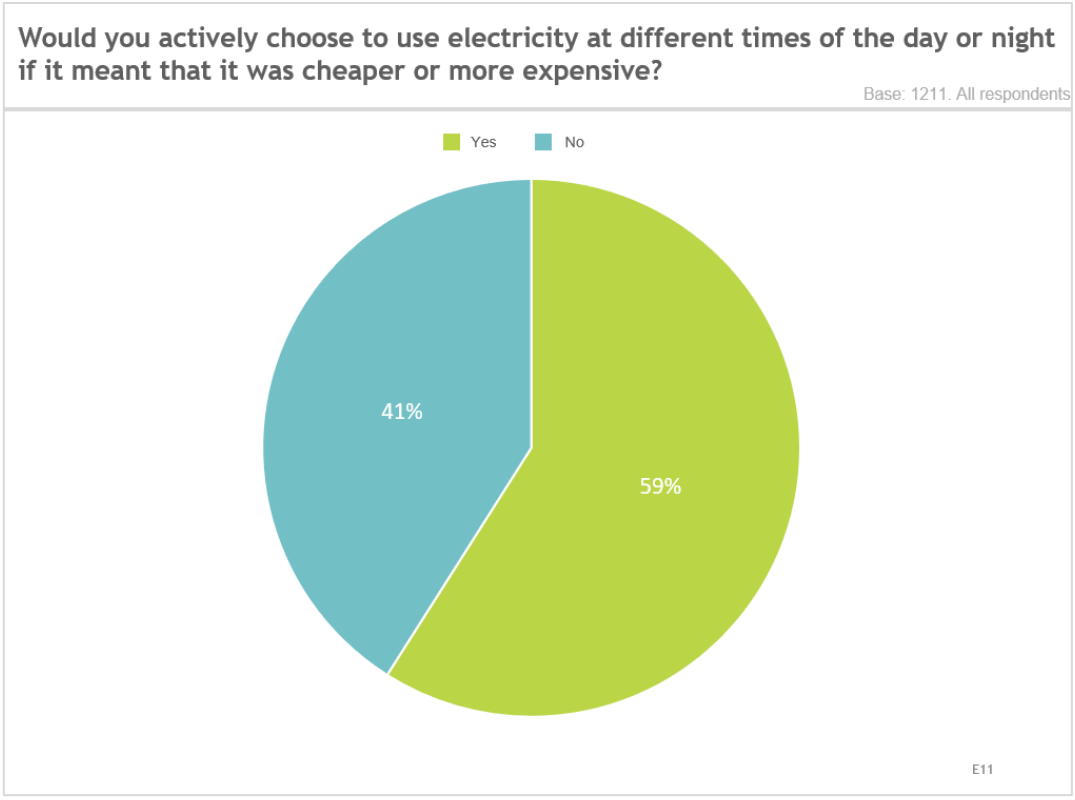
Table 6.4. In favour or against having a smart meter installed in the home by key demographics

		In favour	Against	Not sure	*Total*
Overall	All *Base: 1211*	68%	15%	16%	*100%*
Age	Under 35 *Base:202*	74%	12%	14%	*100%*
	35-44 *Base:207*	76%	11%	14%	*100%*
	45-64 *Base:465*	72%	14%	14%	*100%*
	65 plus *Base: 300*	55%	22%	23%	*100%*
Gender	Male *Base: 596*	67%	18%	16%	*100%*
	Female *Base: 615*	70%	13%	17%	*100%*
SEG	ABC1 *Base: 596*	74%	12%	14%	*100%*
	C2DE *Base: 615*	65%	18%	17%	*100%*
Location	Urban *Base: 558*	70%	14%	16%	*100%*
	Rural *Base: 555*	66%	17%	16%	*100%*
Children	Have children *Base: 318*	81%	10%	10%	*100%*
	No children *Base: 893*	64%	17%	18%	*100%*

Respondents were then informed that having a smart meter means that electricity could potentially be charged at different rates at various times of the day. When asked if they would actively choose to use electricity at different times of the day or night if it means that it is cheaper or more expensive, 59% said that they would while 41% said that they would not.

Again, those aged 65 and over were less likely to say they would actively use electricity at different times according to price (46%) than any other age group (59% of under 35s; 63% of 35 to 44s; and 65% of 45 to 64s). Almost two thirds of female respondents (63%) reported that they would actively choose to use electricity at different times, falling to just over half of males (54%). There was little difference between the responses given by ABC1s and C2DEs to this question, with around three fifths of each group answering ‘yes’. Again, the responses across deprivation quintiles were broadly similar; approximately two fifths of respondents in both the least and most deprived quintiles confirming that they would choose to use electricity at different times based on price.

Figure 6.11. Choosing to use electricity at different times of the day or night according to cost



Prioritisations

A primary objective of the survey was to gain a better understanding of domestic customers' priorities for investment in the electricity network. Respondents were informed that NIE Networks is planning ahead for the next six to seven years and wants to find out what customers think their investment priorities should be. It was explained that while the cost of these investments has not yet been determined, some of the additional costs could be passed on to customers.

This section is structured as follows:

- Support for investment in service areas;
- Priority areas for improvement; and
- Willingness to pay for extra investment.

Support for investment in service areas

Domestic customers were presented with four service areas for possible additional investment and were asked to rate how much they would support investment in each of these areas, using a scale of 1 to 5 where 1 is no support for investment and 5 is a lot of support.

NIE Networks was interested in obtaining a domestic customer viewpoint on four main areas:

- Reducing power cuts and maintaining supply;
- Putting overhead lines underground;
- Supporting rising levels of renewable technology; and
- Improving the customer service experience.

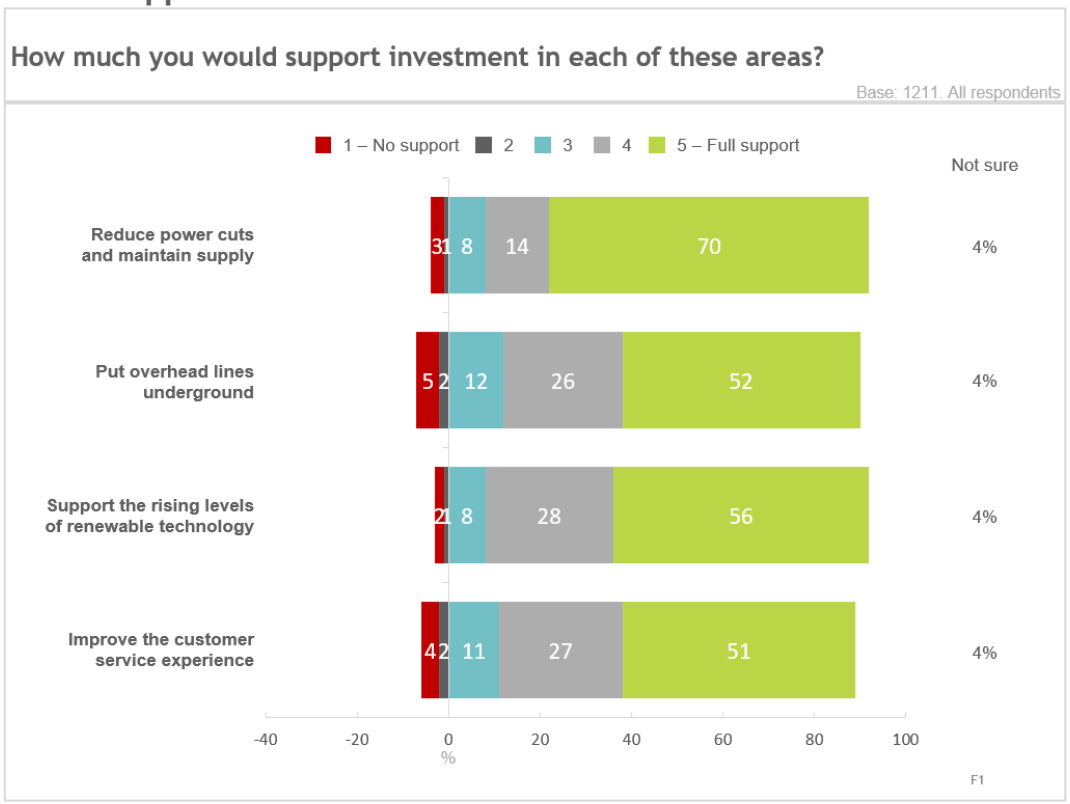
Domestic customers were most likely to be in favour of investment in reducing power cuts and maintaining supply with 70% lending their full support to investment in this area (5 on the scale). A further 14% gave this service area a support level of 4 on the scale, meaning that 84% of respondents deemed a reduction in power cuts and maintaining supply to be a high-level priority (4 or 5 on the scale).

Over half of respondents also gave their full support (rating 5) to the following service areas:

- Putting overhead lines underground (52%);
- Supporting rising levels of renewable technology (56%); and
- Improving the customer service experience (51%).

Approximately one quarter of respondents also gave each of these initiatives a support level of 4 (26%, 28% and 27% respectively). As such, in each case over three quarters of respondents would strongly support investment across all areas (4 or 5 on the scale); 78% in respect of undergrounding power lines and 79% in relation to improving customer service, rising to 84% for supporting renewable technology.

Figure 7.1. Support for investment in service attributes



Sub-group analysis of customers support for investment revealed that customers in urban areas were more likely than rural respondents to lend support (4 or 5 on the scale) to reducing power cuts and maintaining supply (85% compared to 80%) and to putting overhead lines underground (80% compared to 73%).

In addition, over two thirds of under 35s fully support investment in rising levels of renewable technology, but this fell to just over half (54%) of those aged 65 and over; although a similar proportion of both groups support investment in this area to some extent (84% and 82% respectively at 4 or 5 on the scale). There was also disparity in responses of the different socio-economic groupings to this attribute with ABC1s more likely to lend full support (65%) than C2DEs (50%). Again, a similar proportion of both categories supported investment in this area at 4 or 5 on the scale (86% and 84% respectively).

C2DEs were more likely to lend support (4 or 5 on the scale) to improving customer service (84%) than ABC1s (75%).

Table 7.1. Support for investment in service attributes by key demographics (4 or 5 on scale)

		Reduce power cuts and maintain supply	Put overhead lines underground	Support the rising levels of renewable technology	Improve the customer service experience
Overall	All *Base: 1211*	84%	78%	84%	79%
Age	Under 35 *Base:202*	82%	75%	84%	77%
	35-44 *Base:207*	85%	80%	86%	78%
	45-64 *Base:465*	85%	79%	87%	80%
	65 plus *Base: 300*	84%	78%	82%	81%
Gender	Male *Base: 596*	83%	76%	84%	76%
	Female *Base: 615*	85%	79%	85%	82%
SEG	ABC1 *Base: 596*	83%	78%	86%	75%
	C2DE *Base: 615*	87%	80%	84%	84%
Location	Urban *Base: 558*	85%	80%	86%	80%
	Rural *Base: 555*	80%	73%	82%	77%

Those who had experienced an unplanned outage or no outages at all in the last year were more likely to lend support (scale 4 or 5) to reducing power cuts and maintaining supply (86% each) than those who had had a planned power outage (83%). However, those who reported a planned outage in the last year were more likely to be in support of investment in undergrounding overhead lines and improving the customer experience than either those who reported an unplanned or no outage.

Table 7.2. Support for investment in service attributes by experience and incidence of outages (4 or 5 on scale)

		Planned outages		Unplanned outages				Overview		
	All	One outage	>one outage	One outage	>one outage	<3 hours	>3 hours	Had planned outage	Had unplanned outage	No outages
Base	*1211*	*201*	*79*	*173*	*95*	*214*	*54*	*280*	*268*	*732*
Reduce power cuts and maintain supply	84%	84%	80%	86%	85%	87%	81%	83%	86%	86%
Put overhead lines underground	78%	80%	81%	78%	78%	79%	72%	80%	78%	78%
Support the rising levels of renewable technology	84%	89%	85%	86%	86%	87%	81%	88%	86%	88%
Improve the customer service experience	79%	78%	77%	77%	80%	79%	74%	80%	78%	79%

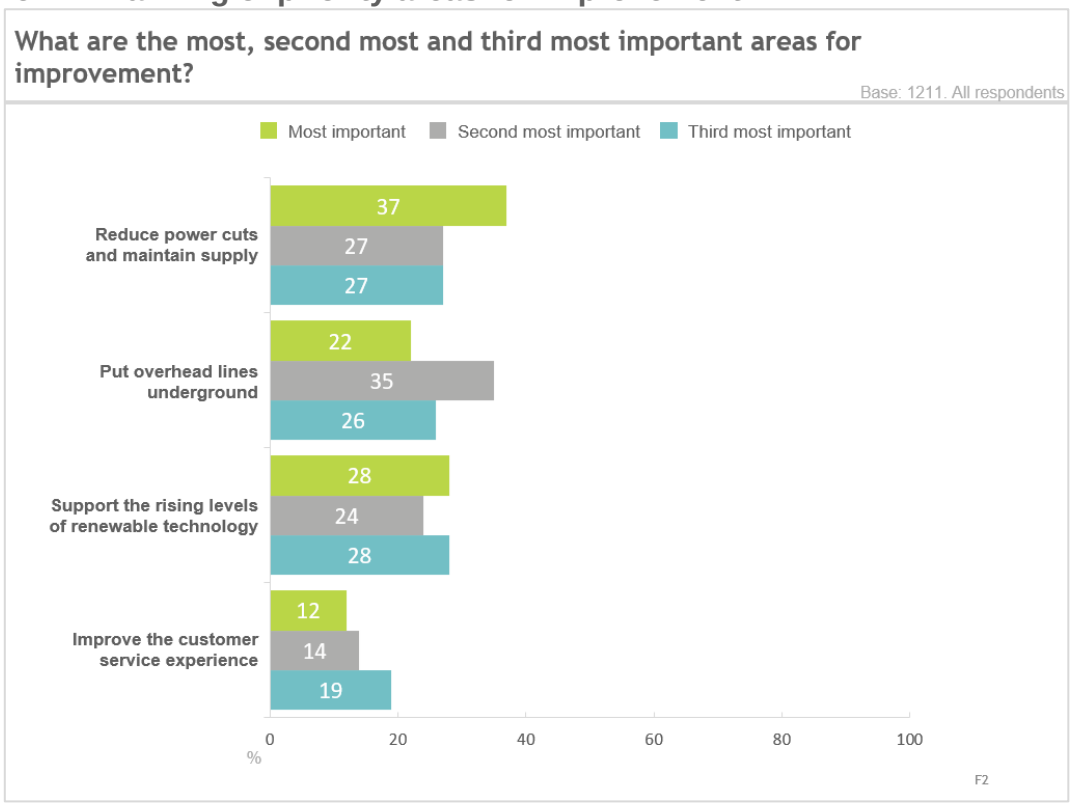
Priority areas for improvement

To verify the prioritisation of investment, respondents were then asked to rank their top three areas for improvement. Respondents confirmed that their main priority is reducing the number of power cuts experienced by NIE Networks customers and maintaining supply; with 37% naming this as their most important area for improvement and 91% of respondents placing it as one of their top three.

The findings were less clear in respect of the second ranked area for investment. While 28% defined 'supporting the rising levels of renewable technology' as their second most important area for improvement compared to 22% saying the same for 'put overhead lines underground'; a greater proportion of respondents placed the undergrounding of powerlines within their top three (83%) than did so for supporting renewable technology (80%).

Only 12% selected 'improve the customer service experience' as their most important area for improvement, with 45% naming it within their top three.

Figure 7.2. Ranking of priority areas for improvement



C2DE respondents were more likely (41%) than ABC1s (34%) to name 'reduce power cuts and maintain supply' as the most important area for investment, whereas a greater proportion of ABC1s selected 'support the rising levels of renewable technology' (36%) for the top position, falling to 21% of C2DEs. Those aged 65 and over were the least likely of any age group to place renewable technology as the highest priority; with only a fifth (20%) doing so compared to 35% of under 35s.

Willingness to pay extra for investment

Domestic customers were then informed that to upgrade the electricity network may require investment. Respondents were asked if they would be willing to pay X amount extra per year to contribute to this spending. Half of respondents were asked in ascending amounts and half in descending amount.

Four in five (79%) said that they were willing to pay something towards investment, meaning 21% were not willing to pay extra. Those unwilling to pay extra are more likely to be:

- 24% of people aged 65 plus compared to 15% aged under 35;
- 22% of C2DEs are unwilling to pay extra compared to 18% of ABC1s;
- 24% of those in rural areas compared to 19% of those in urban areas;
- 23% of those who privately rent their home compared to 19% living in social housing and 18% who own their home; and
- 22% of those in the least deprived areas would be unwilling to pay compared to 18% in the most deprived areas.

The majority (79%) of respondents confirmed they would be willing to pay £1 per year extra for this investment, falling to 74% willing to pay £3 per year extra. This dropped further to just over two thirds (68%) of respondents willing to pay an extra £5, with just over half (55%) willing to pay an additional £10 per year. 21% said they would be willing to pay more than £10 per year.

While a similar proportion of respondents across key demographics were willing to pay an additional £1 per year on their electricity bills, disparities began to appear at £3 per year with those aged 65 and over and rural respondents less likely to be willing to pay this amount. Disparities grew further at £5 per year with C2DE respondents also showing reduced willingness to pay at this amount. Subgroup analysis reveals the following disparities above £10 per year:

- 27% ABC1s are willing to pay more than £10 compared to 15% of C2DEs;
- 23% of those in urban areas are willing to pay more than £10 compared to 16% of rural respondents;
- 22% who own their home are willing to pay more the £10 per year compared to 17% in social housing; and
- 30% of people living in the least deprived areas would pay this amount whereas only one third (20%) of those in the most deprived areas would be willing to do so.

Figure 7.3. Willingness to pay extra for investment

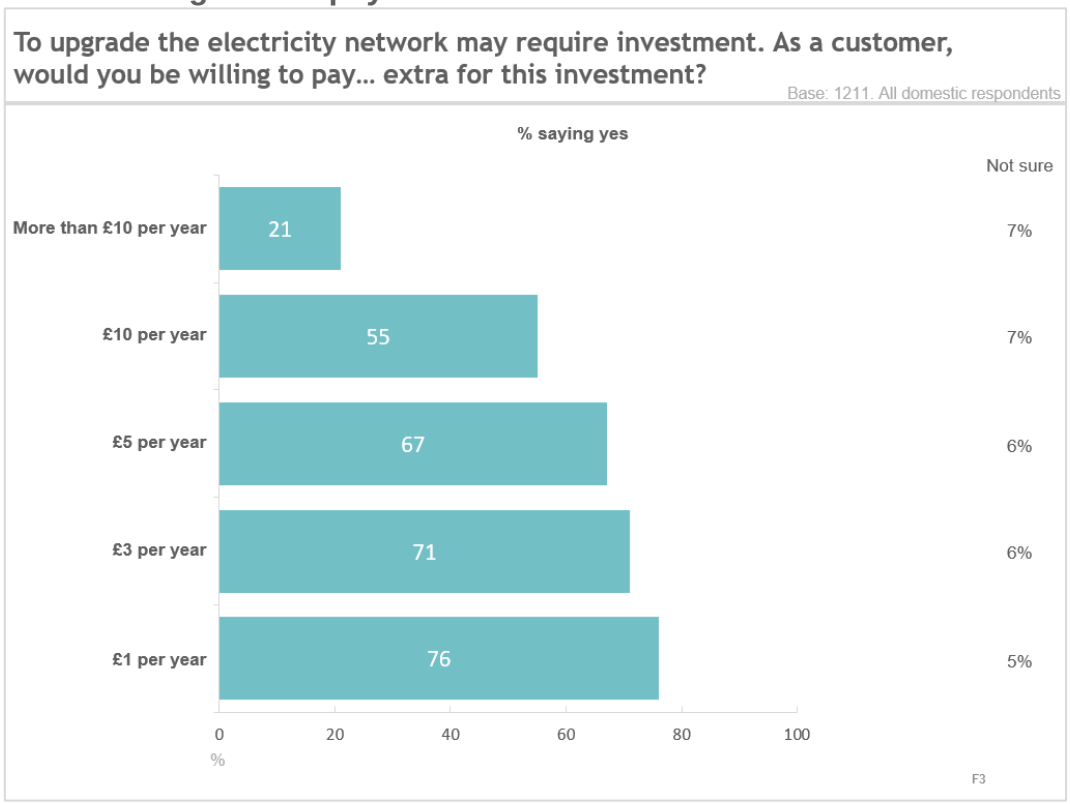


Table 7.3. Willingness to pay extra for investment

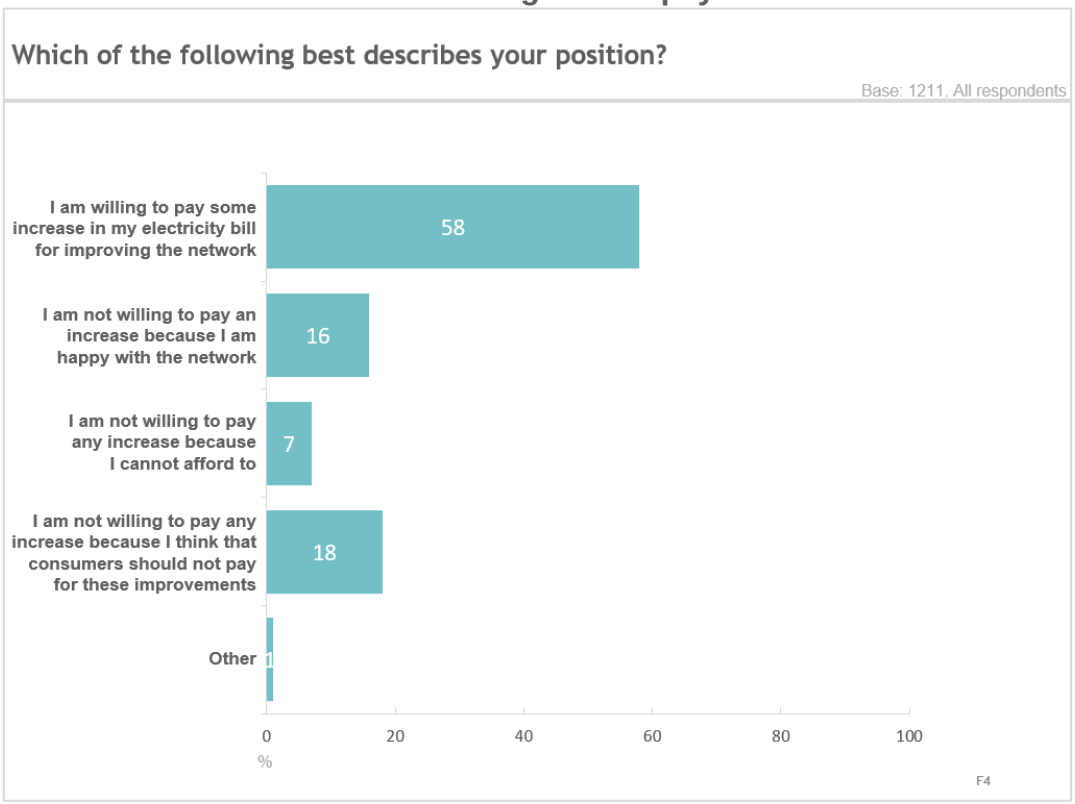
		Not willing to pay extra*	£1 per year	£3 per year	£5 per year	£10 per year	More than £10 per year
Overall	All *Base: 1211*	21%	76%	74%	68%	55%	21%
Age	Under 35 *Base: 202*	15%	85%	83%	77%	67%	23%
	35-44 *Base: 207*	20%	80%	79%	76%	61%	22%
	45-64 *Base:465*	21%	79%	73%	68%	54%	22%
	65 plus *Base: 300*	24%	76%	67%	59%	45%	18%
Gender	Male *Base: 596*	22%	78%	73%	68%	59%	25%
	Female *Base: 615*	20%	80%	75%	68%	52%	17%
SEG	ABC1 *Base: 596*	18%	82%	77%	72%	60%	27%
	C2DE *Base: 615*	22%	78%	73%	66%	51%	15%
Location	Urban *Base: 558*	19%	80%	76%	72%	59%	23%
	Rural *Base: 555*	24%	77%	70%	61%	48%	16%
Tenure	Owner occupied *Base: 851*	18%	82%	76%	69%	55%	22%
	Social rented *Base: 178*	19%	81%	78%	76%	61%	17%
	Private rented *Base: 131*	23%	77%	74%	69%	59%	21%
MDM Quintile	1 - Most deprived *Base: 327*	18%	82%	79%	76%	62%	20%
	2 *Base: 220*	26%	74%	66%	62%	51%	20%
	3 *Base: 231*	23%	77%	71%	64%	52%	21%
	4 *Base: 244*	17%	83%	74%	63%	49%	16%
	5 - Least deprived *Base: 189*	22%	78%	77%	72%	61%	30%
Children	Have children *Base: 318*	17%	83%	81%	76%	65%	20%
	No children *Base: 893*	22%	78%	71%	65%	52%	21%
Electricity dependency	Electricity dependent *Base: 110*	21%	79%	73%	72%	61%	18%
	Not electricity dependent *Base: 1101*	21%	79%	74%	68%	55%	21%
Outages	Had planned outage *Base: 280*	21%	79%	72%	66%	54%	23%
	Had unplanned outage *Base: 268*	20%	80%	75%	71%	59%	23%
	No outages *Base: 732*	20%	80%	74%	68%	55%	21%

*includes those who are unsure whether they would pay extra

Respondents were then asked to describe their position in relation to willingness to pay. Almost three in five (58%) said they are willing to pay some increase in their bill to improve

the network, 16% were not willing to pay because they are happy with the network, 7% said they could not afford to pay an increase, and almost one in five (18%) said they are not willing to pay more because they think consumers should not pay for these increases.

Figure 7.4. Position in relation to willingness to pay



Almost two thirds (64%) of under 35s say they are willing to pay an increase, compared to half (50%) of people aged 65 plus. 63% of people in the ABC1 group would be willing to pay an increase, compared to 54% of those in the C2DE group. Respondents living in urban areas (62%) are also more likely to be in favour of paying more on their electricity bill compared to rural respondents (49%).

Those respondents who said that a member of their household is dependent on electricity for their healthcare needs (13%) were more likely to report that they are not willing to pay any increase because they cannot afford to than households without a member dependent on electricity (7%). 14% of those in social housing said they could not afford to pay more compared to 5% of homeowners.

KEY FINDINGS - NON-DOMESTIC CUSTOMERS

Views of NIE Networks

Those that took part in the non-domestic customer survey were asked a number of questions to capture their perceptions of NIE and ascertain the extent to which they are positive or critical of the services provided.

Similar to the domestic survey, we asked three questions on consumers' general opinions of NIE, as follows:

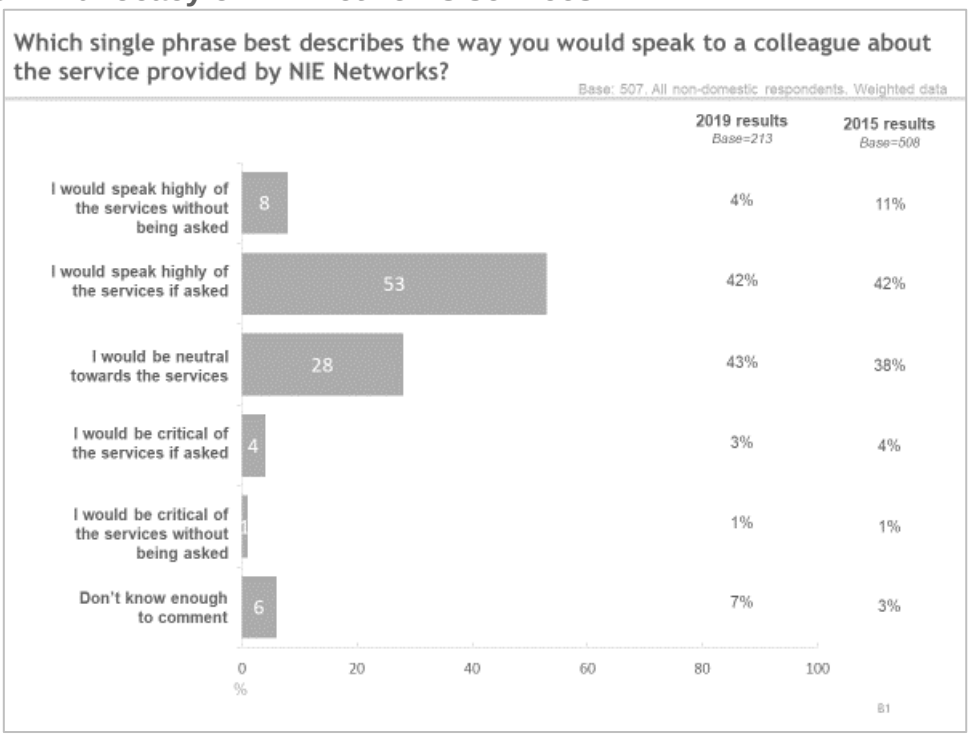
- What phrase describes the way you would speak to friends and relatives about the service provided by NIE Networks; and
- Satisfaction with the service provided by NIE Networks;
- Likelihood of recommending NIE Networks;
- Level of knowledge about the electricity network.

Advocacy of NIE Networks' services

Non-domestic customers were asked how they would speak to a colleague about the services provided by NIE Networks. The majority (61%) said they would speak highly of the services provided, with 8% saying they would do so without being asked; 5% said they would speak critically about NIE Networks.

These findings indicate an 8-percentage point increase since 2015 in the proportion of business customers who would speak highly of NIE Networks (up from 53%).

Figure 8.1. Advocacy of NIE Networks services



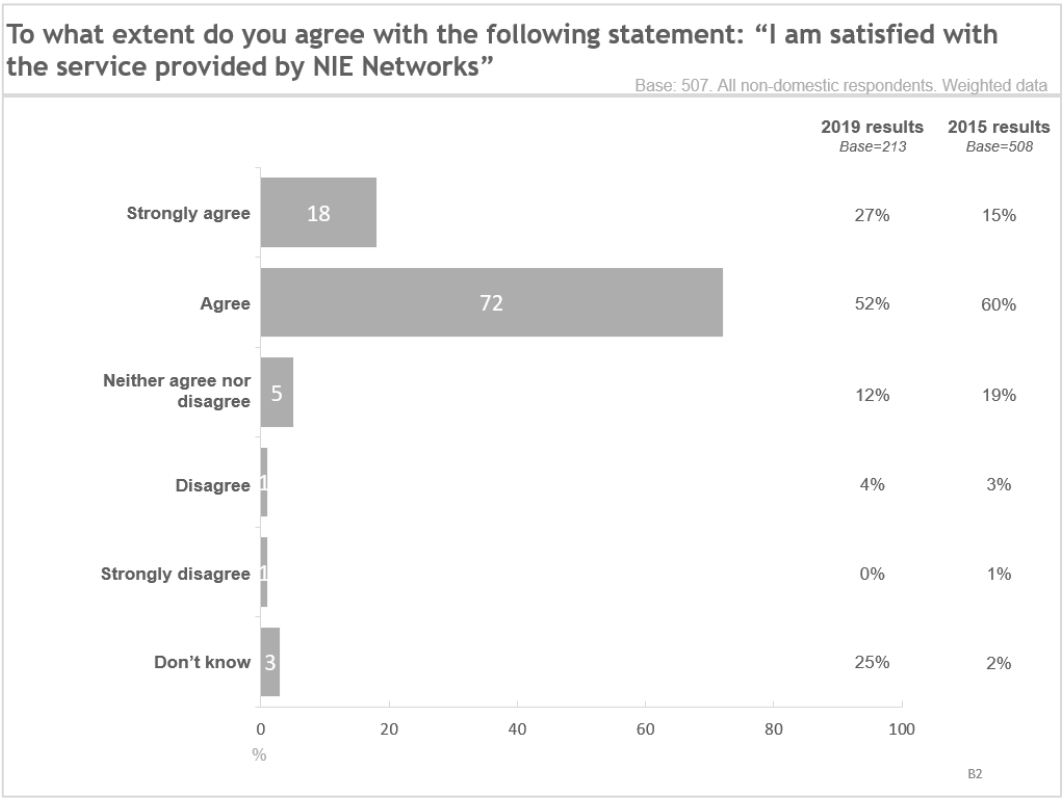
While few organisations said they would speak negatively about NIE Networks, those who would, were most likely to be within the agriculture sector (10%). Those who had experienced either a planned (7%) or unplanned outage (8%) in the last 12 months, were also more likely to speak critically of NIE Networks than those who had not experienced either (4%). Those who had contact with NIE Networks in the last 12 months were more likely to say they would be critical (10%) compared to those who had not contacted (4%).

Satisfaction with NIE Networks' services

Respondents were then asked to what extent they agree or disagree with the statement 'I am satisfied with the services provided by NIE Networks'. Almost all (90%) agreed with this statement with 18% strongly agreeing. Only 2% disagreed with the statement.

At the overall level, satisfaction had increased since the 2015 survey (up 15 percentage points from 75%).

Figure 8.2. Satisfaction with NIE Networks' services



While in the previous section those speaking critically of NIE Networks' were most likely to be agriculture businesses, this sector was most likely to be satisfied with the services provided (96%) followed by those in professional services (92%). Conversely, those in manufacturing, construction and motor trades (8%) and large businesses (50 plus employees) (4%) were more likely to disagree with this statement.

Further subgroup analysis indicates that organisations who have experienced more than one planned (5%) or unplanned (7%) outage are more likely to express dissatisfaction. There is also clear disparity between organisations that have applied for a new connection in the last three years (79% satisfied) and those who have not (91% satisfied).

Table 8.1. Satisfaction by key business demographics

		Agree	Neither	Disagree	Don't know	*Total*
Overall	All *Base: 507/507*	90%	5%	2%	3%	*100%*
Sector	Agriculture *Base: 100/146*	96%	3%	1%	-	*100%*
	Manuf./Const./Motor trade *Base: 102/93*	82%	6%	8%	3%	*100%*
	Wholesale/Retail/Hospitality *Base: 101/82*	88%	5%	-	6%	*100%*
	Transport/ services *Base: 104/113*	92%	7%	-	1%	*100%*
	Public admin/ health/ education *Base: 100/74*	88%	4%	2%	6%	*100%*
Size	1-10 *Base: 281/446*	90%	5%	2%	2%	*100%*
	11-49 *Base: 150/51*	90%	3%	2%	5%	*100%*
	50+ *Base: 76/10*	84%	5%	4%	7%	*100%*
Location	Urban *Base: 278/250*	89%	5%	2%	4%	*100%*
	Rural *Base: 202/245*	91%	5%	2%	2%	*100%*
New connection application	Made application for new connection *Base: 60/47*	79%	12%	9%	0%	*100%*
	Haven't made application *Base: 447/460*	91%	4%	1%	3%	*100%*

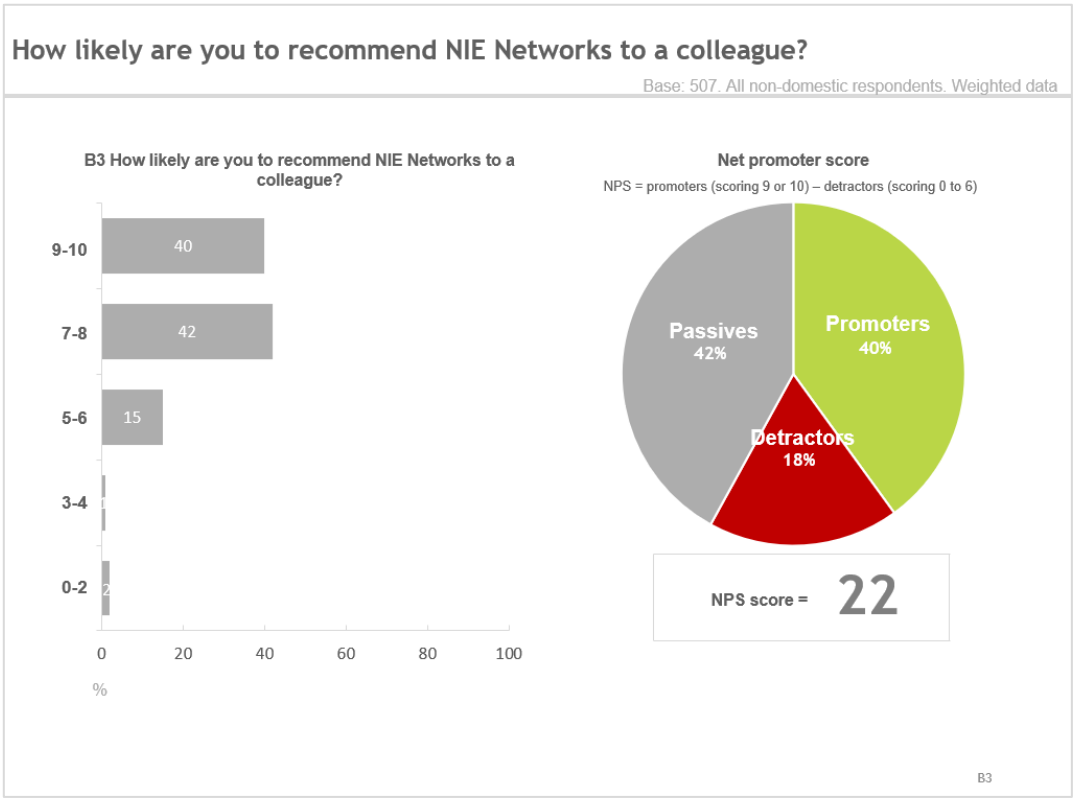
Likelihood to recommend

Non-domestic customers were asked how likely they would be to recommend NIE Networks to a colleague on a scale of 0 to 10 where 0 is 'definitely would not recommend' and 10 is 'definitely would recommend.' Two fifths (40%) of respondents selected a 9 or 10 on the scale, while 18% gave a score of 0 to 6. This produces a Net Promoter Score of 22.

The NPS is slightly lower than in 2019 (down from 24).

While the number of respondents giving a score of 0 to 2 on the scale was low, these were more likely to be businesses in manufacturing, construction and motor trades (7%). Again, those who had experienced more than one planned (5%) or unplanned (5%) power outage in the last 12 months were more likely select the lowest scores (0 to 2 on the scale).

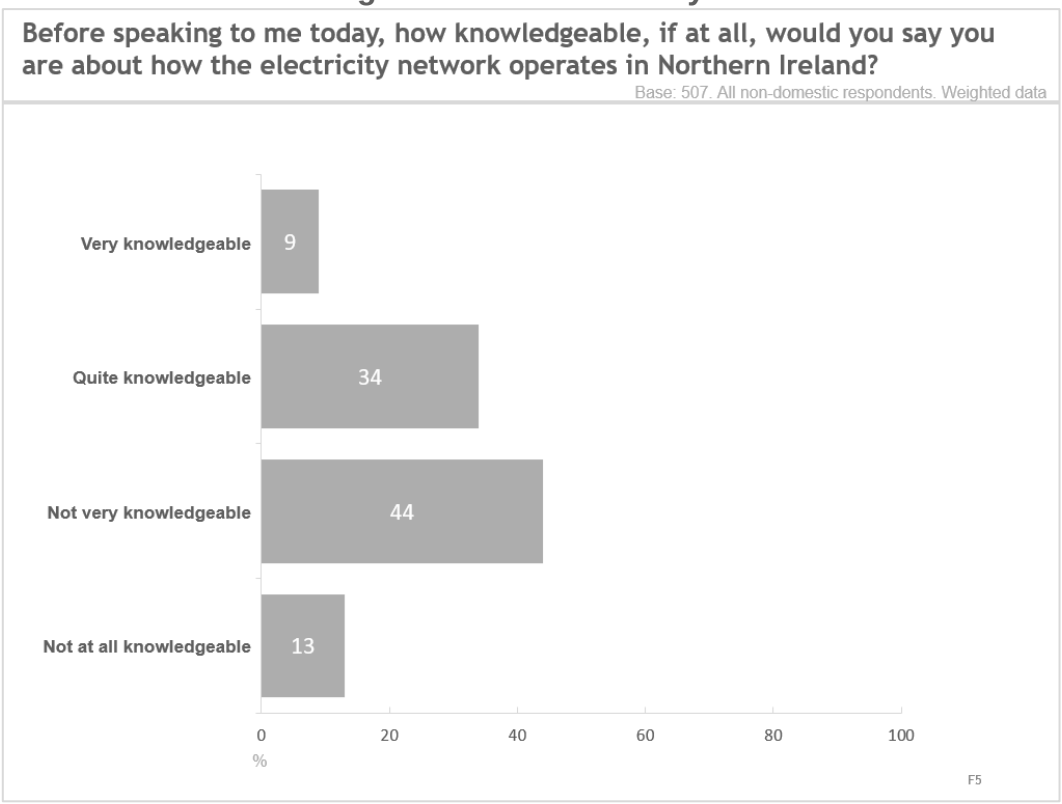
Figure 8.3. Likelihood to recommend



Level of knowledge about the electricity network

Later in the survey respondents were asked about their level of knowledge about the electricity network prior to taking part in the survey. Just over two fifths (43%) described themselves as quite or very knowledgeable, while 44% said they were not very knowledgeable and 13% not at all knowledgeable.

Figure 8.4. Level of knowledge about the electricity network



Recent experience with NIE Networks

The survey explored respondents' recent experiences with NIE Networks in a number of key areas. Non-domestic customers were asked the following questions:

On planned power outages

- Number of planned power cuts experienced in the last 12 months, where a notification was received in advance; and
- Preference between one longer or two shorter planned outages to allow for essential maintenance.

On unplanned power cuts

- Number of unplanned power cuts experienced in the last 12 months, where advance notice was not received; and
- The longest time without power due to an unplanned power cut in the last year.

On connections

- Whether or not the organisation had made an application for a new connection to the electricity network or to alter the existing connection in the last three years; and
- Satisfaction with the connections process.

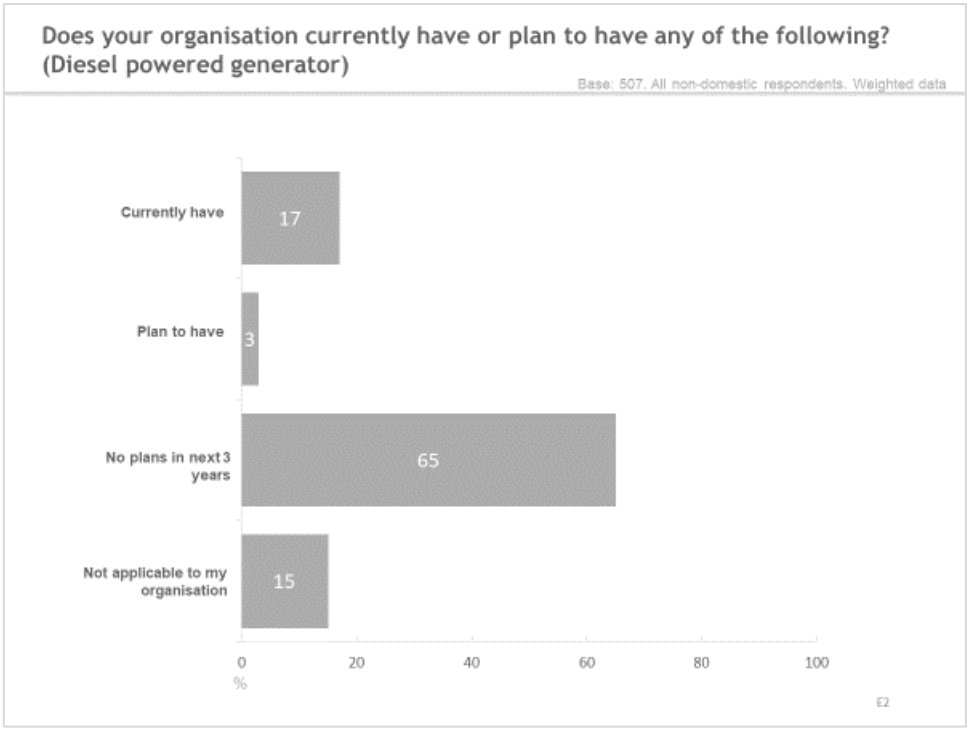
Incidence and experience of planned power outages

Preparedness

To set the context, business respondents were asked if they currently use or have plans to install a diesel-powered generator in the event of power cuts. Almost a fifth (17%) already had a diesel-powered generator, while 3% had plans to get one in the next 3 years. These tended to be in the agriculture sector (33%), rural customers (32%) and large organisations (37%).

These findings indicate a reduction in the those reporting to have a backup generator (down from 24% in 2015).

Figure 9.1. Those with a diesel-powered generator



Incidence of planned power cuts

Almost two thirds (65%) of organisations had not experienced a planned power cut in the last 12 months, while around 1 in 5 (18%) had experienced one outage, 10% had experienced this twice and 3% on three or more occasions.

The proportion of non-domestic customers recalling a recent planned power cut has increased from 20% in 2015 to 32% in the most recent research. While the percentage of non-domestic customers experiencing one (up from 12%) or two (up from 5%) outages has increased, the percentage experiencing three or more has remained unchanged.

Those in manufacturing, construction and motor trades were most likely to recall having experienced at least one planned power cut in the last year (45%) followed by those in agriculture (42%); with about a fifth of both sectors recalling multiple outages. There is a substantial disparity between urban and rural businesses; with 16% and 47% recalling a planned power cut respectively. Rural businesses were also more likely to experience multiple outages; with 24% doing so compared to only 4% of urban respondents.

Figure 9.2. Planned power outages experienced in the last 12 months

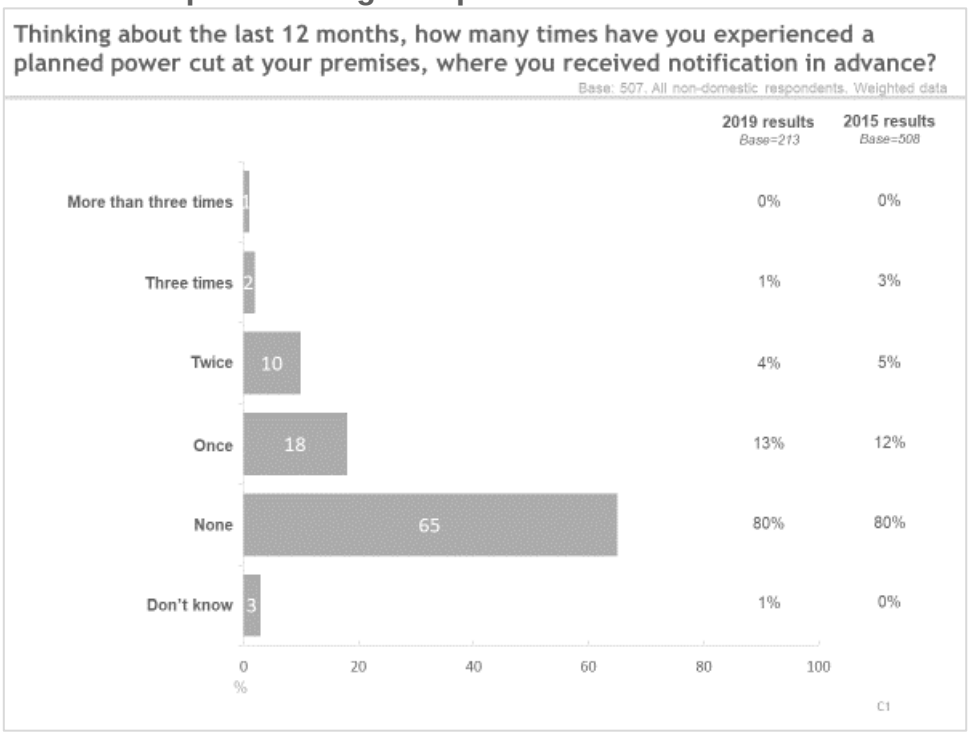


Table 9.1. Incidence and experience of planned power outages by key business demographics

		Yes in last year	None in last year	One outage	More than one outage
Overall	All *Base: 507/507*	32%	65%	18%	14%
Sector	Agriculture *Base: 100/146*	42%	53%	22%	20%
	Manuf./Const./Motor trade *Base: 102/93*	45%	49%	27%	18%
	Wholesale/Retail/Hospitality *Base: 101/82*	26%	71%	17%	9%
	Transport/ services *Base: 104/113*	24%	76%	12%	12%
	Public admin/ health/ education *Base: 100/74*	15%	85%	10%	5%
Size	1-10 *Base: 281/446*	32%	65%	78%	14%
	11-49 *Base: 150/51*	30%	67%	21%	9%
	50+ *Base: 76/10*	38%	61%	20%	18%
Location	Urban *Base: 278/250*	16%	82%	12%	4%
	Rural *Base: 202/245*	47%	48%	24%	24%

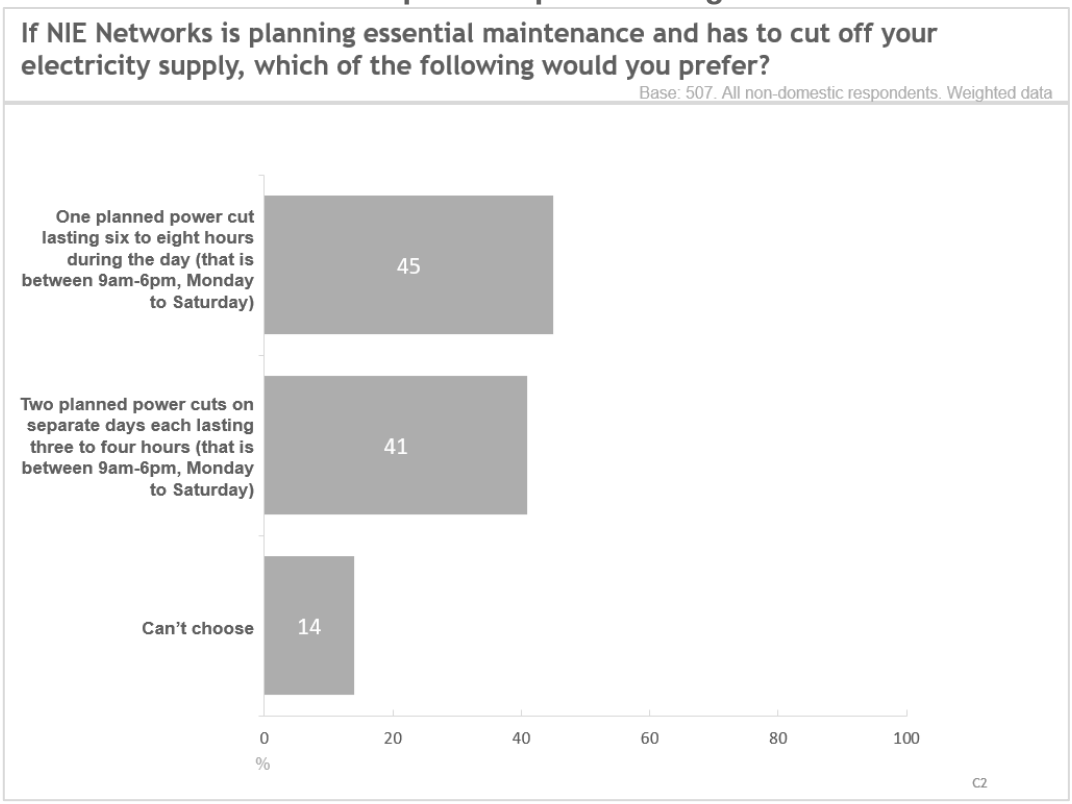
Preference between one longer or two shorter planned outages

Respondents were then asked to select their preference between the following two options where NIE Networks is planning essential maintenance and needs to cut off the electricity supply:

A. One planned power cut lasting six to eight hours during the day (that is between 9am – 6pm, Monday to Saturday); OR
B. Two planned power cuts on separate days each lasting three to four hours (that is between 9am – 6pm, Monday to Saturday).

At the overall level, non-domestic respondents did not show a strong preference for one option or the other; with 45% selecting option A and 41% selecting option B.

Figure 9.3. Preferred format of planned power outages



However at subgroup level, the following preferences were notable:

- The agriculture sector was more likely to display a preference for one long power cut (57% option A) over multiple shorter outages (32% option B);
- The manufacturing, construction and motor trades responded similarly; 49% option A and 31% option B;
- This was reversed in the wholesale, retail and hospitality sector; 62% preferred multiple shorted outages over one long one (26%);
- Mid-sized businesses showed a clear preference for multiple short outages (48% option B) over one long one (35%);
- Urban businesses opted for option B (46%) over option A (38%), but rural respondents preferred the opposite – one longer cut (53% option A) over multiple shorter (35% option B); and

- Those who recalled a planned power cut in the last year were slightly more likely to prefer option A (46%) over option B (40%).

Table 9.2. Preferred format of planned power outages by key business demographics

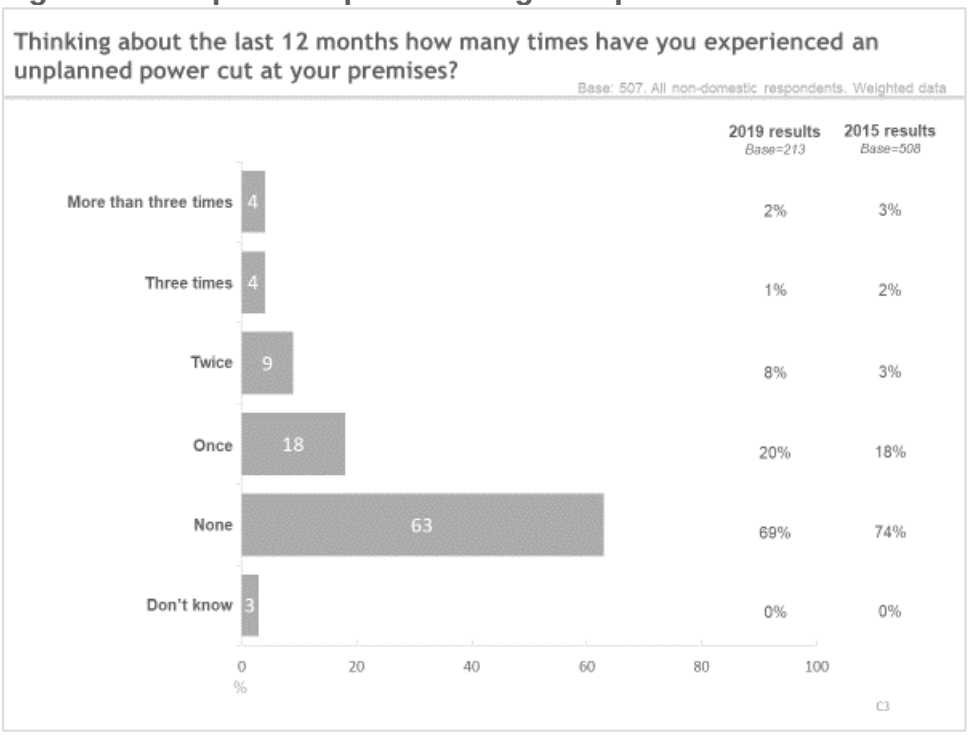
		One planned power cut lasting six to eight hours during the day (that is between 9am-6pm, Monday to Saturday)	Two planned power cuts on separate days each lasting three to four hours (that is between 9am-6pm, Monday to Saturday)	Can't choose	*Total*
Overall	All *Base: 507/507*	45%	41%	14%	*100%*
Sector	Agriculture *Base: 100/146*	57%	32%	11%	*100%*
	Manuf./Const./Motor trade *Base: 102/93*	49%	31%	20%	*100%*
	Wholesale/Retail/Hospitality *Base: 101/82*	26%	62%	12%	*100%*
	Transport/ services *Base: 104/113*	46%	44%	11%	*100%*
	Public admin/ health/ education *Base: 100/74*	39%	45%	16%	*100%*
Size	1-10 *Base: 281/446*	47%	40%	13%	*100%*
	11-49 *Base: 150/51*	35%	48%	17%	*100%*
	50+ *Base: 76/10*	45%	43%	12%	*100%*
Location	Urban *Base: 278/250*	38%	46%	16%	*100%*
	Rural *Base: 202/245*	53%	35%	11%	*100%*

Incidence and experience of unplanned power outages

Just under two thirds (63%) of respondents could not recall having experienced an unplanned power cut in the last 12 months. Almost one fifth (18%) had experienced one, 9% had experienced two, and 7% had experienced three or more.

These findings indicate an increase of 8 percentage points (from 26% to 34%) since 2015 in the proportion of non-domestic respondents recalling at least one recent unplanned power cut. Looking at frequency, the percentage of respondents reporting three and more than three has increased slightly (by 1 percentage point in each case).

Figure 9.4. Unplanned power outages experienced in the last 12 months



Those in the agriculture sector (48%) were the most likely to report having had at least one unplanned power cut in the last 12 months followed by manufacturing, construction and motor trades (36%). Just over a fifth (21%) of urban respondents could recall having experienced at least one unplanned power cut, but this rose to almost half (47%) of those in rural areas.

Almost half (48%) of those who recalled having had an unplanned power cut in the last year said that the longest duration without power was up to 1 hour; 32% said 1 to 3 hours and 20% said 3 to 10 hours. None had been without power for more than 10 hours due to an unplanned outage.

There has been a clear reduction in the percentage of respondents reporting the longest duration of unplanned cuts (three hours or more) since 2015; down 11 percentage points from 31%.

While few businesses could recall an unplanned outage of 3 to 10 hours, those who had done so were most likely to be in manufacturing, construction and motor trades (33%). Of urban and rural respondents who had experienced an unplanned outage, a similar proportion reported a lengthier outage; around a fifth in both locations.

Figure 9.5. Longest time without power due to an unplanned power cut

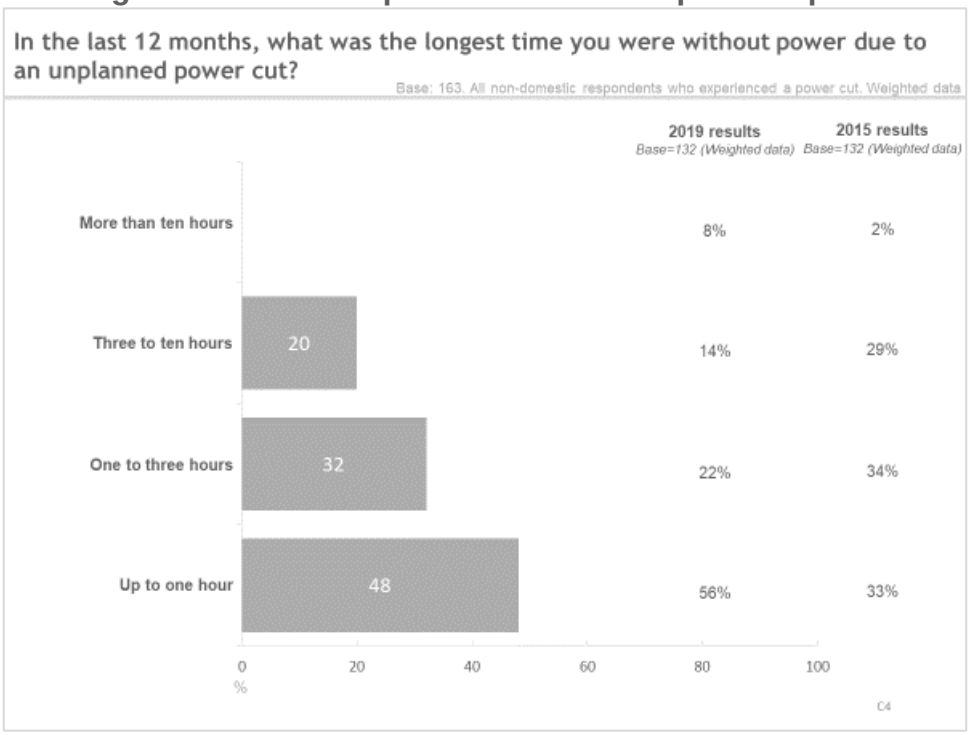


Table 9.3. Incidence and experience of unplanned outages by key business demographics

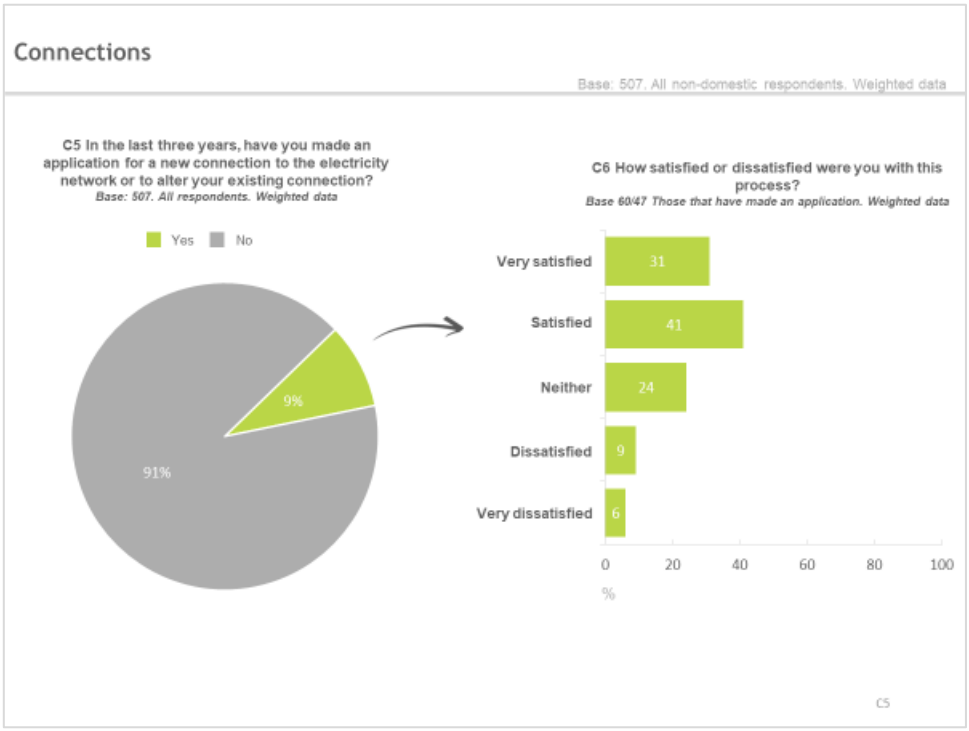
		Yes in last year	None in last year	One outage	More than one outage	Less than 3 hours	More than 3 hours
Overall	All *Base: 507/507*	34%	63%	18%	16%	27%	7%
Sector	Agriculture *Base: 100/146*	48%	47%	22%	26%	40%	8%
	Manuf./Const./Motor trade *Base: 102/93*	36%	62%	18%	18%	24%	12%
	Wholesale/Retail/Hospitality *Base: 101/82*	25%	73%	21%	4%	22%	3%
	Transport/ services *Base: 104/113*	30%	69%	13%	17%	23%	7%
	Public admin/ health/ education *Base: 100/74*	17%	78%	11%	7%	16%	1%
Size	1-10 *Base: 281/446*	34%	63%	18%	16%	27%	7%
	11-49 *Base: 150/51*	30%	70%	17%	13%	24%	6%
	50+ *Base: 76/10*	29%	68%	12%	17%	22%	7%
Location	Urban *Base: 278/250*	21%	76%	14%	8%	16%	5%
	Rural *Base: 202/245*	47%	50%	22%	25%	39%	8%

Connections

Non-domestic customers were asked if they had made an application for a new connection to the electricity network or to alter the existing connection within the last three years. Almost one in ten (9%) had done so. Those applying were more likely to be within agriculture (12%) or manufacturing, construction and motor trades (16%) and to be organisations with 50 plus employees (20%). Of the 47 who had done so, 10 said they were dissatisfied or very dissatisfied with the process. When asked why they were dissatisfied, 7 respondents said it was because of the time taken to arrange the new connection.

The percentage of respondents reporting to have applied for a new connection or alteration to their existing one has increased from 5% in 2015 to 9% in 2021.

Figure 9.6. Applications for new connections or changes to existing connection



Contact and communication channels

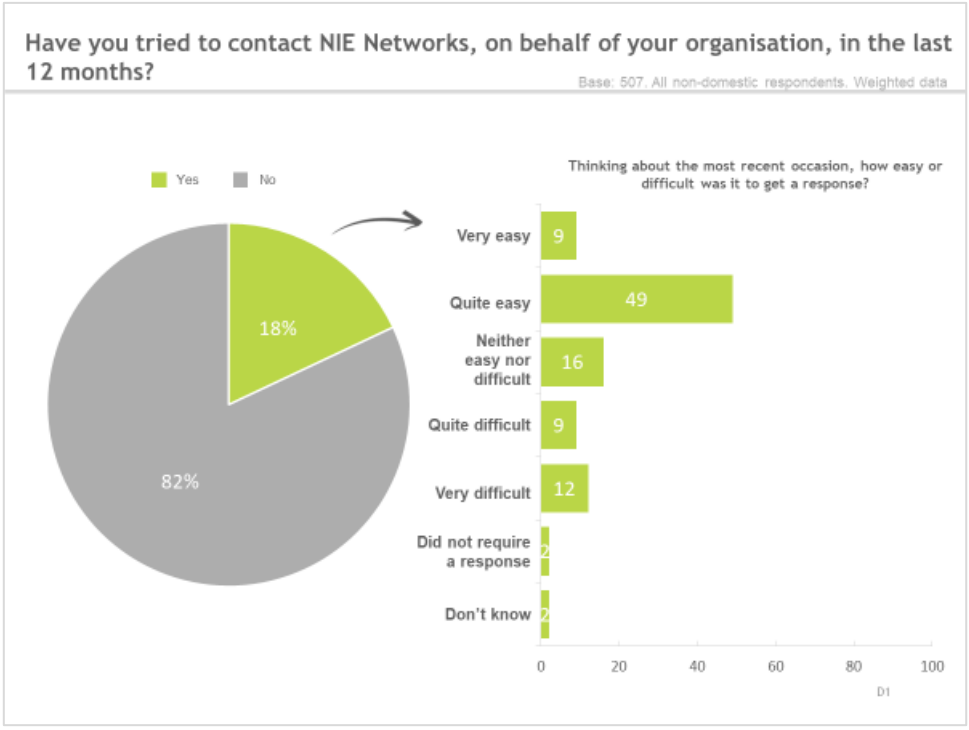
Non-domestic customers were asked about their experiences of contacting and communicating with NIE Networks. This section covers the following areas:

- Contact with NIE Networks in the last 12 months; and
- Ease/ difficulty of getting a response.

Contact with NIE Networks in the last 12 months

Less than 1 in 5 (18%) had tried to contact NIE Networks on behalf of their organisation in the last 12 months, while 82% had not. Those organisations who had experienced multiple unplanned outages (40%) or an unplanned outage lasting more than 3 hours (43%) were more likely to have contacted NIE Networks recently. Almost three quarters (72%) of respondents who had applied for a new connection or to alter their connection in the last three years have tried to contact NIE Networks, compared to 13% of those who had not made an application.

Figure 10.1. Contact with NIE Networks in the last 12 months



Of those who had contacted NIE Networks in the last 12 months, 59% described getting a response as being easy, while 21% said this had been difficult. Those describing getting a response as difficult were more likely to have experienced a planned or unplanned outage in the last year and/or an unplanned outage lasting more than 3 hours.

Table 10.1 Ease of getting a response by incidence and experience of outages

		Planned outages		Unplanned outages				Overview		
	All	One outage	>one outage	One outage	>one outage	<3 hours	>3 hours	Had planned outage	Had unplanned outage	No outages
Base (unweighted/weighted)	*100/92*	*25/23*	*23/20*	*21/29*	*34/33*	*40/37*	*15/15*	*48/43*	*55/52*	*25/22*
Easy	59%	45%	57%	60%	62%	70%	39%	50%	61%	57%
Neither	16%	19%	18%	13%	20%	15%	23%	18%	17%	18%
Difficult	21%	30%	17%	28%	13%	15%	27%	24%	18%	24%
Did not require a response	2%	7%	-	-	5%	-	11%	4%	3%	-
Don't know	2%	-	8%	-	-	-	-	4%	-	2%
Total	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

Those who had not applied for a new connection or to alter their existing connection were more likely to find it easy to get a response (67%) compared to those who had made an application (45%). However, a similar number of respondents found it difficult (21% and 22% respectively), with those who had made an application more likely to say it was neither easy nor difficult (23%, compared to 12% of those who had not made an application). Customers who were dissatisfied with NIE Networks' services were also more likely to have found it difficult to get in contact (60%) than those who were satisfied (18%).

Table 10.2 Ease of getting a response by satisfaction with services

		Attitudes towards NIE Networks			Satisfaction with NIE Networks		
	All	Critical of services	Neutral towards services	Speak highly of services	Satisfied	Neither	Dissatisfied
Base (unweighted/weighted)	*100/92*	*10/9*	*36/31*	*53/52*	*34/33*	*40/37*	*15/15*
Easy	59%	42%	56%	63%	65%	32%	32%
Neither	16%	1%	15%	20%	15%	33%	8%
Difficult	21%	57%	24%	13%	18%	21%	60%
Did not require a response	2%	-	5%	-	5%	15%	-
Don't know	2%	-	-	4%	3%	-	-
Total	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*	*100%*

Future networks

A key aim of the survey was to assess the views of non-domestic customers towards the future of the electricity network. This section is structured as follows:

On climate change

- Organisational views on importance of climate change issue;
- Interest in / adoption of low carbon technologies;
- Whether respondent organisation generates electricity;
- Barriers to organisation becoming more energy efficient; and
- At home working during and after the Covid-19 pandemic.

On undergrounding of overhead power lines

- Support for undergrounding power lines in various circumstances; and
- Prioritisation of undergrounding in different locations.

Climate change

Reducing environmental impact

Respondents were asked to what extent they agreed or disagreed with three statements as follows:

- My organisation thinks it is important to develop solutions to reduce impact on the environment.
- My organisation is willing to change its behaviours because of concerns about climate change.
- My organisation is willing to pay extra to reduce impact on the environment.

The majority (85%) agreed that it is important to develop solutions to reduce impact on the environment, with 17% strongly agreeing. Just 4% were in disagreement. A smaller proportion of respondents agreed to changing organisational behaviours because of concerns about climate change (78%, with 14% strongly agreeing). 9% were in disagreement with this statement.

Agreement fell to under half of business respondents (42%) in relation to willingness to pay extra to reduce impact on the environment (with only 3% strongly agreeing). Just under a third (31%) disagreed. Non-domestic customers are therefore approaching the issue of climate change similarly to domestic consumers; while they recognise the importance of addressing the issue, this does not fully translate into intention to change behaviour and even less so to willingness to pay for measures to reduce environmental impact.

These findings mark a reduction since 2019 in the percentage of organisations willing to change their behaviour (down from 91%) or pay more (down from 69%) to reduce climate impact.

Figure 11.1. Agreement or disagreement to reducing environmental impact

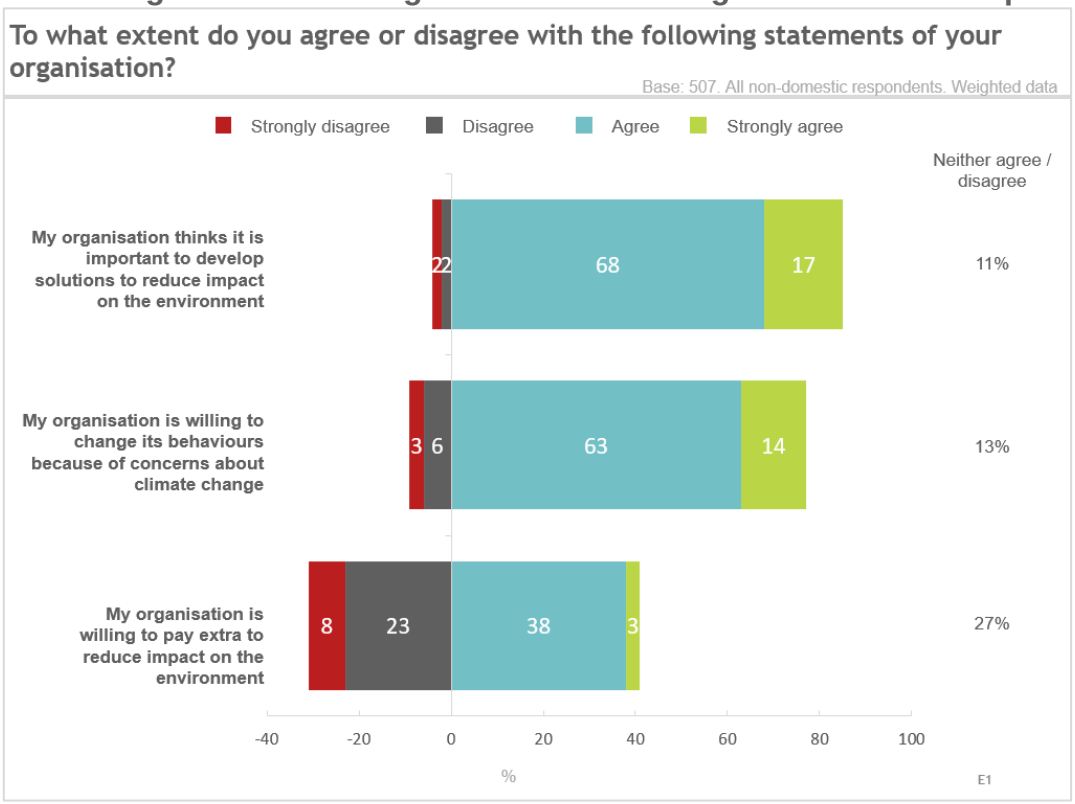


Table 11.1. Agreement by key business demographics

		My organisation thinks it is important to develop solutions to reduce impact on the environment	My organisation is willing to change its behaviours because of concerns about climate change	My organisation is willing to pay extra to reduce impact on the environment
Overall	All *Base: 507/507*	85%	78%	42%
Sector	Agriculture *Base: 100/146*	86%	76%	46%
	Manuf./Const./Motor trade *Base: 102/93*	87%	75%	32%
	Wholesale/Retail/Hospitality *Base: 101/82*	75%	68%	26%
	Transport/ services *Base: 104/113*	90%	86%	50%
	Public admin/ health/ education *Base: 100/74*	86%	82%	50%
Size	1-10 *Base: 281/446*	85%	77%	43%
	11-49 *Base: 150/51*	83%	80%	34%
	50+ *Base: 76/10*	96%	87%	43%
Location	Urban *Base: 278/250*	87%	80%	42%
	Rural *Base: 202/245*	84%	76%	43%

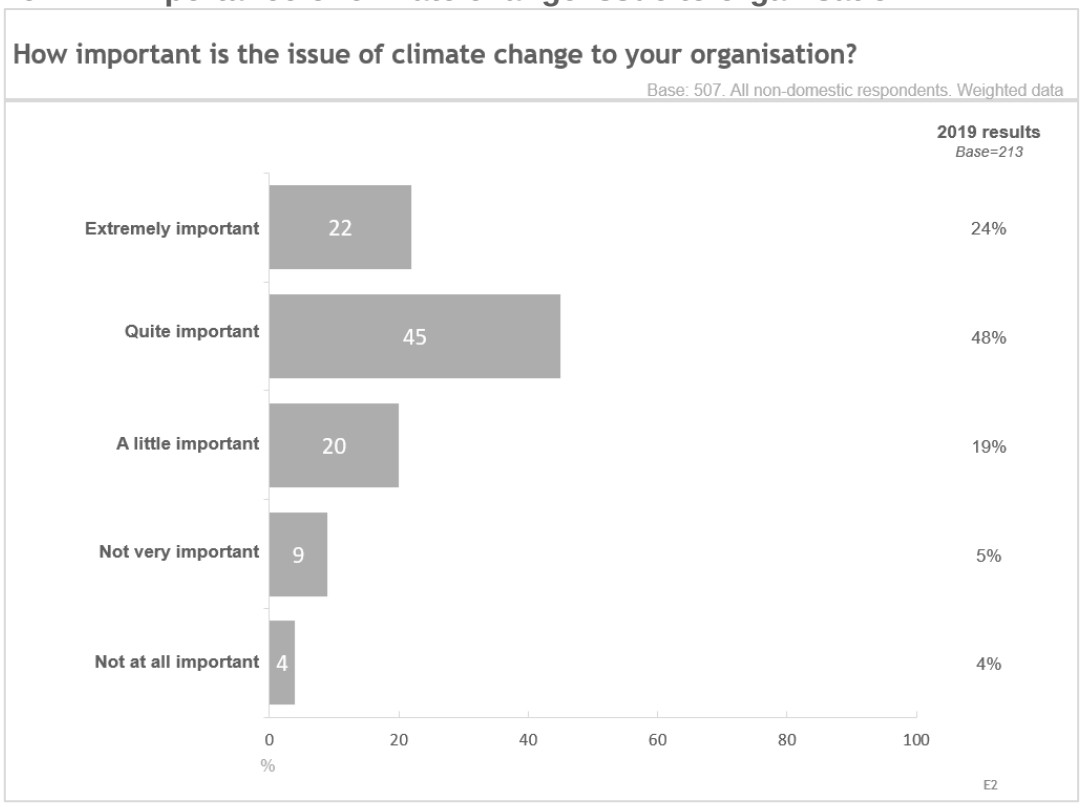
Wholesale, retail and hospitality respondents were the sector least likely to agree in response to each of the statements (75%, 68% and 26% doing so respectively). Large companies (50 plus employees) were more likely to agree with the importance of developing solutions (96%) and willingness to change behaviours than those in the other size categories, however an equal proportion of small businesses (1 to 10 employees) and large companies agreed to paying extra (43% for both). Midsized businesses displayed considerably less willingness to pay (34%).

A similar proportion of urban and rural organisations agreed with each of the statements; however rural respondents were more likely to respond negatively in each case whereas those in urban locations were more likely to take a neutral stance.

Importance of climate change issue

Non-domestic customers were then asked how important the issue of climate change is to their organisation on a scale of 1 to 5, where 1 is not at all important and 5 is extremely important. Over two thirds (67%) described the issue as important; with 22% saying it is extremely important. A further 20% felt it was 'a little important', while around 1 in 10 (12%) said it was not important.

Figure 11.2. Importance of climate change issue to organisation



Organisations in the public administration, health and education sector were most likely to describe the climate change issue as quite or extremely important (83%) followed by transport and business services (72%). Businesses in manufacturing/ construction were most likely to consider the issue not important (18%). Responses were also analysed by business size; those with 50 or more employees were the most likely to rank the issue as quite or extremely important (78%), followed by midsized businesses (70%) and then the smallest companies

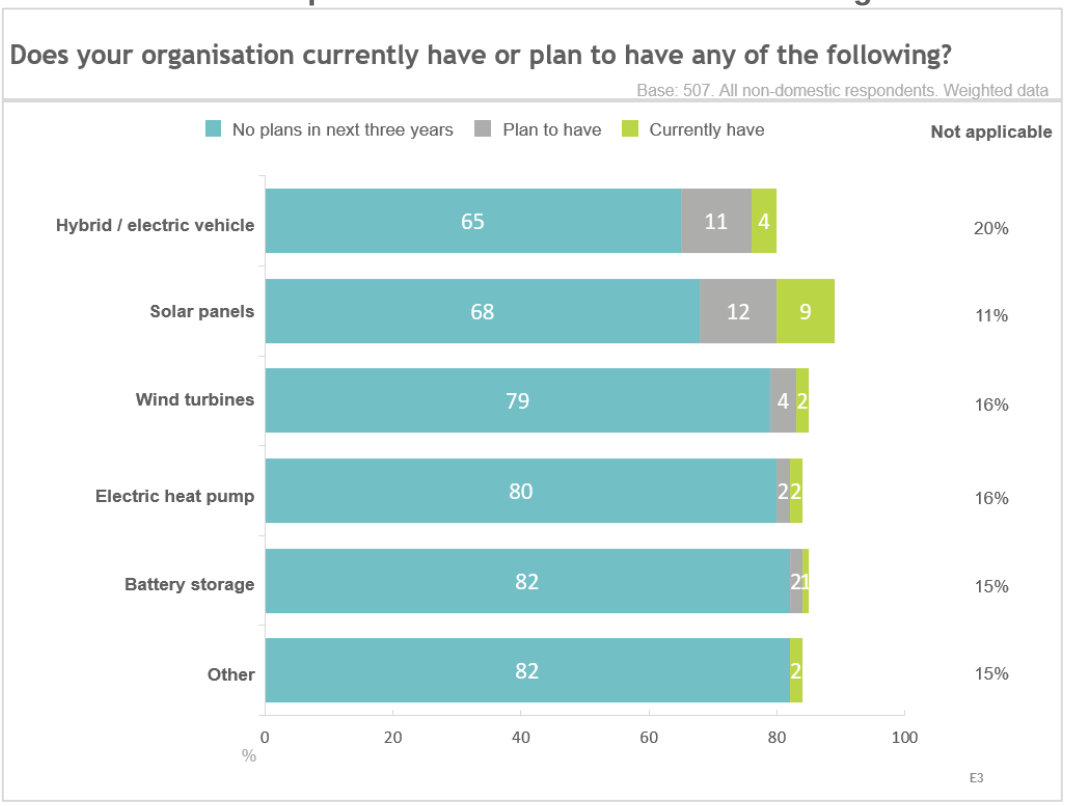
(67%). Almost a fifth (17%) of rural businesses felt the issue was not important compared to 8% of those in urban locations.

Interest in / adoption of low carbon technologies

Current use of low carbon technologies or plans to implement

Respondents were asked if they currently have any of a range of low carbon technologies within their organisation or plan to have in the next 3 years. Few businesses already had any of the low carbon technologies listed, however more had plans to implement a number of the named measures. While only 4% currently use hybrid/electric vehicles, 11% had plans to implement. Almost 1 in 10 (9%) currently have solar panels, while 12% intended to implement. A similar proportion of organisations had installed each of wind turbines, an electric heat pump, and battery storage (1 to 2%), and between 2% and 4% had plans to install each of these.

Figure 11.3. Current and planned use of low carbon technologies



Those in the agriculture sector were most likely to already have low carbon technologies in place (32%) while those in the manufacturing, construction and motor trades were most likely to have planes to introduce these measures in the next three years (26%).

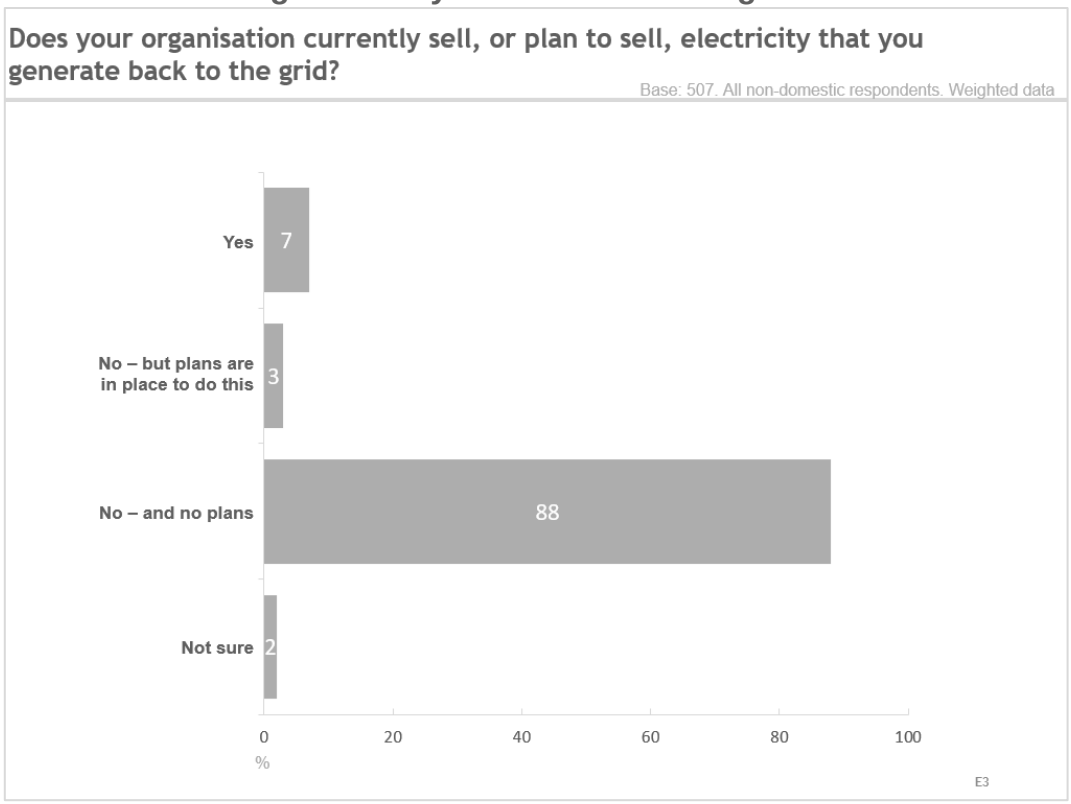
Table 11.2. Currently have or plan to have low carbon technologies by key business demographics (excluding diesel powered generator)

		Currently have	Plan to have	No plans in next 3 years	Not applicable	*Total*
Overall	All *Base: 507/507*	16%	19%	48%	17%	*100%*
Sector	Agriculture *Base: 100/146*	32%	18%	37%	13%	*100%*
	Manuf./Const./Motor trade *Base: 102/93*	13%	26%	45%	16%	*100%*
	Wholesale/Retail/Hospitality *Base: 101/82*	6%	11%	69%	14%	*100%*
	Transport/ services *Base: 104/113*	11%	20%	55%	14%	*100%*
	Public admin/ health/ education *Base: 100/74*	7%	18%	42%	33%	*100%*
Size	1-10 *Base: 281/446*	15%	19%	49%	17%	*100%*
	11-49 *Base: 150/51*	17%	22%	46%	15%	*100%*
	50+ *Base: 76/10*	38%	12%	32%	18%	*100%*
Location	Urban *Base: 278/250*	8%	22%	49%	22%	*100%*
	Rural *Base: 202/245*	24%	15%	50%	11%	*100%*

Generating electricity to sell back to the grid

The majority (88%) did not generate and had no plans to sell self-generated electricity back to the grid; 7% currently do so while 3% have plans in place to do so in the future. Those in agriculture (17%), rural businesses (13%) and organisations with 50 plus employees (17%) were most likely to do so.

Figure 11.4. Generating electricity to sell back to the grid

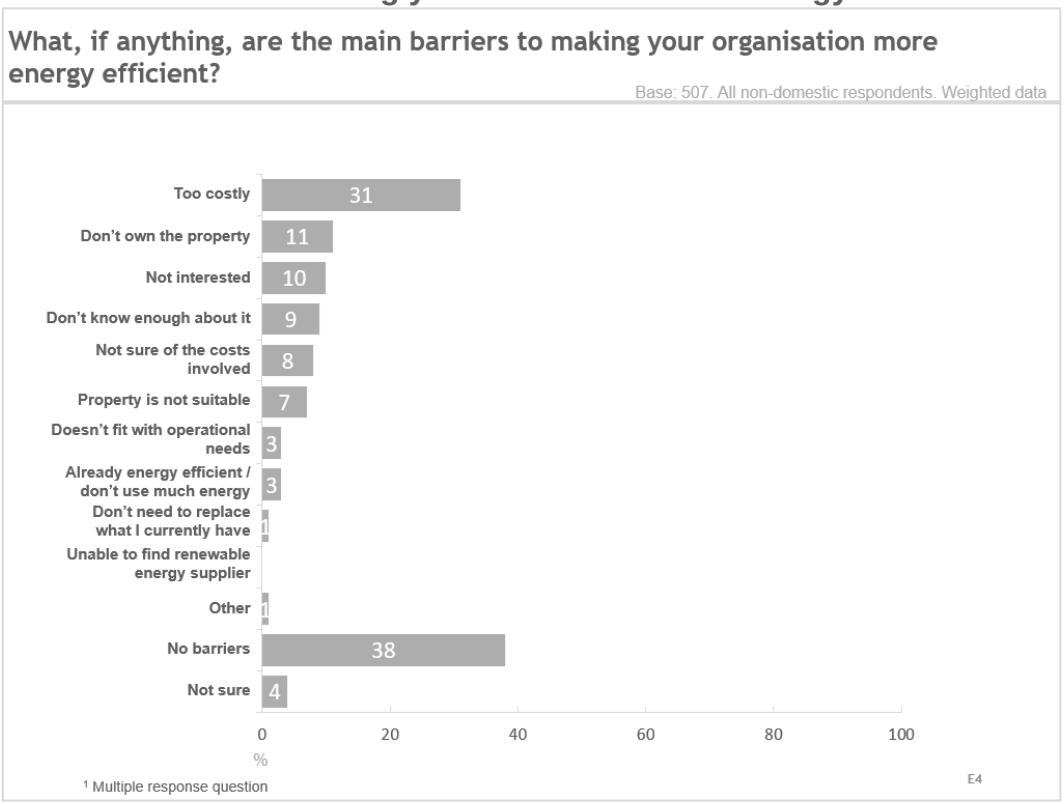


Barriers to energy efficiency in the organisation

Respondents were asked to identify the main barriers to making their organisation more energy efficient. For almost two fifths of businesses there were no barriers (38%). By far the largest proportion of respondents (32%) suggested that cost was the main barrier, this was followed by not owning the property (11%).

Those in manufacturing, construction and motor trades and the wholesale, retail and hospitality sectors were more likely to state a lack of interest as a main barrier (16% respectively). Those in wholesale, retail and hospitality (14%) and public administration, health and education (16%) more commonly stated ‘not sure of the costs involved’ as an issue, while manufacturing, construction and motor trades were the most likely to describe energy efficiency measures as too costly.

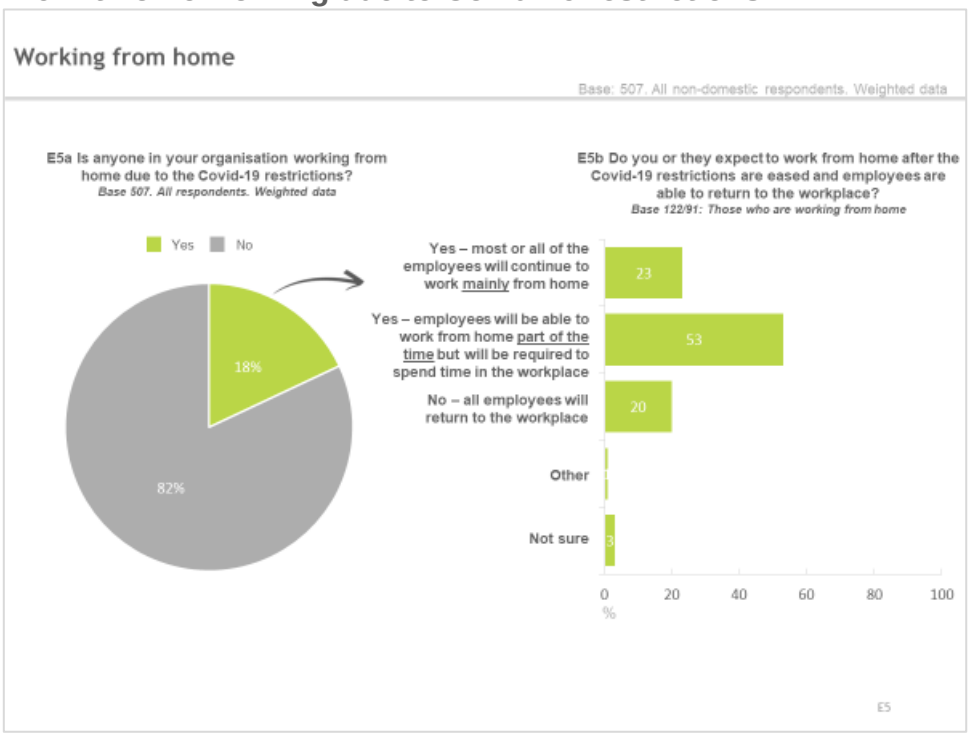
Figure 11.5. Barriers to making your household more energy efficient



At home working due to Covid-19 restrictions

Around one fifth (18%) of organisations reported to have someone in their organisation working from home due to the Covid-19 restrictions, while 82% did not. Those in transport and business services (30%) and public administration, health and education (40%) were most likely to have staff working from home. Just 16% of small businesses (1 to 10 employees) reported to have staff working from home. But this rose to 39% of those with 50 or more employees.

Figure 11.6. At home working due to Covid-19 restrictions

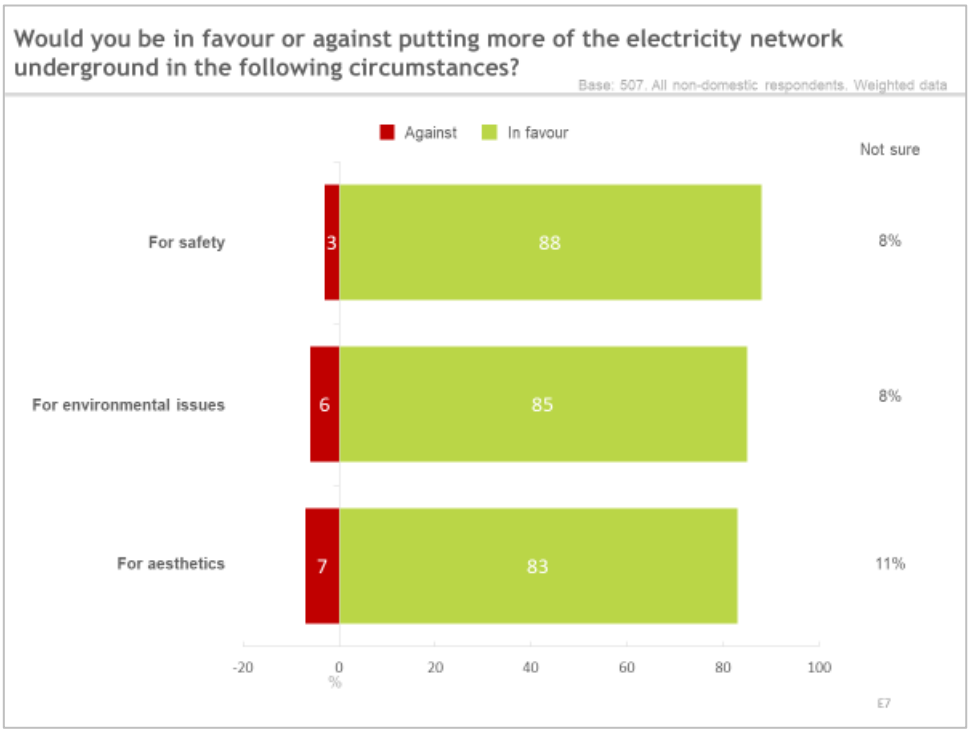


Of those non-domestic customers who had employees based at home due to Covid-19 restrictions, just under a quarter (23%) confirmed that most or all employees would continue to mainly work from home following easing of restrictions and just over half (53%) will allow employees to work from home part of the time, but they will be required to spend some time in the workplace. For a fifth (20%) all employees will return to the workplace.

Undergrounding of overhead powerlines

Respondents were informed that one third of the electricity network in Northern Ireland is currently underground and that underground lines are less likely to be affected by issues such as bad weather, but it is more expensive to put power lines underground. Non-domestic customers were then asked if they would be in favour of undergrounding in a number of circumstances.

Figure 11.7. In favour or against undergrounding of the electricity network



The majority were in favour of undergrounding for safety purposes (88%). Most were also in favour of undergrounding for environmental reasons (85%) and for aesthetics (83%), but the percentage in favour decreased for the latter two scenarios. Those in public administration, health and education were the sector most likely to be in favour of undergrounding for all three reasons (95%, 93% and 86% respectively); while those in manufacturing, construction and motor trades were most likely to be against in all circumstances (10%, 13% and 15% respectively).

While a similar proportion of those who had experienced a planned or unplanned outage or no outages were opposed to undergrounding for safety reasons, those who had had a planned outage in the last 12 months were more likely to disagree with undergrounding for

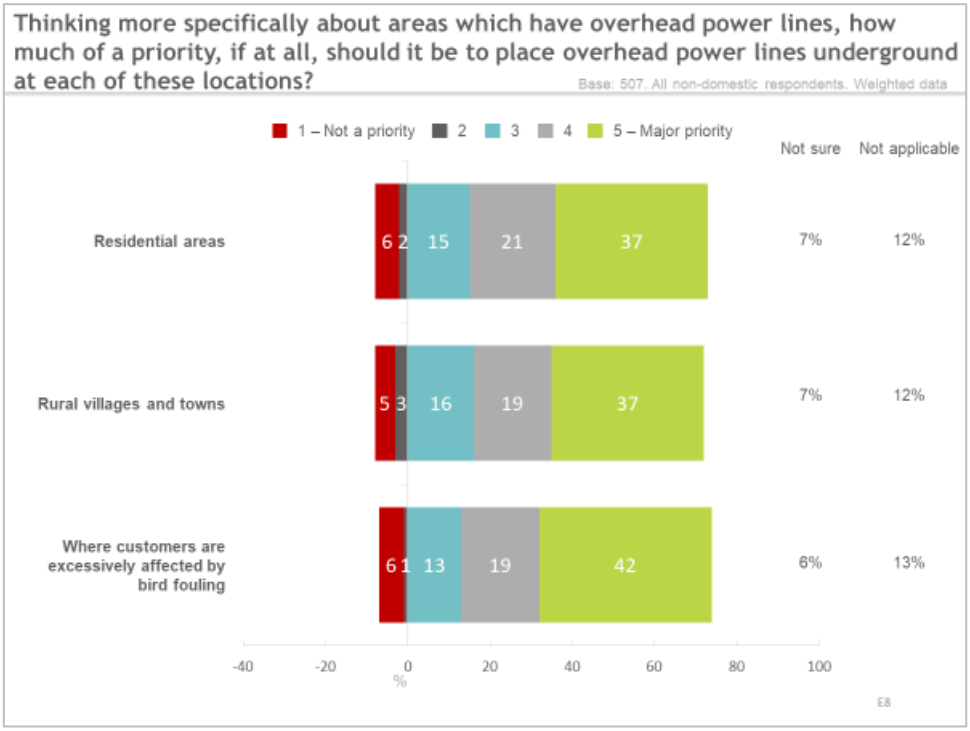
environmental (10% compared to 5% for each respectively) or aesthetic reasons (10% compared to 5% and 4% respectively).

Table 11.3. In favour of undergrounding of powerlines in different circumstances by incidence and experience of outages

		Planned outages		Unplanned outages				Overview		
	All	One outage	>one outage	One outage	>one outage	<3 hours	>3 hours	Had planned outage	Had unplanned outage	No outages
Base (unweighted/weighted)	*507/507*	*97/92*	*67/70*	*84/89*	*79/82*	*130/137*	*33/34*	*164/162*	*163/171*	*255/243*
For safety	88%	86%	89%	87%	86%	87%	86%	88%	87%	90%
For environmental issues	85%	77%	86%	82%	86%	83%	90%	81%	84%	89%
For aesthetics	83%	72%	87%	79%	81%	78%	90%	78%	80%	88%

Respondents were then asked about the level of priority that should be attached to undergrounding of powerlines in three different locations. The largest proportion of respondents saw undergrounding as a high priority (4 or 5 on the scale) in areas affected by bird fouling (61%), falling to 59% in residential areas and further to 56% in rural villages and towns.

Figure 11.8. Prioritisation of areas for undergrounding of overhead powerlines



Prioritisations

A primary objective of the survey was to gain a better understanding of non-domestic customers' priorities for investment in the electricity network. Respondents were informed that NIE Networks is planning ahead for the next six to seven years and wants to find out what customers think their investment priorities should be, and while the cost of these investments has not yet been determined, some of the additional costs could be passed on to customers.

This section is structured as follows:

- Support for investment in service attributes;
- Priority areas for improvement; and
- Willingness to pay for extra investment.

Support for investment in service attributes

Non-domestic customers were presented with four service attributes for possible additional investment and were asked to describe how much they would support investment in each of these areas, using a scale of 1 to 5 where 1 is no support for investment and 5 is a lot of support.

NIE Networks was interested in obtaining a non-domestic customer viewpoint on four main areas:

- Reducing power cuts and maintaining supply;
- Putting overhead lines underground;
- Supporting rising levels of renewable technology; and
- Improving the customer service experience.

Respondents were most likely to be in favour of investment to reduce power cuts and maintain supply. Two thirds (66%) lent their full support to this attribute (5 on the scale); with a further 16% rating their support at 4 out of 5. Therefore, 82% were in support of investment in this area.

Over half of non-domestic respondents said they would also lend full support to investment in the rising levels of renewable technology (55%) and improving the customer service experience (57%). A further 26% and 24% respectively were in favour of support at a 4 on the scale, meaning that about four fifths (80%) supported investment in these attributes.

The percentage in full support of investment in putting overhead powerlines underground fell below half to 41%. With 69% total in support at a 4 or 5 on the scale.

Figure 12.1. Support for investment in service attributes

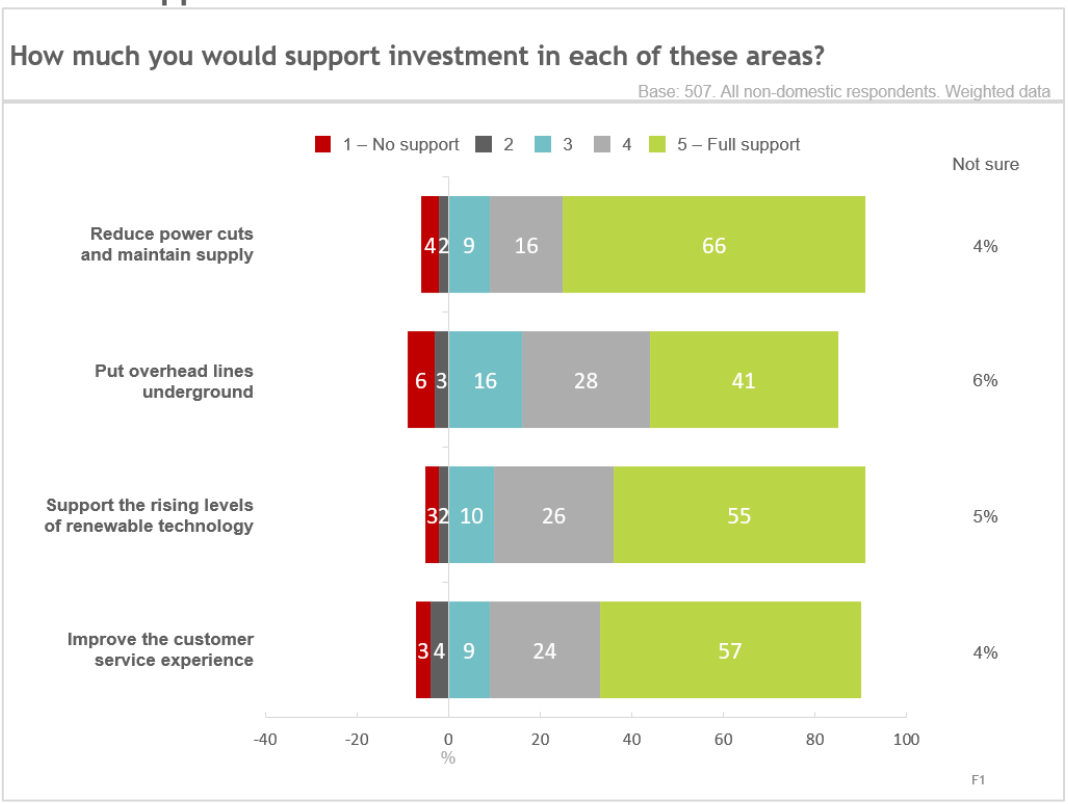


Table 12.1. Support for investment in service attributes by key business demographics (4 or 5 on scale)

		Reduce power cuts and maintain supply	Put overhead lines underground	Support the rising levels of renewable technology	Improve the customer service experience
Overall	All *Base: 507/507*	82%	69%	81%	80%
Sector	Agriculture *Base: 100/146*	75%	61%	81%	79%
	Manuf./Const./Motor trade *Base: 102/93*	76%	63%	75%	76%
	Wholesale/Retail/Hospitality *Base: 101/82*	92%	73%	85%	89%
	Transport/ services *Base: 104/113*	81%	73%	76%	72%
	Public admin/ health/ education *Base: 100/74*	90%	80%	90%	91%
Size	1-10 *Base: 281/446*	81%	69%	81%	81%
	11-49 *Base: 150/51*	82%	67%	79%	75%
	50+ *Base: 76/10*	84%	67%	87%	74%
Location	Urban *Base: 278/250*	83%	70%	82%	81%
	Rural *Base: 202/245*	79%	866%	79%	79%

Those in wholesale, retail and hospitality (92%) and public administration, health and education (90%) were more likely to lend support to reducing power cuts and maintaining supply and improving the customer service experience (89% and 91% respectively). Those in public administration, health and education were also more likely to be in favour of undergrounding of overhead lines (80%) and supporting the rising levels of renewable technology (90%) than those in other sectors.

A greater proportion of large companies were in support of investment in the third attribute (renewable technology, 87%) while small companies prioritised customer service (81%).

Table 12.2. Support for investment in service attributes by experience and incidence of outages (4 or 5 on scale)

		Planned outages		Unplanned outages				Overview		
	All	One outage	>one outage	One outage	>one outage	<3 hours	>3 hours	Had planned outage	Had unplanned outage	No outages
Base (unweighted/weighted)	*507/507*	*97/92*	*67/70*	*84/89*	*79/82*	*130/137*	*33/34*	*164/162*	*163/171*	*255/243*
Reduce power cuts and maintain supply	82%	80%	90%	83%	79%	80%	85%	84%	81%	82%
Put overhead lines underground	69%	60%	68%	70%	65%	66%	75%	64%	68%	72%
Support the rising levels of renewable technology	81%	80%	83%	82%	78%	78%	89%	81%	80%	83%
Improve the customer service experience	80%	75%	77%	80%	78%	79%	78%	76%	79%	84%

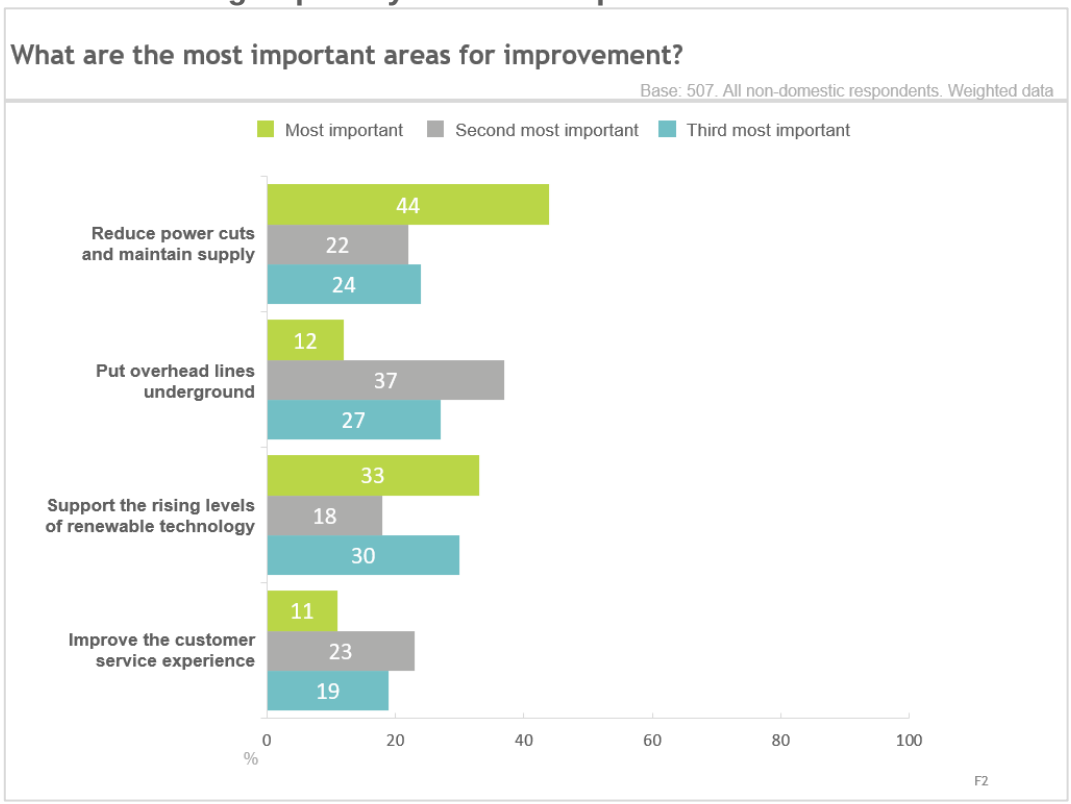
Priority areas for improvement

To verify the prioritisation of investment, respondents were then asked to rank their top three areas for improvement. Respondents confirmed reducing power cuts and maintaining supply as their top priority with 44% selecting it as the most important area for improvement and 90% naming it as one of their three highest priority areas.

‘Supporting the rising levels of renewable technology ranked as second highest priority. One third (33%) of respondents named it as their top area for investment and 81% placed it within their top three.

Next came putting overhead powerlines underground (12% top priority and 76% within highest three), followed by ‘improving the customer service experience (11% top priority and 53% top three).

Figure 12.2. Ranking of priority areas for improvement



Those in wholesale, retail and motor trades were the most likely to place reducing power cuts and maintaining supply as their top priority for improvement (68%), followed by agriculture businesses (46%). Transport and business services and the public administration, health and education sector were instead more likely to position supporting the rising levels of renewable technology as the most important area for improvement (46% for each).

Willingness to pay for extra investment

Non-domestic customers were informed that to upgrade the electricity network may require investment. Respondents were asked if they would be willing to pay X percent extra on their current billing extra per year to contribute to this spending.

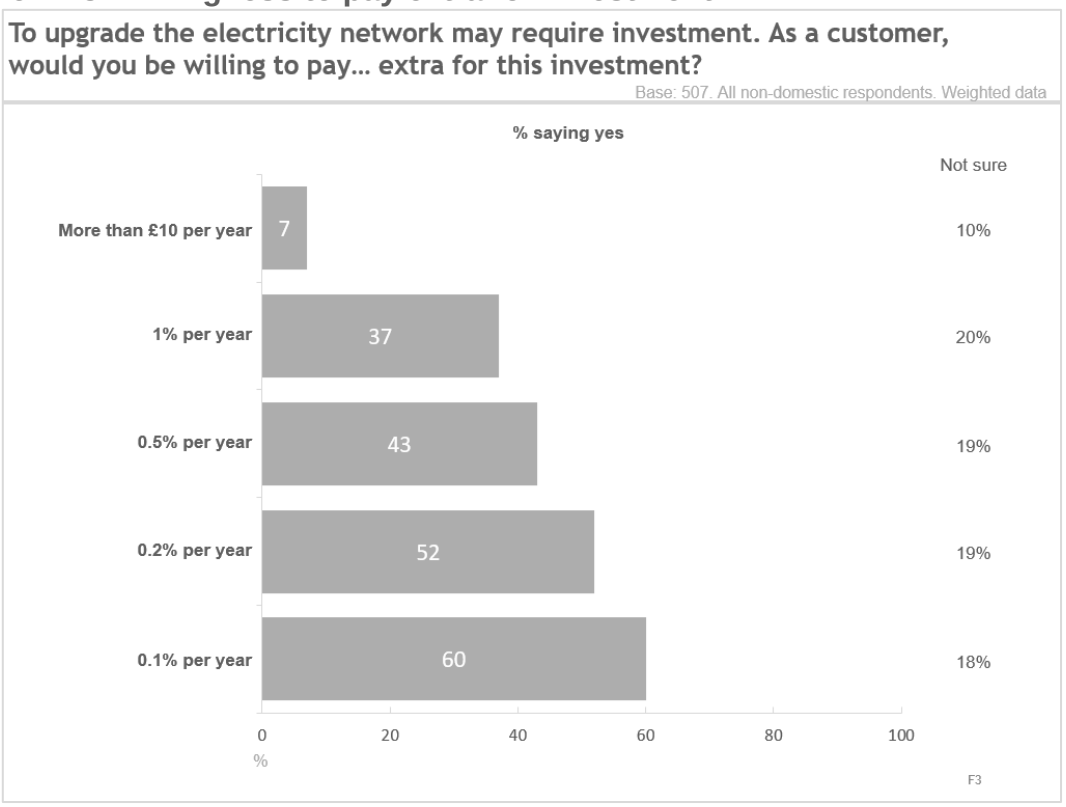
Half of respondents were asked in ascending percentages and half in descending percentages.

Three in five (60%) said that they are willing to pay something extra towards investment, meaning 40% are not willing to pay extra. Those unwilling to pay extra are more likely to be:

- 52% of public administration, health and education organisations and 51% of wholesale, retail and hospitality businesses are unwilling to pay extra, compared to 23% operating in the agriculture sector; and
- 51% of business with 11 to 49 employees are unwilling to pay, compared to 41% of those with 50 plus and 39% with 10 or fewer employees.

Three fifths (60%) of respondents said they were willing to pay 0.1% extra, 52% were willing to pay 0.2% extra, 43% were willing to pay 0.5% extra and 37% were willing to pay an additional 1%. Only 7% would be willing to pay above 1% extra.

Figure 12.3. Willingness to pay extra for investment



There were already clear disparities between sectors and business sizes at the 0.1% increase. Those in agriculture (77%) were most likely to agree to paying this amount, while those in the public administration, health and education sector were the least likely (48%). Midsized businesses were less likely to agree to this percentage (49%) than small (61%) or large organisations (59%). Those in rural locations also showed greater willingness to pay at this percentage (63%) than their urban counterparts (57%).

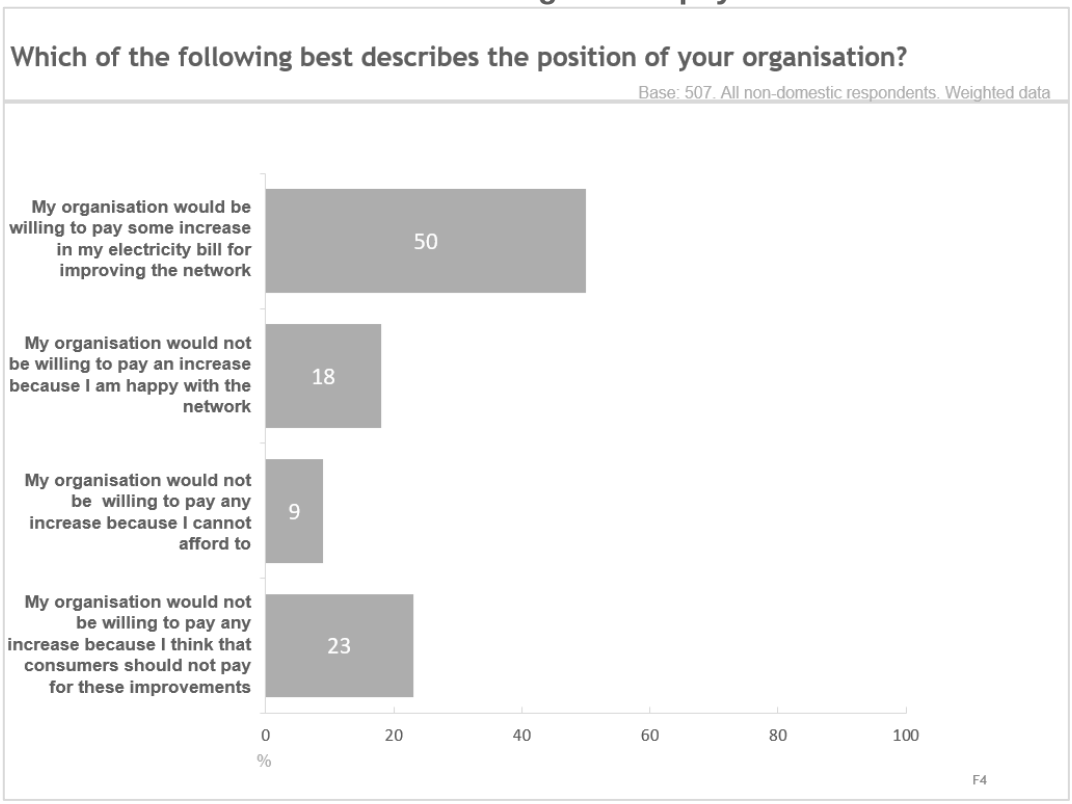
Those is the manufacturing, construction and motor trades (11%) and large organisations (12%) were more likely to pay above 1% extra.

Table 12.3. Willingness to pay extra for investment by key business demographics

		Not willing to pay extra*	0.1%	0.2%	0.5%	1%	More than 1%
Overall	All *Base: 507/507*	40%	60%	52%	43%	37%	7%
Sector	Agriculture *Base: 100/146*	23%	77%	66%	54%	46%	6%
	Manuf./Const./Motor trade *Base: 102/93*	46%	54%	48%	41%	36%	11%
	Wholesale/Retail/Hospitality *Base: 101/82*	51%	49%	42%	30%	29%	10%
	Transport/ services *Base: 104/113*	40%	60%	55%	45%	36%	5%
	Public admin/ health/ education *Base: 100/74*	52%	48%	40%	32%	28%	7%
Size	1-10 *Base: 281/446*	39%	61%	53%	44%	38%	7%
	11-49 *Base: 150/51*	51%	49%	42%	33%	27%	5%
	50+ *Base: 76/10*	41%	59%	53%	42%	36%	12%
Location	Urban *Base: 278/250*	43%	57%	50%	40%	34%	5%
	Rural *Base: 202/245*	37%	63%	55%	46%	39%	9%

*includes those who are unsure whether they would pay extra

Figure 12.4. Position in relation to willingness to pay



Non-domestic customers were also asked to describe their position regarding willingness to pay. Half (50%) confirmed that their organisation would be willing to pay some increase to improve the network, a fifth (18%) said their organisation would be unwilling to pay because it is already happy with the network, 9% of organisations could not afford to pay and a further 23% suggested that consumers should not have to pay for improvements on the network.

APPENDIX

Appendix A: Demographics of domestic sample

As part of the quantitative survey to determine domestic customer views of NIE Networks, respondents were asked a number of questions about themselves in order to verify that the sample was indeed representative of the population as a whole. As such, the tables below summarise the demographic characteristics of the survey respondents.

Table A.1: Gender

Gender			
Gender	Overall	Male	Female
Count	**1211**	596	615
Percentage	**100%**	49%	51%

Table A.2: Age

Age										
Age	Overall	18 to 24	25 to 34	35 to 44	45 to 54	55 to 59	60 to 64	65 to 74	75 plus	Refused
Count	**1211**	10	192	207	158	90	217	184	116	37
Percentage	**100%**	1%	16%	17%	13%	7%	18%	15%	10%	3%

Table A.3: Socio-economic group

SEG						
SEG	Overall	AB	C1	C2	DE	Refused
Count	**1211**	250	308	214	341	98
Percentage	**100%**	21%	25%	18%	28%	8%

Table A.4: Household size

Number of people in household										
Including yourself, how many people live in your household?	Overall	1	2	3	4	5	6	7	8 or more	Refused
Count	**1211**	220	449	252	164	65	24	8	4	25
Percentage	**100%**	18%	37%	21%	14%	5%	2%	1%	0%	2%

Table A.5: Electricity dependency

Electricity dependency			
Is any member of your household dependent on electricity for their healthcare needs?	Overall	Yes	No
Count	**1211**	110	1101
Percentage	**100%**	9%	91%

Table A.6: Awareness of Medical Customer Care Register

Medical Customer Care Register			
Are you aware that NIE Networks has a Medical Customer Care Register for people who are dependent on electricity for healthcare needs?	Overall	Yes	No
Count	**1211**	288	923
Percentage	**100%**	24%	76%

Table A.7: Medical Customer Care Register

Medical Customer Care Register				
Is any member of your household on the Medical Customer Care Register held by NIE Networks?	Overall	Yes	No	Prefer not to say
Count	**1211**	41	1164	6
Percentage	**100%**	3%	96%	0%

Table A.8: Household composition

Household composition						
Is there anyone living in this household..?*	Overall	Aged over 70	Aged between 60-69	Aged between 6-16	Aged below 5	None of the above
Count	**1211**	242	355	245	146	352
Percentage	**100%**	20%	29%	20%	12%	29%

*Multiple choice question

Table A.9: Tenure

Tenure						
Do you..?	Overall	Rent your home from a private landlord	Rent your home from NIHE	Rent your home from a Housing Association	Own your home or buying through a mortgage	Prefer not to say
Count	**1211**	131	141	37	851	51
Percentage	**100%**	11%	12%	3%	70%	4%

Table A.10: Building type

Building type								
What type of building do you live in?	Overall	Bungalow	Terraced	Semi-detached	Detached	Apartment / flat	Other	Prefer not to say
Count	**1211**	261	223	341	280	49	11	46
Percentage	**100%**	22%	18%	28%	23%	4%	1%	4%

Appendix B: Demographics of non-domestic sample

As part of the quantitative survey to determine non-domestic customer views of NIE Networks, respondents were asked a number of questions about themselves in order to verify that the sample was indeed representative of the population as a whole. As such, the tables below summarise the demographic characteristics of the survey respondents.

Table B.1: Employees

Employees				
	Unweighted		Weighted	
Gender	Count	Percentage	Count	Percentage
None	2	0%	3	1%
Sole trader	48	9%	76	15%
1 to 2	77	15%	122	24%
3 to 10	154	30%	245	48%
11 to 20	90	18%	30	6%
21 to 49	60	12%	20	4%
50 to 100	48	9%	6	1%
101 to 249	16	3%	2	0%
250 to 499	5	1%	1	0%
500 to 999	3	1%	0	0%
1000+	4	1%	1	0%
Total	***507***	***100%***	***507***	***100%***

Table B.2: Sector

	Sector				
		Unweighted		Weighted	
	Gender	Count	Percentage	Count	Percentage
Agriculture	Agriculture	100	20%	146	29%
Manufacturing	Food and drink	6	1%	3	1%
	Textiles and clothing	4	1%	2	0%
	Electronics and software	1	0%	2	0%
	Chemicals and pharmaceuticals	3	1%	4	1%
	Other	28	6%	26	5%
	Construction	60	12%	57	11%
Services	Transport/ communications	14	3%	16	3%
	Finance, banking, insurance	25	5%	29	6%
	Computer related activity	6	1%	4	1%
	Business services	32	6%	43	9%
	Hotels, restaurants and catering	75	15%	54	11%
	Retail	21	4%	25	5%
	Wholesale, distribution and logistics	5	1%	3	1%
	Other	27	5%	21	4%
	Public administration	14	3%	6	1%
	Health, education	27	5%	12	2%
	Community, voluntary, church, charity	50	10%	44	9%
	Sports club	9	2%	12	2%
	Total	***507***	***100%***	***507***	***100%***

Table B.3: Sites in Northern Ireland

Sites in Northern Ireland				
	Unweighted		Weighted	
Gender	Count	Percentage	Count	Percentage
One	393	78%	437	86%
Two	41	8%	30	6%
Three	21	4%	18	4%
Four	12	2%	6	1%
Five	8	2%	3	1%
Six to ten	17	3%	7	1%
More than ten	15	3%	5	1%
Total	***507***	***100%***	***507***	***100%***

Table B.4: Council

Council				
	Unweighted		Weighted	
Gender	Count	Percentage	Count	Percentage
Antrim & Newtwonabbey	71	14%	62	12%
Armagh, Bandridge & Craigavon	51	10%	47	9%
Belfast	101	20%	70	14%
Causeway, Coat & Glens	54	11%	53	11%
Derry & Strabane	58	11%	44	9%
Fermangh & Omagh	44	9%	40	8%
Lisburn & Castlereagh	35	7%	32	6%
Mid & East Antrim	40	8%	29	6%
Mid Ulster	53	10%	40	8%
Newry, Mourne & Down	83	16%	95	19%
North Down & Ards	39	8%	35	7%
Not sure	6	1%	4	1%

*Multiple choice question

Table B.5: Location

Location				
	Unweighted		Weighted	
Gender	Count	Percentage	Count	Percentage
Urban	278	55%	250	49%
Rural	202	40%	245	48%
Both	27	5%	12	2%
Total	***507***	***100%***	***507***	***100%***