Visual Impact Project Acceptability

Final Report

April 2018

Accent

nationalgrid

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EXECUTIVE SUMMARY

This report presents results from qualitative and quantitative research into British bill-payers' acceptability towards electricity consumers paying for the undergrounding of power cables at four designated landscapes – the VIP project.

The research comprised a multi-strand programme of research with bill-payers, including ten discussion groups, nine depth interviews with vulnerable bill-payers and a quantitative survey of 2,002 bill-payers aged 16+.

There is wide use of the British countryside, National Parks and AONBs

National Parks and AONBs are widely used. One in four (26%) visit either a National Park or AONB once a month or more frequently. A further two in five (43%) visit at least once a year. Bill-payers are attracted to these areas of countryside for their inherent qualities or attributes (such as fresh air, tranquillity, the countryside's beauty) or the benefit it brings them as a user of them (e.g. 'getting away from it all', finding it calming etc).

Electricity bills are generally seen as affordable but expensive, and there is an underlying level of mistrust towards the energy sector

Most (75%) find their household electricity bill to be affordable. However, while generally considered affordable, most find the bill very expensive and continually increasing. Furthermore, the energy industry is viewed with a certain degree of cynicism and distrust. This stems from the sense that the high bills that consumers face are, to a large degree, seen to be a result of private energy companies' excessive profits.

Many do not have strong feelings towards electricity infrastructure in the countryside, but most concede it is ugly and an eyesore in these environments

Electricity infrastructure is widely visible; just under half (49%) say they can see transmission lines or pylons from their home or neighbourhood. However, bill-payers are fairly evenly split on whether they notice this kind of infrastructure in the countryside or not (36% vs. 38%).

A sizeable proportion of bill-payers are somewhat apathetic towards electricity infrastructure in the countryside; over one third (34%) have no strong feelings on this infrastructure and 42% do not express a view either way. Bill-payers tend to view electricity infrastructure in the countryside as a 'necessary evil', with just over half (58%) considering it to be necessary and unavoidable.

However, many do find it to be out of place in the countryside; when asked if they consider electricity infrastructure in the countryside to be an eyesore, half (51%) agree. The group discussions revealed that while bill-payers' initial reactions tended to be that they do not give a great deal of thought to electricity infrastructure in the countryside, when prompted to consider its presence, most agreed that it is ugly when set against these landscapes. Proximity to the countryside is also correlated with this negative view of electricity infrastructure, with those living in AONBs or National Parks or rural areas, more likely to hold this view.

Most would prefer it if we could avoid the use of overhead lines and pylons in AONBs and National Parks, to avoid it impacting on the natural beauty of these landscapes.

A strong majority find it acceptable to pay for the VIP project

Undergrounding of power cables is widely seen as an improvement on the use of overhead power lines and pylons. It is seen by many as a modernising step forward and a moral action to improve the appearance of our most beautiful landscapes for future generations.

When presented with details of the VIP project, two thirds of bill-payers (66%) find it acceptable for its cost to be passed on to consumers, while one in seven (15%) find it unacceptable. Acceptability of the individual schemes is broadly similar, ranging from 65% for the Snowdonia scheme to 73% for the Peak District scheme.

Acceptability is highest among users of protected and rural areas and declines with income and age

Perceived acceptability of the VIP project is higher among rural bill-payers, those living within an hour's drive of an AONB or National Park, and users of these designated landscapes. Acceptability falls among lower income earners, and those who find their electricity bill less affordable. However, other than the lowest income bracket (earning less than £5,200 a year) a majority of all other income levels find the VIP project acceptable. Even amongst those on the lowest income level and those who find it hardest paying for their electricity bills, a larger proportion support the VIP project than object to it.

Younger bill-payers are less likely to say the VIP project is acceptable, but this is largely a result of apathy; they are no more likely than older bill-payers to object but are far more likely to give a neutral view.

Reasons for support or opposition

The VIP project is primarily supported for the improvement it would have on the landscapes of AONBs and National Parks, at a perceived low cost per household. The removal of overhead power lines from these locations is seen as providing benefits for the user's enjoyment of these areas, as well as benefits to tourism and local wildlife.

The key concerns that bill-payers have over the process of undergrounding is the potential environmental impact (for instance on wildlife habitats) and the ability to maintain and repair power lines once they are underground. However, this latter issue is one which most bill-payers expect technology to find a solution for.

For the small minority that oppose the cost of the VIP project being passed to bill-payers, this is predominantly a rejection of the notion that consumers should foot the bill. This is generally not a question of affordability – the majority say that the cost per household is easily affordable – but one of principle. Negativity toward the project is often driven, or accompanied by, a wider cynicism toward the energy industry. For those critical of the idea, they question why consumers should pay when the industry is perceived to be so profitable.

Other key reasons for rejection of the project are that the disruption (environmentally and to the local area) might outweigh the aesthetic benefits. Other areas that bill-payers seek greater

clarity on are other potential impacts on the geology of the area, and how tested this technology is.

Conclusions

The VIP project is viewed as a positive step forward and one which most bill-payers are happy to pay for. One area that many bill-payers say is important in underpinning acceptability (and would increase acceptability for some who are initially cynical) is transparency in the passing on of the cost. Bill-payers want assurances the final cost does not escalate, remaining true to the stated amount, and does not become subsumed within indefinite 'general' energy bill increases.

Considering the negative light in which many view the energy industry, and the high energy bills that many feel they must endure, acceptability of the VIP project is high. Ultimately, when weighing up the perceived benefits against costs of the project, a significant majority believe it is acceptable for bill-payers to pay for it.

1 INTRODUCTION

1.1 Background

National Grid owns and maintains the high voltage electricity transmission system in England and Wales.

The company is regulated by Ofgem, which carries out price control reviews to set National Grid's permitted revenues. RIIO-T1 - the current price control - was the first transmission price control review to reflect the new regulatory framework resulting from Ofgem's RPI-X@20 review. The RIIO model (Revenue = Incentives + Innovation + Outputs) builds on the previous RPI-X regime, placing a greater focus on incentives to drive the innovation that is necessary to deliver a sustainable energy network, combined with value for money for consumers, now and in the future.

The Visual Impact Provision (VIP) project

As part of the current transmission price control, RIIO-T1, Ofgem introduced a policy allowing the electricity transmission owners, including National Grid Electricity Transmission (NGET), to reduce the visual impact of existing electricity infrastructure in Britain's most protected landscapes, namely Areas of Natural Beauty (AONBs), National Parks and National Scenic Areas (NSAs).

Stakeholder consultation is an important component of the RIIO framework. NGET had already engaged extensively with stakeholders, including research in 2012 into consumers' willingness to pay (WTP) to mitigate the visual impact of existing transmission infrastructure in Britain's designated landscapes. This activity aims to conserve and enhance the natural beauty, wildlife and environmental heritage within these protected areas.

Following this research, in 2014 Ofgem supported NGET's plans, permitting NGET to develop engineering projects to mitigate the visual impact of overhead transmission lines in AONBs, National Parks and NSAs with an allocation of £500 million.

In 2015, NGET developed four undergrounding projects (known collectively as the Visual Impact Provision project), designed to minimise the visual impact of power lines in selected AONBs and National Parks. In 2015, National Grid's stakeholder Advisory Group recommended four schemes to be taken forward, including in Dorset, the New Forest, the Peak District and Snowdonia.[1] All four of these schemes involve the 'undergrounding' of existing electricity cables to allow the permanent removal of overhead cables and pylons.

Before NGET can begin this programme of investment on undergrounding, Ofgem have requested that research be undertaken to assess if bill payers in Great Britain find it acceptable to pay for this work via increases in their electricity bills.

[1] https://www.nationalgrid.com/uk/investment-and-innovation/environment-and-community/visual-impact-provision-vip

To this end, NGET commissioned Accent to conduct acceptability testing research among household electricity bill-payers to determine their acceptance of paying towards mitigating the visual impact of existing power lines and pylons in the four specific designated landscapes in England and Wales.

1.2 Objectives

The key objective of the research is to establish whether household electricity bill-payers find it acceptable to pay for mitigating the visual impact of existing transmission infrastructure in National Parks and Areas of Outstanding Natural Beauty (AONBs). Specifically, it will assess acceptability of the four undergrounding schemes as part of the VIP project.

The research also needs to provide an understanding of why bill-payers hold these views.

2 METHODOLOGY

2.1 Introduction

This section of the report sets out the methodology used for the research, the rationale for the approach and how the research builds on previous research undertaken on the subject.

2.2 Rationale for acceptability testing

This research used an acceptability testing approach to understand bill-payers' reactions to the concept of paying for mitigating the visual impact of existing transmission infrastructure via the four VIP project schemes.

Acceptability testing is an appropriate approach to undertake this exercise for the following reasons:

1. Acceptability testing can be seen as a natural second stage, once Cost Benefit Analysis has been completed, where the cost and nature of the scheme under question is more established.
2. Acceptability testing focuses on the proportion of research participants willing to pay above the true cost, rather than on how much above the true cost they are willing to pay. This is a different measure of support than benefit-cost ratio but equally, if not more, valid as it doesn't rely on assumptions to fit a model. WTP is derived from a choice experiment, which requires the analyst to fit an econometric model to the choice data. The WTP measure is then derived from the model. Since any econometric modelling involves making assumptions regarding the structure of the data generating process, e.g. functional form and the shape of the error distribution, the WTP measure will itself be sensitive to those assumptions to a certain extent. By contrast, responses to a direct question regarding the acceptability of a proposal (as used in this research) are direct measures in themselves, not influenced by analyst assumptions.
3. Acceptability research can be completed quicker and at lower cost than a targeted Stated Preference WTP type study and is more valid than benefits transfer because it is locally targeted.

Acceptability testing is also a tried and tested approach in other utility sectors, for example the price review process in the water sector. This type of research has widely been, and is expected to continue to be, an important aspect of the business planning process in the England and Wales water sector, in providing a measure of customer support for investment decisions.

2.3 Moving beyond previous research

This research moves beyond previous research to provide a robust measure of electricity bill-payers' views towards paying for the four VIP project schemes. It does so in the following ways:

- It measures acceptability of NGET visual enhancement schemes holistically: the research brought together all of NGET's current significant visual mitigation spending into one piece

of research, including the VIP projects as well as the Hinkley-Seabank project[2]. This means that research participants responded to the project in the context of other visual enhancement projects and could make an assessment based on the collective cost of both projects.

- Projects focused on the specific context of the VIP project. Information for each project was presented in both the qualitative and quantitative phases of research. This was to allow participants to respond based on the impact they felt it would have on the local landscape.

2.4 Qualitative research approach

The research took a mixed-method approach, comprising qualitative and quantitative strands. The research commenced with a qualitative phase, with the aim being to test the research materials, including discussion guide and stimulus materials on project information, the clarity of language used and to ensure that initial findings could be incorporated into the survey design.

The qualitative research included discussion groups and depth interviews, with people responsible, either solely or jointly, for paying their household's electricity bill. The discussion groups and depth interviews were held between 18 and 29 January 2018.

Group discussions

The qualitative phase comprised a programme of ten discussion groups, each lasting one hour 45 minutes. All participants were offered £50 for their involvement.

The groups were designed to allow time to ensure participants had a sufficient understanding of the electricity supply chain and the role of National Grid Transmission within that supply chain, as well as an understanding of other relevant issues such as the purpose of designated landscapes and the proportion that transmission makes of the total average electricity bill.

Discussion group locations were selected to provide coverage of urban and rural locations in England, Wales and Scotland, including areas closer to and further away from AONBs and National Parks.

Across these locations, the group structure included a range of age groups and socio-economic grades (SEGs[3]). All groups were mixed gender, and each included a variety of levels of use of the countryside including a minimum of two respondents who were 'users' of countryside. Use of the countryside was determined through the following question, with at least two attendees per group giving code 2 or code 3 as a response:

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[2] The Hinkley-Seabank project is the use of T-pylons as part of the connection between Hinkley Point C power station in Somerset and Seabank power station in Bristol.

[3] Definitions of SEGs:
A = Higher managerial/ professional/ administrative;
B = Intermediate managerial/ professional/ administrative;
C1 = Supervisory or clerical/ junior managerial/ professional/ administrative, student;
C2 = Skilled manual worker;
D = Semi or unskilled manual work;
E = Casual worker, not in permanent employment, Looking after the home, Retired and living on state pension, Unemployed or not working due to long-term sickness, Full-time carer of other household member.

Q. How often have you visited or used the countryside for leisure purposes?

1. Never
2. Less than four times in the past twelve months
3. Four times or more in the past twelve months

The group structure was as follows:

Table 1. Discussion group structure

Group	Region	Place	Rural / urban	SEG
1 2	West	Swindon	Urban Urban	C2DE ABC1
3 4	Wales	Swansea	Rural Suburban	C2DE ABC1
5 6	Scotland	Edinburgh	Urban Suburban	ABC1 C2DE
7 8	North	York	Suburban Suburban	C2DE ABC1
9 10	East	Peterborough	Rural Rural	C2DE ABC1

Depth interviews

The discussion groups were supplemented with nine depth interviews with vulnerable or hard to reach bill-payers. Each interview took up to one hour and followed broadly the same discussion guide as used in the discussion groups. All participants were incentivised £40 for their involvement.

The participants were recruited to meet one of the following criteria:

- Be on a low income (social grade E)
- Be 'power reliant' (have a medical condition or disability that means they rely on energy)
- Have English as a second language

The nine depth interviews were held across the discussion group locations as follows:

Table 2. Interview profiles

Group	Region	Place	Rural/Urban	Gender	Vulnerability
1	West	Swindon	Urban	Female	Power Reliant
2	Wales	Swansea	Rural	Female	Power Reliant
3			Suburban	Male	Low Income
4	Scotland	Edinburgh	Urban	Female	Low Income
5			Suburban	Male	BME
6	North	York	Suburban	Female	Low Income
7			Suburban	Female	Low Income
8	East	Peterborough	Rural	Female	Low Income & Power Reliant
9			Rural	Male	Low Income & Power Reliant

Presentation of VIP project information

The discussion guide and show material were designed by Accent and technical details of the VIP project were approved by National Grid in advance of the fieldwork. They are attached as Appendices A and C respectively.

The information about the VIP schemes was presented via a series of showcards which summarised:

- the purpose of undergrounding
- the construction process before and after images
- images of associated structures (tunnel-head houses and sealing end compounds)
- details of the specific scheme including the length and map of the route, the number of pylons removed, the dates of the construction work and when they would become operational.

In the group discussions, participants were presented with the estimated cost of £0.73p per year for the next 25 years after they had discussed the general appeal of the VIP project. In between the group discussions and the delivery of the online survey, National Grid was able to finalise the estimated cost for each household. Consequently, survey participants were presented with the estimated cost of £0.60p per year for the next 25 years.[4]

During the discussion groups, the order in which the projects were presented was alternated. Half of the groups began with Hinkley-Seabank and half of the groups began with the VIP project. This was to explore whether there was any ordering effect that might influence responses to the project shown second.

All groups were audio recorded to aid analysis.

[4] The estimated cost of the VIP projects has been derived using revenue calculations as per the RIIO-T1 price control, with the exception that the depreciation life has been reduced to 25 years to allow for a worst-case value. The value is in 2017/18 price base and includes network consumer bill impact only.

2.5 Quantitative research approach

The quantitative research comprised a survey of electricity bill-payers aged 16+ across Great Britain. Participants were screened to be responsible, solely or jointly, for paying their household's electricity bill. The screening questionnaire also checked participants' status regarding age, gender, SEG and their location (region and urban or rural status).

Participants took part in the survey either via an online panel survey, or in-home Computer-Assisted Personal Interview (CAPI).

The majority of the sample (n = 2,001) participated via the online survey. This was supplemented with an in-home survey (n = 101) to ensure coverage within the sample of vulnerable or hard to reach bill-payers who might be less likely to participate in an online survey. The in-home survey therefore targeted individuals who were older, lower SEG, or without access to the internet at home.

Quotas were set on region, urban/rural status, age, gender and SEG to ensure that the sample was representative of the population on these measures. The quotas were set on the basis of:

- ONS 2016 Mid-year population estimates[5] (age, gender and region)
- The National Readership Survey for January- December 2016 (SEG) [6]
- Defra's urban / rural classification

Data was weighted – by the characteristics in Table 3 - to correct for any over or under-representation of particular groups.

Table 3. Weighting of the data

	Achieved	
	Unweighted	Weighted
North East	4.0%	4.1%
North West	10.3%	11.4%
Yorkshire and The Humber	6.0%	8.4%
East Midlands	5.9%	7.4%
West Midlands	8.7%	9.3%
East	5.6%	9.4%
London	12.6%	14.4%
South East	11.2%	13.9%
South West	6.6%	8.4%
Wales	13.5%	4.8%
Scotland	15.7%	8.5%
Urban	74.5%	79.9%
Town and fringe	12.3%	9.6%
Village	9.5%	7.4%
Hamlet	3.8%	3.1%
Male	46.8%	49.3%
Female	53.2%	50.6%
16-24	5.2%	14.5%

[5] https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesanalysistool

[6] http://www.nrs.co.uk/nrs-print/lifestyle-and-classification-data/social-grade/

	Achieved	
	Unweighted	Weighted
25 to 34	13.8%	15.9%
35 to 54	38.8%	32.9%
55 to 64	20.0%	17.5%
65 to 74	17.7%	15.2%
75+	4.5%	4.0%
AB	28.8%	27.7%
C1	29.2%	27.4%
C2	17.1%	20.0%
DE	24.8%	25.0%

Survey materials

The questionnaire was designed - drawing on the results of the initial stages of the qualitative research - by Accent and approved by National Grid.

The questionnaire included the following topics:

- Screener
  - Qualification (bill-payer)
  - Quota questions
- Use of the countryside
  - Explanation of NPs and AONBs/NSAs
  - Proximity to these areas
  - Visit/usage of countryside
- Electricity bill and affordability
  - Bill size questions
  - Perceived affordability of electricity bill
- Electricity infrastructure
  - Explanation of the industry and National Grid's role
  - Views on pylons and other infrastructure
  - Views on pylons and other infrastructure
  - Summary of undergrounding process
  - Summary of VIP project
- Classification questions
  - Household characteristics
  - Highest education level
  - Membership of environmental groups

Presentation of project information

It was important that the projects were presented to survey participants in a way that allowed them to provide an informed opinion of the acceptability of the projects, while being presented in a concise enough format to be feasible within a survey. Information about each of the four VIP projects was presented in a consistent manner to allow for easier review and to aid

comparison between them. Figure 1 and Figure 2 show examples of this information - for the Dorset VIP scheme. The detailed showcards are included as Appendix C.

Figure 1. Example stimulus for VIP Project schemes

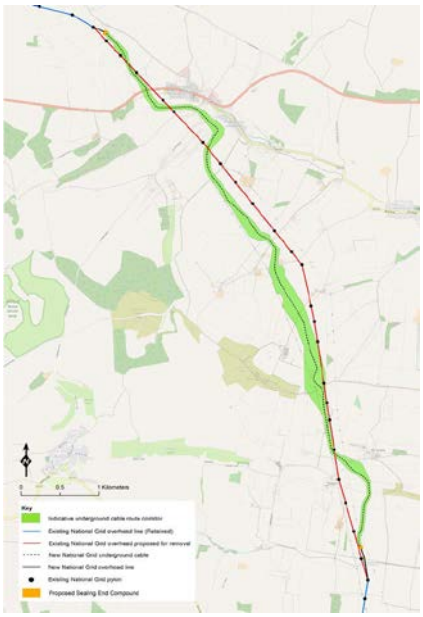
Dorset AONB undergrounding

Location of the undergrounding project

Figure 2. Example summary of VIP Project schemes - Dorset

Project	Route length	Pylons removed	Other details	Timings		
				Construction starts	Cable energised	Pylons dismantled
Dorset AONB	9 km	22	Construction of 2 sealing end compounds and 1 associated replacement terminal.	Spring 2019	August 2021	2022

- The dotted line indicates the preferred route for the underground cable
- The green area (cable route corridor) indicates the potential area in which the cable could be installed. It is larger than the preferred route as it provides the flexibility to avoid underground issues if found e.g. archaeological issues



The order in which the projects (VIP or Hinkley-Seabank) were presented to participants was randomised within the survey design. This ensured that there was no ordering effect that might impact the responses to the project seen second.

Fieldwork timings

The quantitative fieldwork included a soft launch. An initial target of 50 online interviews and 20 CAPI interviews was set, to allow analysis of an initial sample prior to the full launch of the survey. Following review of the interim data from a sample of 53 interviews, the full fieldwork was launched. Dates were as follows:

Soft launch:
Online – (53 completed interviews) 2nd February
CAPI – (20 completed interviews) 3-5th February

Main fieldwork:
Online – 7th – 16th February
CAPI – 9th – 18th February

Presentation of quotes in the report

Quotes from participants who took part in a group discussion, depth interview or the survey can be identified through the following labels.

- Quotes from group participants are attributed as follows: Location of group, Urban/Suburban/Rural, participant's SEG. E.g. *(Peterborough, Rural, C2DE).* If conversation between more than one participant is presented, individual participants are identified by a number e.g. P1.

- Quotes from depth participants are attributed as follows: Location of the interview, Urban/ Suburban/Rural, and then type of vulnerability (either Low income or Power Reliant). E.g. *(York, Suburban, Low Income).*

- Quotes from survey participants are taken from responses to the open-ended questions and are attributed as follows: Survey participant, Urban/Suburban/Rural, SEG E.g. *(Survey participant, Rural, C1).*

3 USE OF COUNTRYSIDE AND DESIGNATED LANDSCAPES

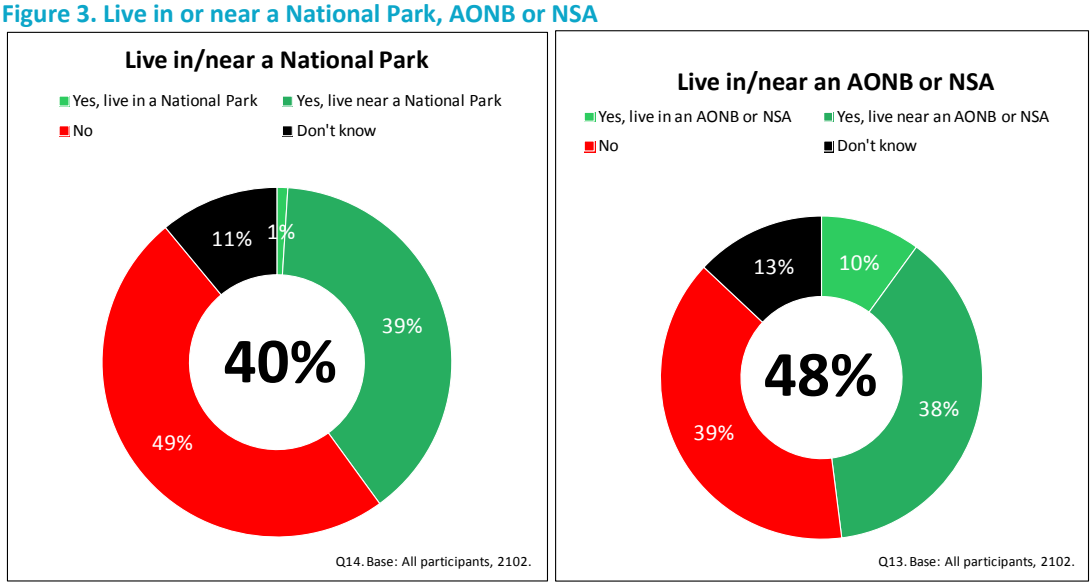
Summary

- Just over half (56%) of bill-payers live in or within an hour's drive of a National Park, AONB or NSA. Slightly fewer than half (48%) live in or near an AONB or NSA and 40% live in or near a National Park.
- National Parks and AONBs are widely used. One in four (26%) visit either a National Park or AONB once a month or more frequently. A further two in five (43%) visit at least once a year. Just under three in ten hardly ever (22%) or never (7%) visit these areas.
- Bill-payers are attracted to these areas of countryside for the inherent qualities or attributes they bring (such as fresh air, tranquillity, the countryside's beauty) or the benefit it brings them (e.g. getting away from it all, finding it calming).
- Users undertake a range of activities in these designated landscapes, the most common including physical exercise, visiting specific places of interest, going on holiday and driving.

3.1 Proximity to designated landscapes

Of the survey participants, just over half (56%) lived in or near (within a one-hour drive) of a National Park, AONB or NSA. Slightly fewer than half (48%) lived in or near an AONB or NSA and 40% lived in or near a National Park.

Figure 3. Live in or near a National Park, AONB or NSA



3.2 Appeal of rural areas and designated landscapes

Participants of the qualitative research named many reasons why they find the countryside appealing. The main reasons tended to fall into inherent qualities or attributes of the countryside (relaxing, fresh air, peace and quiet, the absence of people, the beauty of the countryside, country pubs, the friendliness of country people, the tranquillity, countryside activities like golf, and so on) or the benefit it has for them as a countryside user (such as getting away from it all, being good for your head space, it's calming).

> *It's the landscape and the views as well isn't it; it's not like you see high-risers or buildings it's just nothing but landscape, you get head space. (Edinburgh, Suburban, C2DE)*

> *Especially with my depression, it's just my peace is in my garden, and it's [the open countryside] an extension of me being able to get out and have peace. (York, Suburban, Low Income)*

3.3 Understanding of Areas of Outstanding Natural Beauty and National Parks

In the qualitative research it was evident that nearly all participants had heard of the term National Park. Most understood that they are areas of special status, designated by Government, that are protected from development. However, some did confuse National Parks with the land and properties owned by the National Trust.

> *A managed park. You know, managed by rangers and things like that. (Peterborough, Rural, C2DE)*

> *P1. Run by the government is it, it's national.*
> *P2. Designated by the government.*
> *(Swansea, Rural, C2DE)*

About half of participants had heard of the term Area of Outstanding Natural Beauty or AONB, mostly through physical references, such as maps and road signs. However, participants were much less confident in providing an explanation for what an AONB might be, beyond something to do with the physical beauty of an area.

> *P1. Aware of them yeah, because when I have been exploring I have seen symbols on the map, so go and have a look.*
> *P2. I didn't know there was an official category that they were.*
> *P4. I'd have thought they were nice places to go, but I didn't know anything about that.*
> *(Swindon, Urban, C2DE)*

> *These [AONBs] are places that you don't want to touch, you don't want to change because if you do it's going to be detrimental to head space. (Edinburgh, Suburban, C2DE)*

The idea of who decides which areas become designated Areas of Natural Beauty or National Parks was a point of contention in some of the groups. This was particularly the case in the Scottish discussion groups, where there are no visual enhancement projects planned.

Yes, but who's decided they're areas of natural beauty, because everybody's views would be different about whether they think that was attractive. (York, Suburban, ABC1)

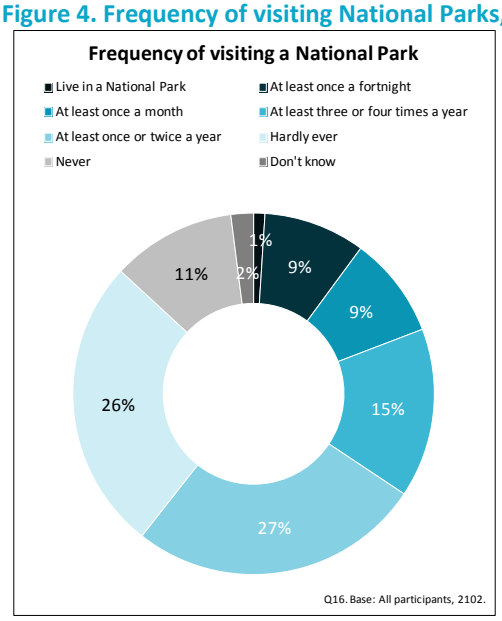
3.4 Use of countryside and designated landscapes

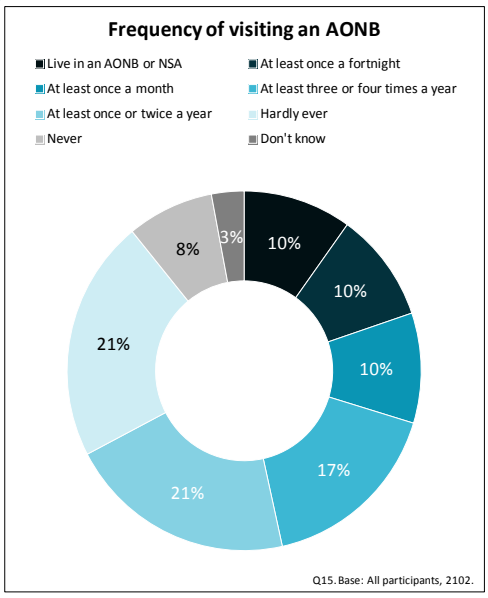
National Parks and AONBs are widely used. One in four (26%) said they visited either a National Park or AONB once a month or more frequently. A further two in five (43%) said they visit at least once a year, while almost three in ten hardly ever (22%) or never (7%) visit these areas.

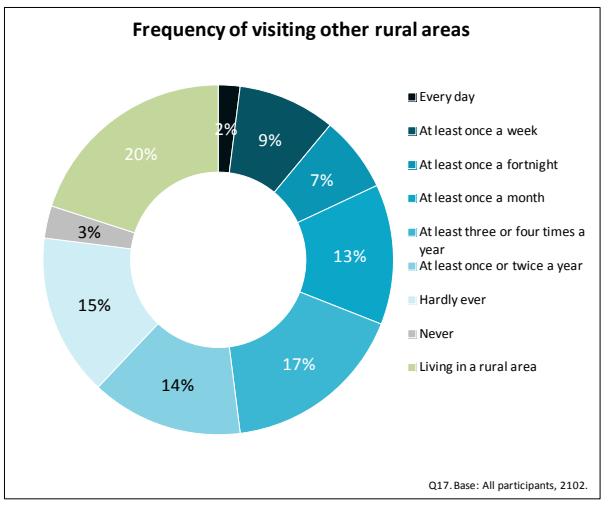
One in five (18%) survey participants said they visit a National Park once a month or more frequently, with a further 42% visiting at least once a year. Similar proportions said they visit AONBs (20% monthly or more frequently, and 38% at least once a year). One per cent said they live in a National Park, and 10% said they live in an AONB.

One in five (20%) survey participants reported living in other rural areas, with a further three in ten (31%) visiting them monthly or more frequently. One in six (18%) said they hardly ever or never visit other rural areas.

Figure 4. Frequency of visiting National Parks, AONBs and other rural areas



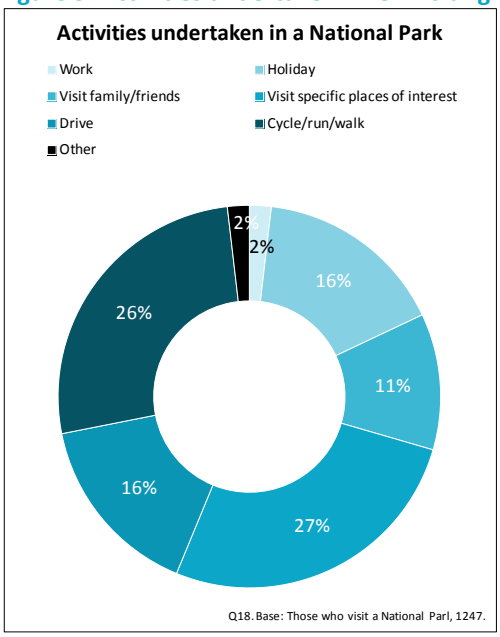


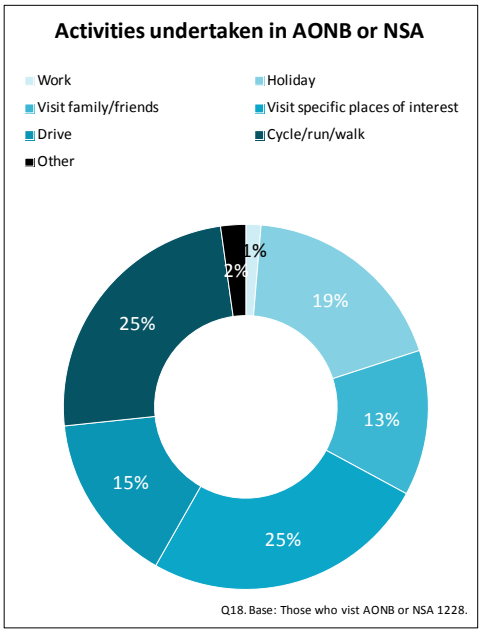


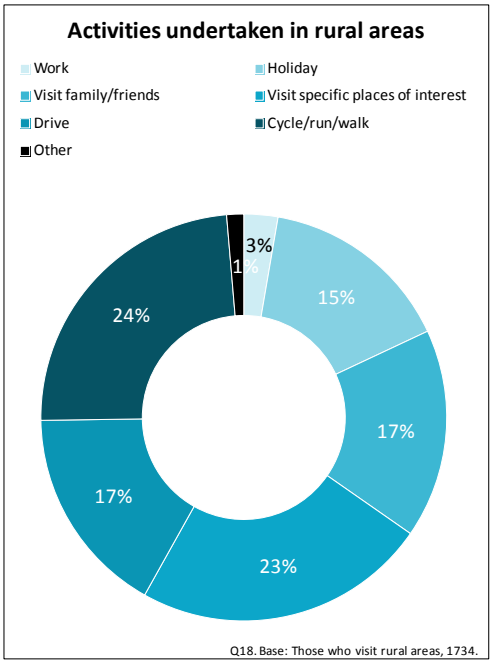
Use of AONBs and National Parks is more common among younger bill-payers; 24% of bill-payers aged 16-29 reported using them at least fortnightly, compared to 14% of 30-49 year olds, 8% of 50-64 year olds and 9% of those aged 65+. There is also a link with income; 33% of people who earn £5,200 a year or less never visit AONBs or National Parks, compared to 11% of those earning £5,201 - £15,600, and 4% of people earning more than £15,600.

Figure 5 shows that about one quarter of survey participants said that they like to go running, walking or cycling in National Parks, AONBs or other rural areas. About another quarter said that they like to go to these areas to visit specific places of interest. Other common activities undertaken in these areas are driving and going on holiday. The activities undertaken do not differ significantly between AONBs, National Parks and other rural areas.

Figure 5. Activities undertaken when visiting National Parks, AONBs and rural areas







4 ATTITUDES TOWARDS NATIONAL GRID AND THE WIDER ENERGY SECTOR

Summary

- Awareness of National Grid is relatively high, but knowledge of its activities or role is shallow. Mostly this knowledge is limited to a general sense of its responsibility for construction and maintenance of electricity cables and pylons and 'moving energy around the country'. Most discussion group participants did not know of the distinction between National Grid's activity and that of the DNOs.
- Most view the proportion that National Grid's activity makes up of the total energy bill as being relatively low, considering its important role in transmitting electricity at a national level.
- Three quarters (75%) find their household electricity bill to be affordable. Only 3% thought their bill was not at all affordable, but one in five (21%) said it was not very affordable. However, while considered affordable, most find the bill very expensive and continually increasing.
- The energy industry is viewed with a certain degree of cynicism and distrust. This stems from the sense that the high bills that consumers face are, to a large degree, a result of private energy companies' excessive profits.

4.1 Awareness and understanding of National Grid's role

In the discussion groups, most participants had heard of National Grid before, but knowledge was shallow. A significant proportion did not know or were not confident in explaining who National Grid is or what the company does. However, several participants did know about National Grid's role in the electricity supply chain, correctly attributing the construction and maintenance of electricity cables and pylons to National Grid.

P1. I thought it was an electricity company.
P2. Something about solar panels maybe?
P3. Is it the power cables that go across the fields?
P4. Big pylons, they're the ones that take the electric everywhere, all over the country.
(Peterborough, Rural, C2DE)

P1. They put pylons everywhere.
P2. The National Grid is like a bank of electric going in, power coming out.
(Peterborough, Rural, ABC1)

Very few participants had ever been in contact with National Grid. Nearly all participants said they would call their power supply company if they were having an issue with their electricity.

When shown a diagram of the electricity supply chain (see the showcards in Appendix C), most participants were surprised to see how many organisations were involved in getting electricity from the source of generation to homes and businesses. They were unaware of how far down the supply chain their energy company is, and the majority did not realise DNOs existed and some did not know about National Grid.

> *P1. I just thought it was the National Grid and then the suppliers.*
> *P2. Yeah, the amount of processes it goes through, I didn't think there were so many.*
> *(Peterborough, Rural, ABC1)*

> *I didn't know that the DNO, that was the thing. I thought they worked for the National Grid with suppliers, so that's a step I didn't know. (Swansea, Suburban, ABC1)*

Most participants thought that because of the important role played by National Grid in transmitting electricity, its functions would account for more than 4% of their bill.

> *I think the more of the supply chain involved, then the less they will get at the top so probably about 30, 40%. (Peterborough, Rural, ABC1)*

> *I thought 'the grid' would have more. It's the greedy little underlings that are getting it. (Swansea, Rural, Power Reliant)*

However, a few participants did note that as most of the infrastructure was already in place when National Grid was privatised, the ongoing maintenance and operating costs should be small, and this justified the small proportion of their bill.

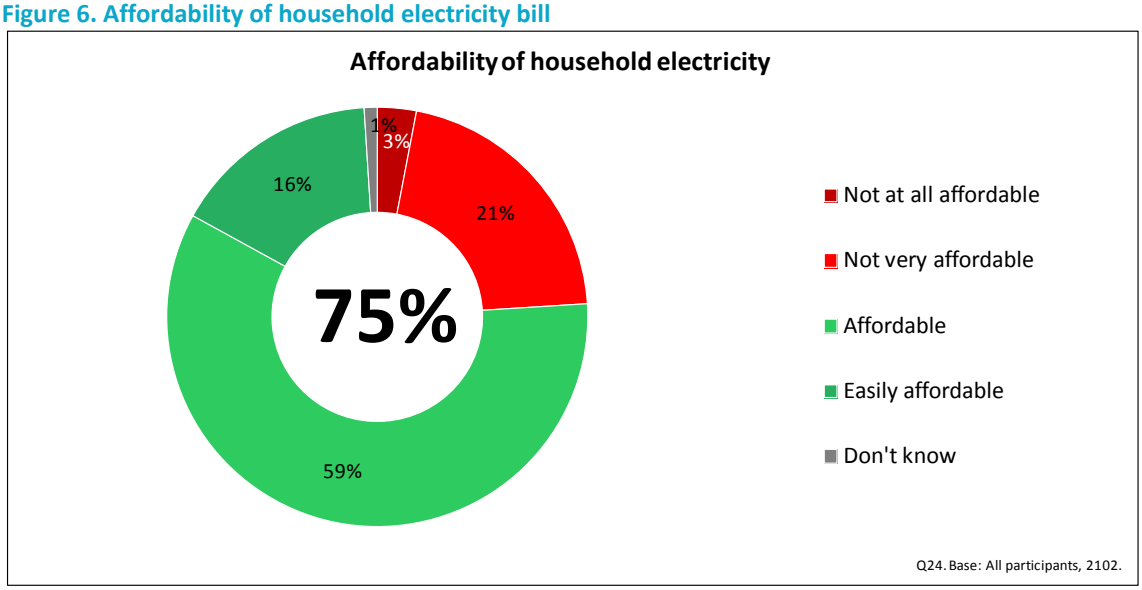
> *P1. I didn't expect it to be quite low on the National Grid side.*
> *P2. I guess that's [because National Grid is just] maintaining an existing infrastructure. To rebuild the whole thing from scratch, or change the way you're doing it, it would be more expensive.*
> *(Swindon, Urban, ABC1)*

> *National Grid is a business, they have to make money and we've already discussed that they're getting such a small percentage of what is out there [referring to energy bill] ... that's because they're inheriting something that's already there and they're not putting in new lines. (Peterborough, Rural, ABC1)*

4.2 Affordability of energy

Three quarters (75%) of survey participants thought that their household electricity bill was affordable. Only 3% thought their bill was not at all affordable, but one in five (21%) said it was not very affordable.

Figure 6. Affordability of household electricity bill



The conversations in the discussion groups help to contextualise the survey results as a large number of participants in both higher and the lower income groups expressed that they thought their electricity bills were too high – but not necessarily unaffordable. Although they could find the money to pay for their bills, they were concerned about the current cost of their electricity and that their bills appear to be continually increasing.

As would be expected, people on the lowest incomes were more likely to say their electricity bill is unaffordable (43% say it is not at all or not very affordable). Bill-payers aged 30-49 are the age group most likely to say they find it unaffordable (30%). This is likely to be because they are one of the age groups most affected by other outgoings such as mortgage and childcare.

4.3 Mistrust of the energy sector

There was a sense in the discussion groups (and to a degree from the responses to the open survey questions) of a general distrust of the energy sector stemming from the perceived high bills, coupled with the fact that the energy supply chain is run through privatised as opposed to nationalised companies. As noted in the section on 'Awareness and understanding of National Grid's role', most participants were not aware of each of the different stages in the supply chain or the roles that each company plays within the energy sector. Consequently, participants had a tarnished view of all companies operating in the energy sector and did not distinguish between suppliers and those involved in transmission. Their negative and cynical view was generally directed towards the entire energy sector as opposed to National Grid specifically.

When shown the electricity supply chain showcard (see Appendix C), several participants commented that the energy sector is highly profitable and saw those profits being at the expense of consumers.

There's like what, three middle men you've [the energy supply chain has] got to go through, so I imagine these charge something separate and eventually it snowballs into like the obnoxious prices we pay. (Peterborough, Rural, C2DE)

I just see the top ones [companies in the energy supply chain], as a cartel who robs us all off. (Edinburgh, Suburban, C2DE)

Others were just sceptical of the energy sector in general.

What we [are] much more concerned about is that the electricity bills are to be paid for, the household bills go up ten per cent all the time. Our household electricity bills, gas bills they go up ten per cent every time through the energy companies. Basically, the energy companies are making huge profits. (Edinburgh, Urban, ABC1)

Think back to when the National Grid was a national company, see that £4billion profit per year that was not lying in people's pockets, that was getting reinvested on upgrading infrastructure. Where it's not now. It's lining the pockets of the people who are already rich and will never spend it in their lifetime. (Edinburgh, Suburban, C2DE)

5 ATTITUDES TOWARDS ELECTRICITY INFRASTRUCTURE

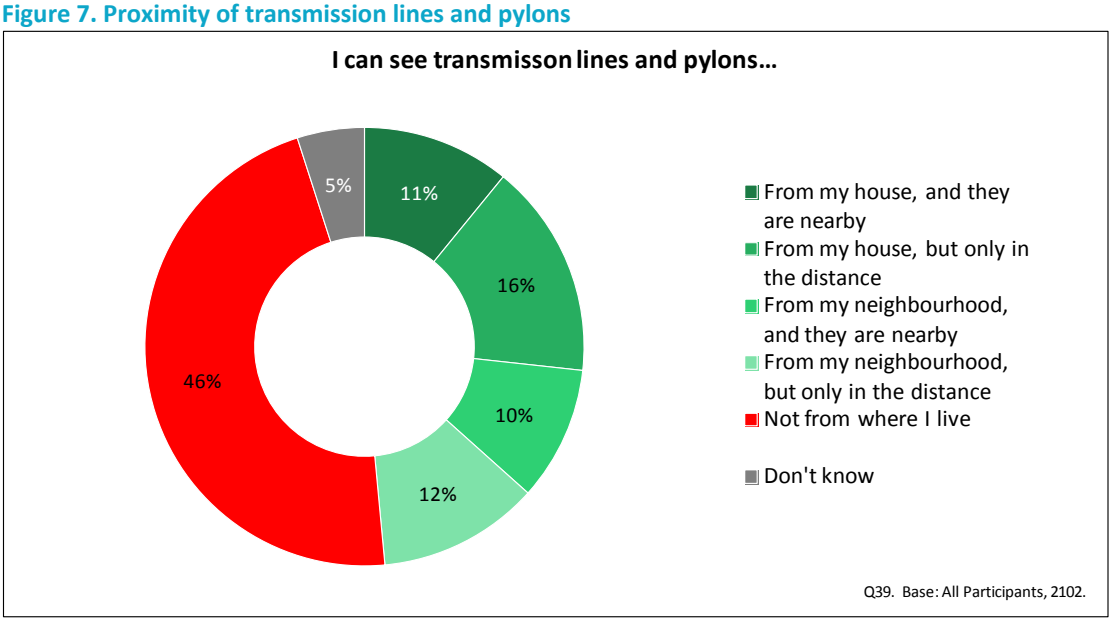
Summary

- Electricity infrastructure is widely visible; just under half (49%) say they can see transmission lines or pylons from their home or neighbourhood.
- However, bill-payers are split on whether they notice this kind of infrastructure in the countryside (39% say they do whereas 36% do not).
- A sizeable proportion of bill-payers are somewhat apathetic towards electricity infrastructure in the countryside; over one third (34%) have no strong feelings on the matter and 42% do not express a view either way.
- This is typically because power lines and pylons are seen as such a permanent fixture in these areas that we have become entirely used to their presence to the point of not noticing them.
- However, when prompted, many bill-payers (51%) do consider electricity infrastructure in the countryside as an eyesore. Just one in six (17%) disagree. Proximity to the countryside is also correlated with this negative view of electricity infrastructure, with those living in AONBs or National Parks or rural areas more likely to hold this view.
- Their use in AONBs or National Parks is considered at odds with the natural beauty of the area. However, most (58%) consider electricity infrastructure in the countryside to be necessary and unavoidable – a 'necessary evil'.

5.1 Proximity to electricity infrastructure

Of the survey participants, close to half (46%) could not see transmission lines and pylons from their home or neighbourhood. However over one quarter (27%) stated they can see transmission lines and pylons from their house.

Figure 7. Proximity of transmission lines and pylons



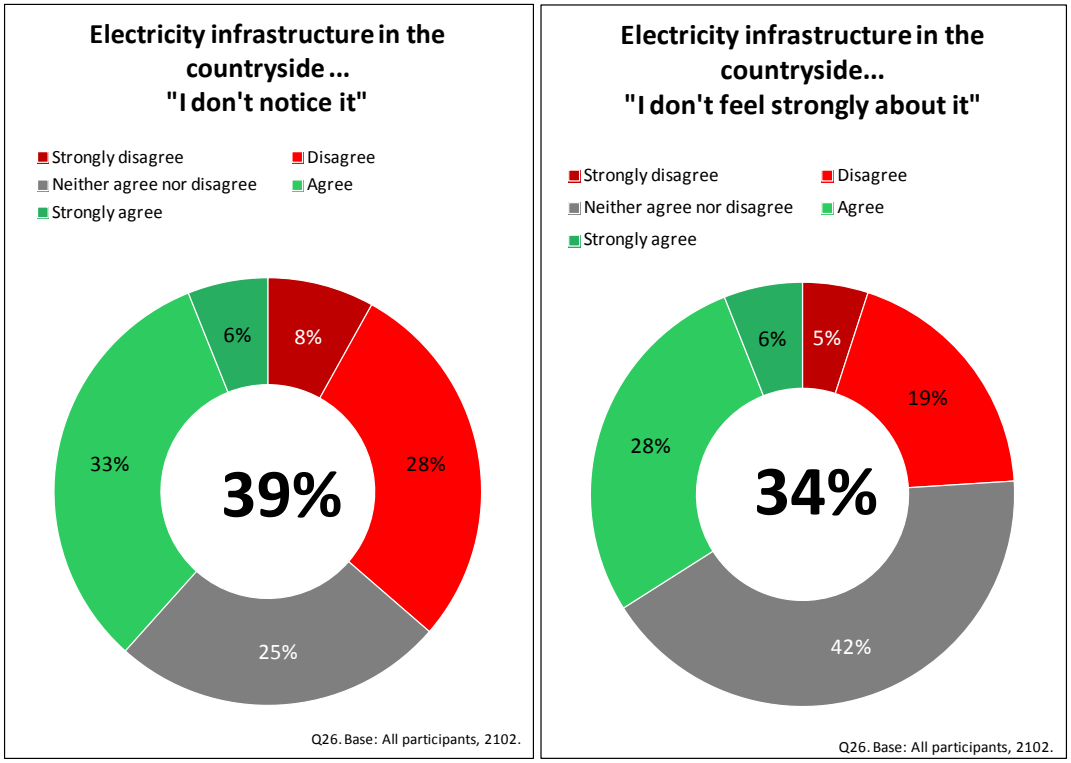
5.2 Views towards electricity infrastructure

Survey participants held mixed views towards electricity infrastructure in the countryside.

Many do not notice electricity infrastructure in the countryside

Figure 8. shows that over one third of survey participants said that they do not notice electricity transmission infrastructure in the countryside (39%), with 6% of these participants strongly agreeing that they do not notice. Another third (36%) said they do notice. It appears that a sizeable proportion of participants are somewhat apathetic towards electricity infrastructure in the countryside, as over one third (34%) said that they have no strong feelings on the matter and 42% could not express a view either way, indicating that they are not concerned either way.

Figure 8. Do not notice or have no strong feelings towards electricity infrastructure in the countryside



The group discussions tended to reflect the survey findings. A large proportion of participants described how, until taking part in the research, they had never really noticed pylons or other electricity infrastructure in the countryside and consequently did not give it much thought or feel particularly strongly about the subject. A common view was that, while they are aware of their existence, they were so used to seeing pylons that they tend to blend in with the landscape. This view was held by low and high-income earners in urban, suburban and rural areas.

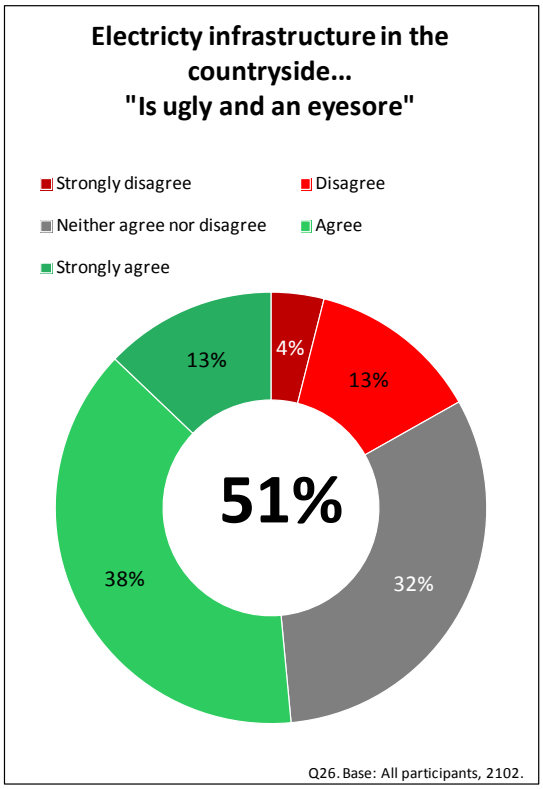
> *I think because they've always been there. Wherever you live, you see them don't you. No, I don't really notice them. They're just a part of life. (Peterborough, Rural, Low Income and Power Reliant)*
> *I really think we've become so used to seeing pylons that they're almost invisible. (York, Suburban, ABC1)*

> *P1. In general, just things that you see all the time and become quite obsolete in day to day vision, after today I will probably notice them more.*
> *P2. It's part of the landscape, they have been there forever haven't they; ever since I was a kid they have always been there, so you just accept them as part of the landscape. (Swindon, Urban, C2DE)*

> *They're there you do get used to them, but they'd be quite nice if they're not there. (York, Suburban, ABC1)*

However, when prompted, many participants do consider electricity infrastructure in the countryside as an eyesore

Figure 9. Electricity infrastructure in the countryside is ugly and an eyesore



Over half (51%) of the survey participants agreed that electricity transmission infrastructure in the countryside is ugly and an eyesore. Just one in six (17%) disagreed.

Proximity to the countryside is also correlated with this negative view of electricity infrastructure. Those who live in National Parks or AONBs were more inclined (17%) to strongly agree that the infrastructure is ugly than those who do not live in these areas (11%). People living in rural areas were more likely to agree (58%) than those in suburban (46%) or urban (51%) areas. People living in Wales are more likely than those in England and Scotland to say they are an eyesore (64% vs. 51%). This country difference is likely to be an effect of the rural nature of Welsh participants – they were more likely to live in rural areas or live near AONBs or National Parks.

Proximity to the infrastructure is also a driver. Participants who can see pylons nearby to their home are more likely to strongly agree that the electricity infrastructure is an eyesore (19%) compared to those who cannot see it from their home or neighbourhood (12%).

Interestingly, women are more likely to view the electricity infrastructure as an eyesore than men.

Although a large proportion of discussion group participants claimed to not notice pylons, when asked what they think of existing electricity infrastructure in the countryside, participants from rural and suburban areas contemplated that it was unattractive, out of place and a blight on the beautiful landscape.

> *I don't see it that much. It's only when you're a traveller and you can see electricity pylons which they are a blot on the landscape, there's no question about that. (Swansea, Suburban, Low income)*

> *I've often thought that, you go 'Well that's a bit of an eyesore there isn't it', but then you think that somewhere down there somebody's receiving that electricity so you kind of put up with it. (York, Suburban, C2DE)*

> *P1. Yeah once you get out into the countryside they are far more noticeable and there are certain areas where really, they spoil the view completely...*
> *P2. They don't look very nice when you've got a lovely countryside and you've also got a manly structure in the middle of it.*
> *(Swansea, Rural, C2DE)*

Some urban and suburban participants did concede that they would be more frustrated by the presence of pylons if they lived in the countryside.

I would imagine they might irritate people that live there if it spoils their sight of where they live I suppose; they've obviously chosen to live there for a reason, it might be a source of irritation. (Edinburgh, Urban, ABC1)

Some consider electricity infrastructure in National Parks and AONBs to be even more of an eyesore

Few participants distinguished between the countryside and National Parks or AONBs. Of those who did, they found pylons much less acceptable in National Parks and AONBs than in the countryside. In these environments, the presence of pylons was considered more contentious and at odds with the natural beauty of the area.

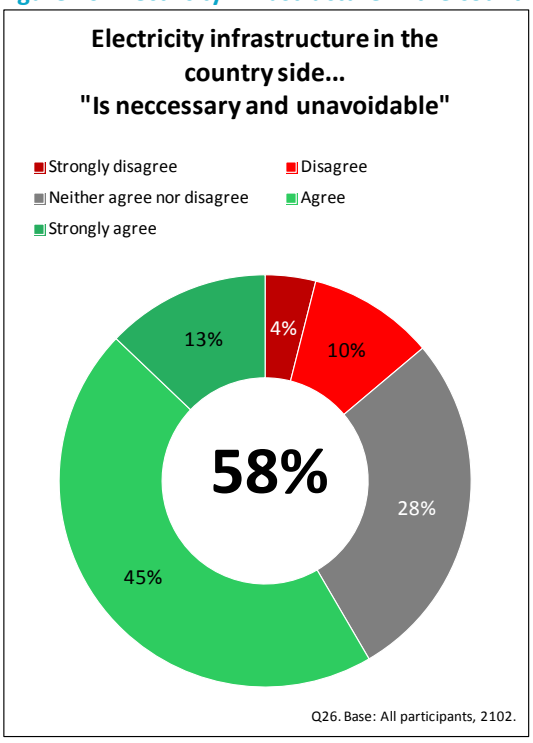
I personally think if it [electricity infrastructure] was in the middle of the moors or in the national parks it would look worse, as opposed to just driving maybe five minutes out of York and you see one. (York, Suburban, C2DE)

Areas of Natural Beauty, I think it [electricity infrastructure] would ruin that, wouldn't it? If I went down to Cornwall and there's a great big pylon I think I'd be a bit peed off. (Peterborough, Rural, ABC1)

It gives everybody a freedom, wherever you go, whatever country you go to, it's our green and pleasant land, we're proud of it, and it needs to be kept that way. We don't need, because of technology, putting more things on it, we need less things visible on it. (York, Suburban, Low Income)

Electricity infrastructure in the countryside is necessary and unavoidable

Figure 10. Electricity infrastructure in the countryside is necessary and unavoidable



While it is viewed (when prompted) as ugly in certain landscapes, the majority (58%) of survey participants considered electricity infrastructure in the countryside to be necessary and unavoidable.

The view that electricity infrastructure is necessary and unavoidable was a key motif throughout the group discussions. Discussion group participants referred to pylons as a "necessary evil". Participants conceded that while the infrastructure is ugly and an eyesore, they were willing to have it in the countryside as they are not prepared to do away with the comfort and quality of life that electricity provides. This is seen as a right that everyone – regardless of where they live in the country – is entitled to. Ultimately, participants thought the benefits that electricity brings outweighed the negative cost to the landscape. This view was held by participants living in all kinds of areas, but came through stronger in urban and suburban discussion groups.

P1. They're a necessity, aren't they? They are a necessity nowadays; if you don't have electricity you don't have the quality of life that the rest of the country has....
P2. I suppose it's one of those things that you wouldn't want one in your back yard but it's almost a necessary evil in a way.
(York, Suburban, ABC1)

I just see them as that's what makes my kettle work. I don't see them as something I don't get any benefit from. (Peterborough, Rural, ABC1)

Suggested acceptable locations for electricity infrastructure

When accepting that electricity infrastructure is necessary, and if it must be present, some participants suggested alternative solutions to running pylons and cables through the countryside and in National Parks and AONBs. Unprompted, participants suggested several ideas, but the most common suggestion was to bury electricity infrastructure underground. This concept came up in nearly every group discussion before being presented with any information on the VIP project or the Hinkley-Seabank project.

Two things. One is if you're going to put a pylon up, put up a pretty one. Pylons look too industrial and they don't have a place in the countryside, but that should always be a last resort. The first resort should be dig a trench, put it in a trench. I've never understood why they have to use pylons other than going across water maybe. (Edinburgh, Suburban, C2DE)

Why use pylons? Does it need to go above ground? Why does it need to be so high? Why can't it be underground? Shouldn't we have the technology now to change that and we've got road networks... why can't they put a large conduit pipe, whatever you want to call it, underneath and run them through there?
(Swansea, Rural, C2DE)

Another frequently made suggestion was to group all man-made materials together. It was suggested that electricity cables could be run alongside existing motorway routes, to minimise the visual impact they have. It is important to note that not all participants agreed with this suggestion. Some participants objected as they thought putting all industrial structures together could exacerbate the problem.

[Run the cables] along the roadside because the road's not natural anyway so it should be together rather than like two consecutive lines. (Edinburgh, Suburban, C2DE)

P1. Can I just ask why they just don't run it up the M5?
P2. There must be a reason I suppose 'cause it just seems to make sense to keep all the kind of ugly noisy stuff together.
(York, Suburban, C2DE)

A small proportion view electricity infrastructure favourably

Figure 11. Electricity infrastructure in the countryside is industrial architecture/heritage

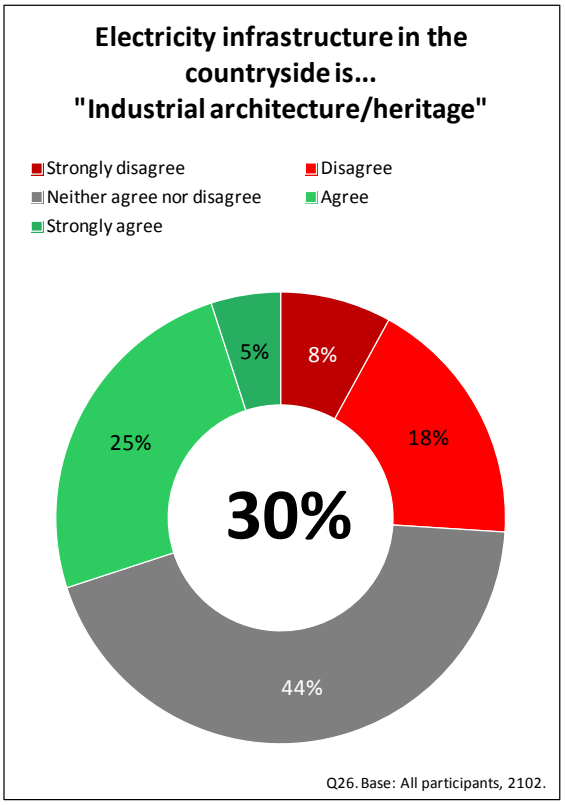


Figure 11 shows that, when prompted, three in ten survey participants (30%) viewed electricity infrastructure as our industrial architecture and heritage. However, one quarter (26%) of participants disagreed with this view.

In the group discussions, a select few participants held positive views towards pylons and electricity infrastructure in the countryside. These participants viewed the pylons as a reminder of man's innovation. Several participants fondly remembered staring at them as a child out of the car window.

I love pylons....it's what they represent, they represent manmade power…I live in the countryside, they are a bit of an eyesore, but I understand what they are. (Peterborough, Rural, C2DE)

They have always fascinated me. [As a kid in the back of the car] you could see the pylons, like march out into the distance, like an army of soldiers, fascinating. The amount of distance that they actually go. (Swindon, Urban, C2DE)

I just kind of admire the engineering behind them. I think they're designed for a purpose aren't they and they're obviously put where they are for certain reasons. (York, Suburban, ABC1)

6 ACCEPTABILITY OF VIP UNDERGROUNDING PROJECTS

Summary

- Undergrounding of power cables is widely seen as an improvement on the use of overhead power lines and pylons. It is seen as a modernising step forward and a moral action to improve the condition and appearance of our most beautiful landscapes for future generations.
- The key concerns that bill-payers have over the process of undergrounding is potential negative environmental impact (for instance on wildlife habitats) and the ability to maintain and repair power lines once they have been undergrounded. However, this latter issue is one which most expect technology to find a solution for.
- When presented with details of the VIP project, two thirds (66%) find it acceptable for its cost to be passed on to bill-payers. One in seven (15%) find it unacceptable.
- Acceptability of the individual schemes is broadly similar ranging from 65% for the Snowdonia scheme to 73% for the Peak District scheme.
- Acceptability is higher among rural bill-payers, those living within an hour's drive of an AONB or National Park, and users of these designated landscapes.
- Acceptability falls among lower income earners, and those who find their electricity bill less affordable. However, other than the lowest income bracket (earning less than £5,200 per year) a majority of all other income levels find the VIP project acceptable.
- Younger bill-payers are less likely to say the VIP project is acceptable, but this is largely a result of apathy; they are no more likely than older bill-payers to object but are far more likely to give a neutral view.
- Acceptability is also high among bill-payers who are pragmatic about electricity infrastructure; those who do not think it is ugly when in the countryside and those who say they really don't notice it, show similarly high levels of acceptability (68% and 66% respectively).
- The VIP project is primarily supported for the improvement it would have on the landscapes of AONBs and National Parks, at a perceived low cost per household.
- For the small minority that oppose the cost of the VIP project being passed to bill-payers, this is predominantly a rejection in principle that consumers should foot the bill. Other key reasons are that the disruption (environmentally and to the local area) might outweigh the aesthetic benefits.
- Some bill-payers call for transparency in passing on the cost, to ensure the final cost does not escalate and remains true to the stated amount.

6.1 Initial reaction to undergrounding concept

The idea of undergrounding is viewed positively

At the beginning of each discussion, the process of undergrounding was explained to the participants without relation to the VIP project or its related costs. It was clear during the group discussions that most participants were favourable towards undergrounding – with participants in nearly every group suggesting undergrounding as a good option for enhancing the visual appearance of the countryside, National Parks and AONBs. This suggestion was often brought up before the issue of undergrounding was presented.

Following the explanation of undergrounding, most participants agreed that undergrounding pylons would undoubtedly improve the visual outlook of the landscape. This occurred across rural, suburban and urban groups.

> *P1. I like it.*
> *P2. I think it's a good idea.*
> *P3. Very good.*
> *(Peterborough, Rural, ABC1)*

> *Pleasing and, even though it's more expensive, I should imagine you'll have less maintenance, so I suppose [it will even out] over a period of time. (Swansea, Suburban, ABC1)*

> *It looks nice as it is, the countryside, but how much nicer would it look? When you look, and you do see them don't you? Everybody sees them, but you don't go 'Ooh look at them pylons', you go 'Ooh look at the view', imagine without them it would be better. (York, Suburban, C2DE)*

> *P1. Looking at any one of your pictures [on the showcards] without cables and pylons [is] much nicer.*
> *P2. Even the buildings [referring to tunnel head houses] - these look nicer [than pylons]. (Edinburgh, Suburban, C2DE)*

Some participants viewed undergrounding with a sense of moral obligation to future generations. They saw it as an opportunity to ensure that they preserved the natural beauty of the British countryside.

> *I think we've got to have a look at the long-term plan though and that is it's going to be better for the countryside you know for future generations they won't have to stare at these ugly pylons. (Suburban, C2DE, Edinburgh)*

> *We're leaving a better environment for the future. I mean think about it in 50 years' time. Because we know what happened 50 years previously, we need to be leaving things in a better state than we have previously. I think anything is an improvement, but I really do think that it's going to be a benefit for the future. (Swansea, Rural, C2DE)*

> *That's why I'm looking at it for my kids' and my grandkids' future, that if we don't look at going underground. And as they go underground, surely they're going to future proof when they go underground, that it's going to last a long time. (York, Suburban, C2DE)*

While viewed positively as a concept overall, participants were concerned about the cost of maintaining underground cables

Even when talking about undergrounding as a broad concept, several participants raised concerns about how much undergrounding might cost. Participants considered both the initial construction costs as well as the ongoing maintenance and repair costs involved; suggesting that these could be important barriers to full acceptance. Whether they came down positively or negatively on this depended on whether they believed technology would find a way to reduce the costs of maintenance. These concerns are discussed in greater detail under the 'reasons for opposition' section of the report.

> *P1. The only concern would be if something needed to be fixed.*
> *P2. Yeah but technology now tells you where the fault is.*
> *P3 [Yea, they can – inaudible] pinpoint it easier...so they wouldn't likely be digging up for miles and miles they'd know exactly where it was.*
> *P2. It's easier to find it on the ground as it is up there.*
> *(Swansea, Rural, C2DE)*

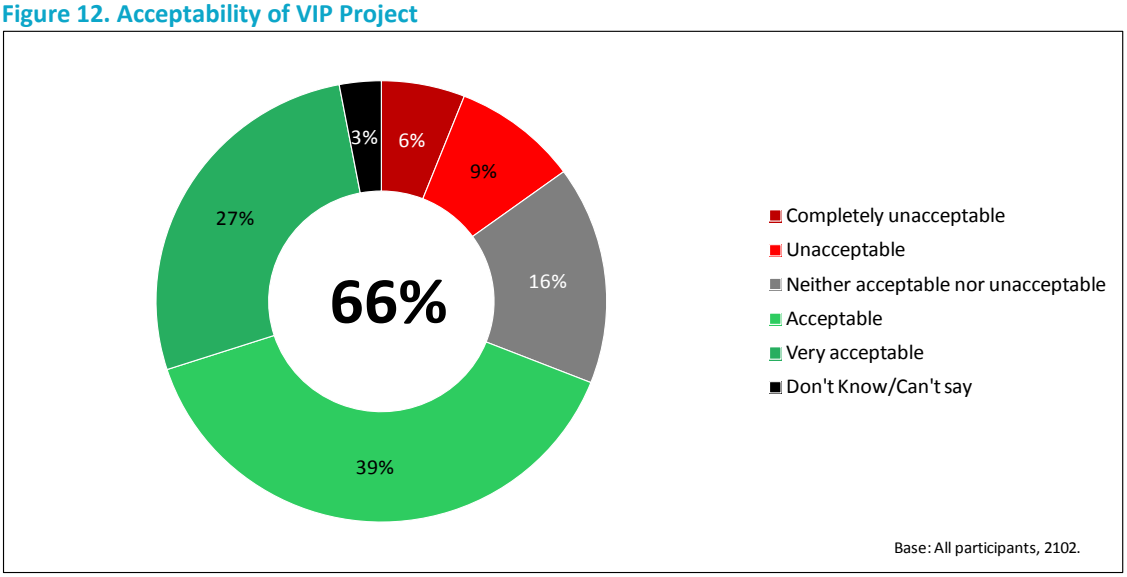
> *P1. I think it's a no-brainer to say it's [undergrounding] better, but I think the crux is, are we paying for it at the end? Are we paying 10 per cent [of our electricity bill] rather than 4 per cent?*
> *P2. Especially if you're talking about blending it [pylons] in with the area in which it's going to be, and specialising the turf and things on top. Obviously, the cost is going to come down to the customers at the end of it, and that's going to be us I guess.*
> *(Swindon, Urban, ABC1)*

6.2 Acceptability of the VIP project

Overall acceptability

Once participants were informed of the details of the VIP project and the cost to consumers, two thirds (66%) of survey participants considered the planned VIP project to be acceptable or completely acceptable. One in seven (15%) thought it was unacceptable or completely unacceptable, but only a small proportion (6%) found the project completely unacceptable.

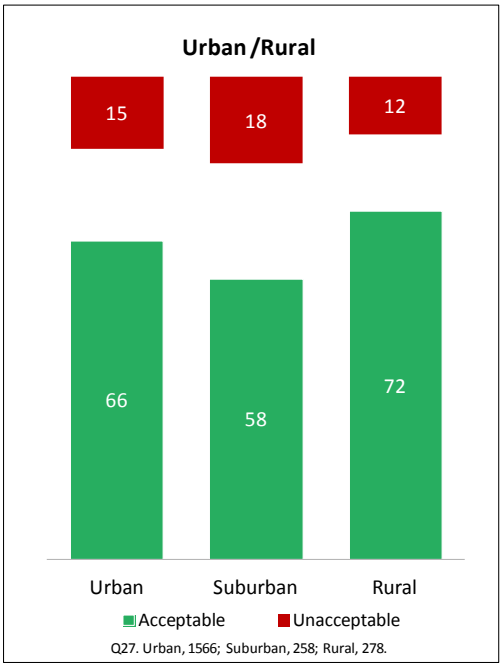
Figure 12. Acceptability of VIP Project



Consistent with the survey results, the majority of focus group participants were favourable towards the VIP project in their discussions. Acceptability did dip slightly once they found out that each household would need to contribute 73p per year for the next 25 years, but even with this knowledge of the cost most participants accepted the VIP project as a good idea.

Locational differences in acceptability

Figure 13. Acceptability of VIP Projects by Urban/Rural status



Views toward the VIP project differ by urban/rural classification. Rural participants were significantly more likely than those from more urban areas (particularly suburban) to find the VIP project acceptable (72% vs 66% in urban areas and 58% in suburban).

Ultimately, discussions boiled down to whether the short-term pain of the construction period and associated disruption was worth the long-term gain of no longer having visible pylons; with rural groups being slightly more inclined to support the VIP project than urban groups.

Underground, just out of the way, no one sees, everyone benefits, it's easier. Why would you use choose something ugly over something pretty? It's just based on looks. (Swansea, Rural, C2DE)

P1. I think if you lived there it would be great because you've only got to pay 73p to have the pylons removed.
P2. To get rid of the eyesore.
(Peterborough, Rural, ABC1)

It's a got a benefit. My personal opinion is that it takes away all the ugliness of a pylon with cables going across. (Peterborough, Rural, ABC1)

Typically, the suburban and urban participants thought that if they lived closer to the planned VIP schemes, the disruptions caused by the construction process might outweigh the long-term benefits.

I'm for it. I think for all the die-hard people that go to the countryside and they would argue that these pylons are a blot on the landscape then okay yeah, I agree two or three years is going to be a bit of disruption and it won't be particularly nice but surely they can see in the long term. You know in four years time when they're walking over the Peaks – over any of these areas - that they're not going to have these big pylons. (York, Suburban, C2DE)

No. [If you were a local], you'd be fed up with the amount of disruption and tippers and dumper trucks coming for six months or however long it takes. That would be your prime concern. (York, Suburban, ABC1)

I think the construction is going to disrupt the amount of people that visit these places for the next three years, definitely, because if there's a lot of construction going on, people aren't going to want to go to a place that's supposed to be quiet. (Swindon, Urban, ABC1)

Yeah because it's what 40 metres wide up to 60 metres wide so it's a fair old hole their digging. Three years 2019 to 2022 for Dorset - Does it bother me because it's in Dorset? No. But the Dorset (people) will probably be up in arms because their countryside is getting made nice but for that three years is a big inconvenience. (Edinburgh, Suburban, C2DE)

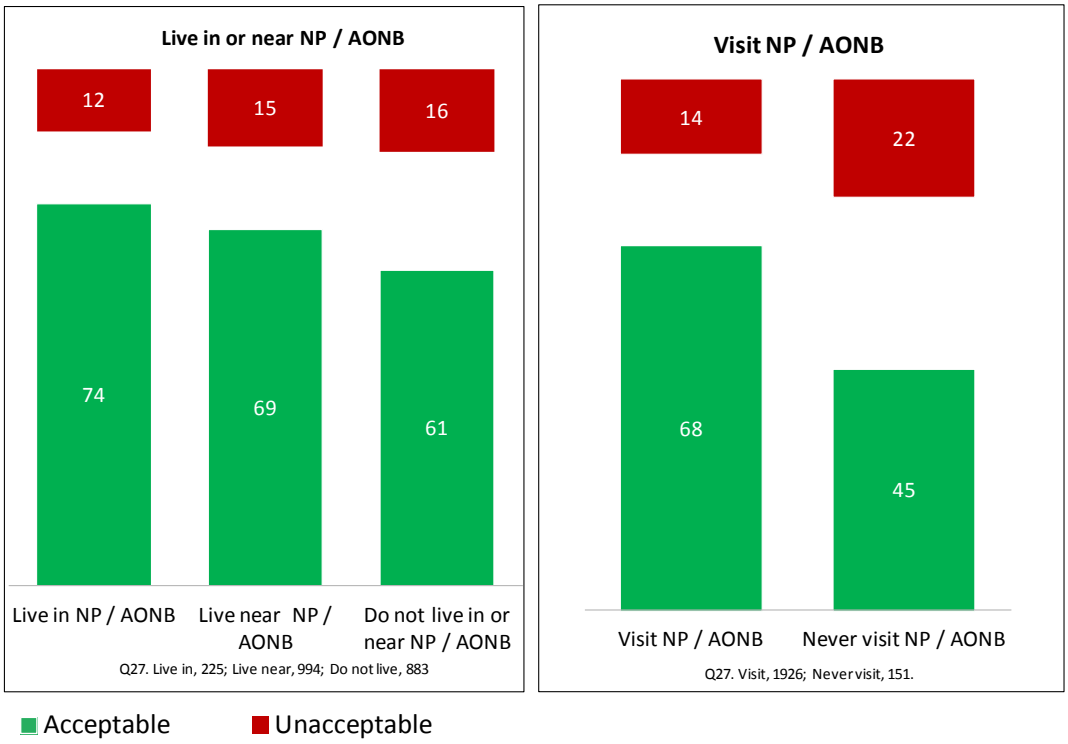
However, a number of urban and suburban participants did lean in favour of the long-term gain outweighing the short-term disruption.

Acceptability of VIP project by proximity and frequency of visits to National Parks or AONB

Participants who live in or near a National Park or Area of Natural Beauty were more likely to find the VIP project acceptable than those who do not (74%, 69% and 61% respectively).

Comparably, participants who visited a National Park or AONB at any point, even if it was 'hardly ever' were significantly more likely to find the VIP project acceptable compared to people who never visit them. Less than half (45%) of the participants who never visit a National Park or AONB accepted the VIP project.

Figure 14. Acceptability of VIP by household proximity and frequency of visits to National Parks and AONBS.



Acceptability of VIP project by annual income and perceived affordability of electricity bill.

Figure 15 shows that there is a clear correlation with acceptance of the VIP project and participants' annual income as well as how affordable they think their electricity bill is. Unsurprisingly, participants at the lowest end of the income and affordability spectrums, (namely those who earn under £5,200 per year and who said their bills are not at all affordable), are the most likely to find the VIP project unacceptable. Apart from this most vulnerable group, the majority of participants in all other income brackets and affordability classifications found the VIP project to be acceptable or very acceptable. Even in the lowest income band, a higher proportion find the project acceptable (33%) than unacceptable (26%).

Figure 15. Acceptability of VIP project by annual income and perceived affordability of electricity bill

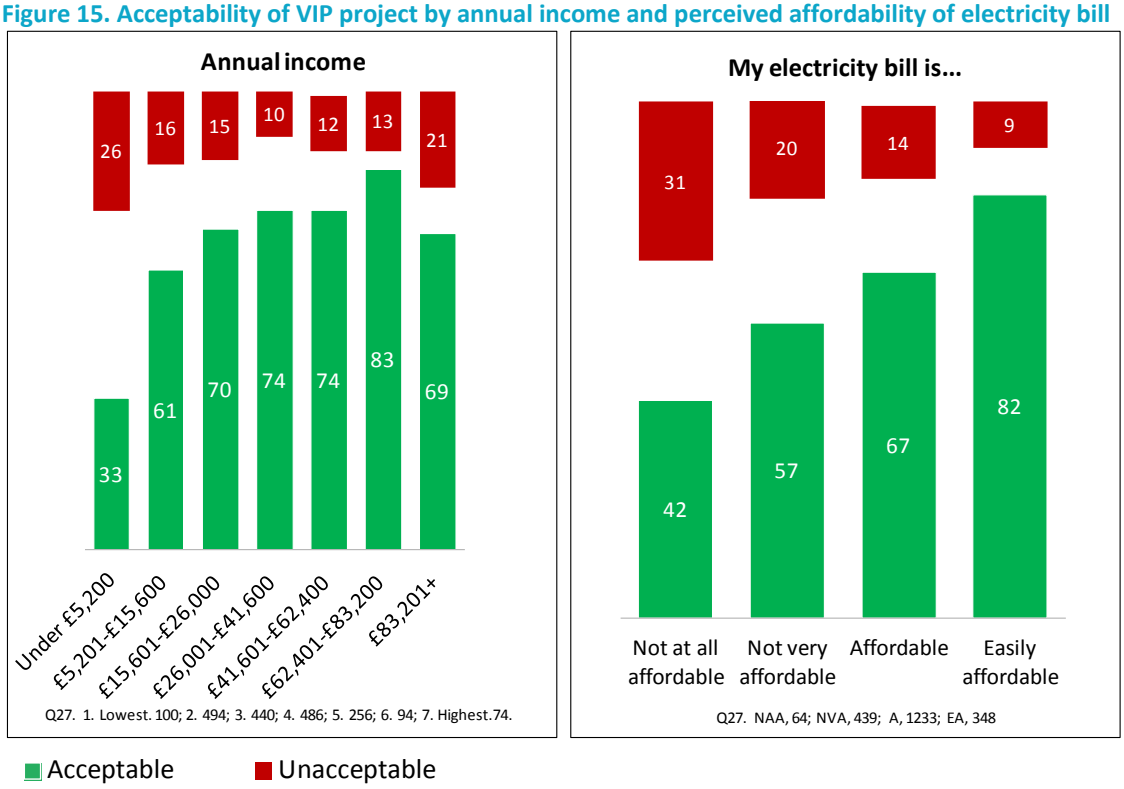


Figure 16. Acceptability of VIP project by SEG

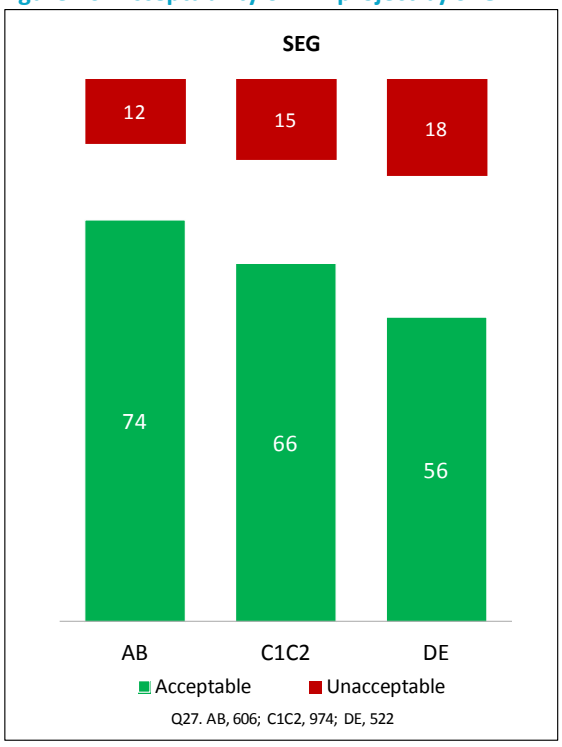


Figure 16 shows there is a trend between socio economic grade and acceptability of the VIP project. Although over half of lower social grade survey participants accepted the VIP project (56%), they were significantly less likely to accept the VIP projects in comparison to higher social grades (66% C1C2 and 74% AB). Social grades DE were more likely to either say they don't know how acceptable they found the project or that it was completely unacceptable or unacceptable.

Figure 17. Acceptability of VIP project by age

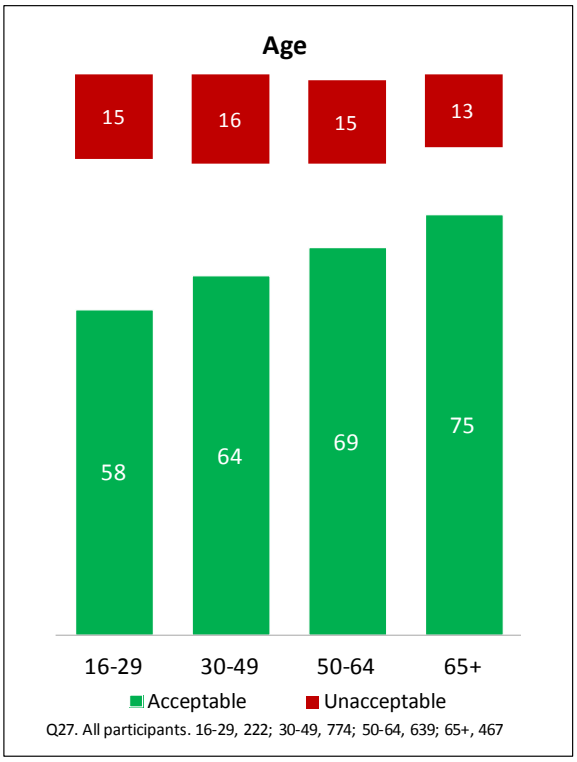


Figure 17 shows the differences in acceptability of the VIP project by age. There is a clear correlation between increasing age and acceptability. Older participants (aged 50 or more) were significantly more likely to find the VIP project acceptable than younger participants. Younger participants were no less likely to be users of designated landscapes and only marginally less likely to live in rural areas, indicating a genuine lower level of acceptance among this group. However, this is down to a higher level of apathy in this group; they are no more likely to object but are a lot more likely to give a neutral view (24% vs. 14% of older people).

Figure 18. Acceptability of VIP project by country

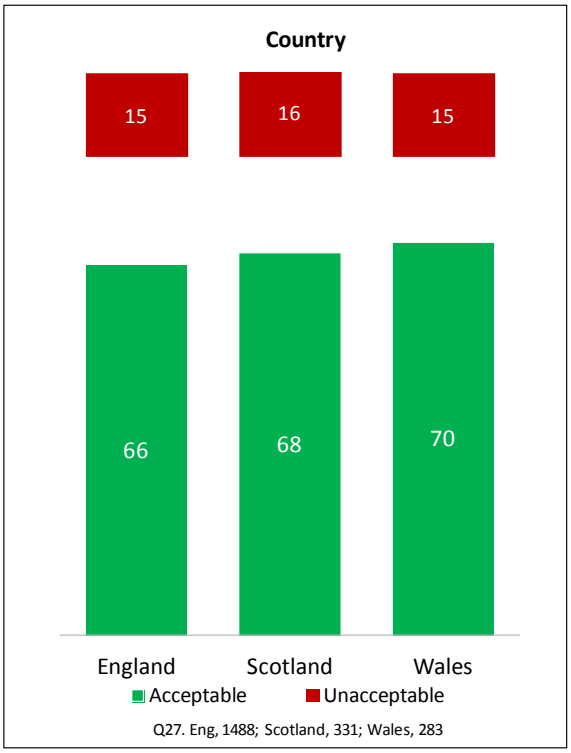


Figure 18 shows that there were no significant differences in survey participants' acceptance towards the VIP project by the country that they live in. About two thirds of participants across England (65%), Scotland (68%) and Wales (70%) found the projects to be acceptable or very acceptable.

The group discussions held in England (York, Swindon and Peterborough) and Wales (Swansea) were similar and the conversations tended to be more favourable towards the VIP project in general. However, the two discussion groups held in Edinburgh tended to be more critical towards the VIP project. This criticism was largely underpinned by the fact that none of the four schemes are planned in Scotland. While they voiced more frustration in having to fund south-based projects, overall the general impression was that they supported the VIP project. This broadly aligns with the survey results showing that the majority of Scottish participants found the project acceptable or very acceptable.

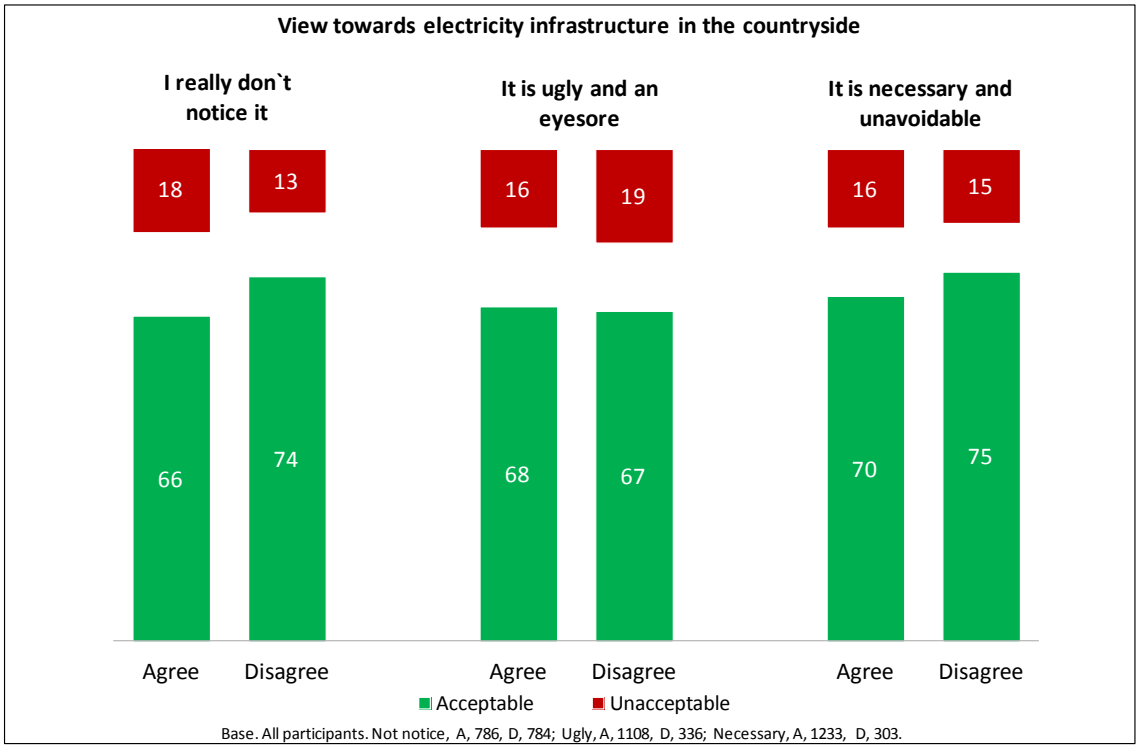
Acceptability of VIP project by attitudes to electricity infrastructure

Figure 19 shows that acceptability towards the VIP project was high, irrespective of more general views towards electivity infrastructure in the countryside. At least two thirds of bill-payers who believe it is necessary and unavoidable or who do not notice pylons in the countryside, or who do not feel it is ugly, found the VIP project acceptable.

Among participants who are somewhat apathetic towards electricity infrastructure in the countryside about two thirds who 'do not notice' it (66%) support the VIP project. An even higher proportion of bill-payers who do notice the electricity infrastructure (74%) were inclined to accept the VIP project.

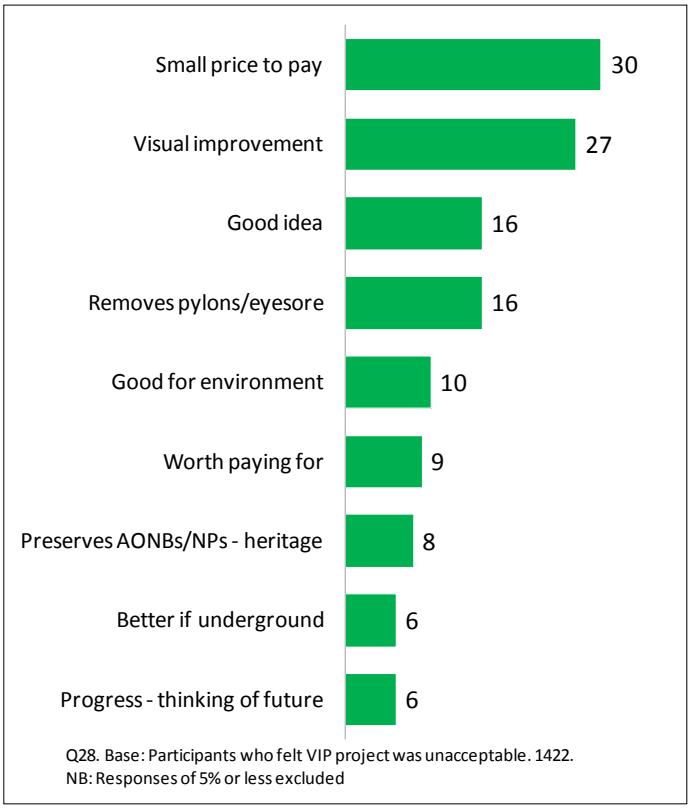
There is a similar level of acceptance of the project between those who agree and those who disagree that electricity infrastructure is ugly and an eyesore (68% and 67% respectively). Similarly, acceptability is high (70% or more) among bill-payers regardless of whether they agreed or disagreed that electricity infrastructure is necessary and unavoidable. This suggests that unacceptability of the projects is relatively low across the board (with the exception of the lowest income bracket as already discussed). Acceptability is lower among those who find it hard to give a view about electricity infrastructure, but this reflects their inability to give an opinion about it, rather than indicating objection. Unacceptability tends to be no higher among these bill-payers.

Figure 19. Acceptability of VIP project by view towards electricity infrastructure in the countryside



6.3 Reasons for support

Figure 20. Main reasons for supporting VIP project



Participants expressed a wide range of reasons for support of the VIP project. In the quantitative survey the key reasons for support were that the cost to bill-payers is low (mentioned by 30% of those who find the VIP projects acceptable), that it improves the visual appearance of these landscapes (27%), that it is an improvement overall (16%) and it removes the eyesore of pylons (16%).

The qualitative findings largely echoed the same reasons given for support of the VIP projects found in the survey. However, as is true of qualitative research, a more nuanced understanding of the rationale behind participants' acceptance of the VIP project was revealed.

The key reason for participants accepting the VIP project was simply due to the aesthetic benefit – at low cost - of removing electricity infrastructure from the natural landscape. The key drivers of support were the arguments that it is protecting these landscapes for future generations and that the long-term gain of a beautiful 'untouched' landscape outweighed the short-term pain of construction.

> *A small price to pay to keep our countryside stunning. (Survey participant, Rural, C1)*

> *60p a year is nothing in the grand scheme of things, plus it would make our national parks etc look a lot more natural and secluded, as they should be. (Survey participant, Urban, AB)*

> *73p a year. That is nothing. You can't buy a pint of beer for that. Can't even buy a pint of beer in India for that. I think that's exactly what we need and the sooner the better. 73p. Unbelievable. (Swansea, Suburban, Low Income)*

However other key reasons for accepting the VIP project included:

- The desire for VIP project to be extended, for more undergrounding.
- Fewer power outages, resulting in less and possibly safer maintenance.
- More enjoyable use of the landscape for local users with the possibility of improving tourism in these areas and safer outcomes for children.
- Producing a less harmful outcome for wildlife, specifically birds in the four scheme areas. (However, this point was contested as about half of the participants thought it may cause

more harm for the wildlife and this is discussed in the reasons for opposition section of the report'.

- Local job creation through the undergrounding process.

Some participants like it so much, they want the VIP project to be extended.

As mentioned above, the key reason participants supported the VIP project is for pure aesthetic gain; they thought undergrounding will substantially improve the outlook in the four scheme areas. However, a large number of the discussion group participants were disappointed that the planned project did not go further. This critique did not hinder their support for the current planned project, but they hoped that National Grid might be able to use this as a platform to carry out more undergrounding in other areas – a sign that they are fully on-board with the project.

> *P1. My concern was whether they [National Grid] could do a little bit more.*
> *P2. Well it needs to be looked at I mean two kilometres or three kilometres is neither here or there in many cases. Fair enough if that, sort of – which it probably does include the most visual part, but whether they could extend that a little bit, that would be better. (Swansea, Rural, C2DE)*

> *Basically, anything is an improvement, but – I mean I do question whether it could be extended. (Swansea, Rural, C2DE)*

Fewer power shortages, resulting in less, and possibly safer, maintenance.

As noted in the 'initial reactions to undergrounding' section, participants were concerned with the ability to maintain and make repairs to underground cables. Some participants thought that going underground not only resulted in the benefit of having fewer power outages and therefore requiring fewer repairs, but also it might be safer for the workmen to repair. This is an area that participants were keen to have more information on.

> *It looks like progress being made, doesn't it? Not just for aesthetics, it does protect these areas, if it is going to stop shortages, not necessarily be easier to maintain is it but going to need less maintenance. (Swindon, Urban, C2DE)*

> *I would think their health and safety would be massively more expensive [for pylons] – I don't know how many feet cables are up in the air, but you're 50 meters in the air, whatever, as [compared] to something they can access on the ground, there has got to be a health and safety saving somewhere there. (Swansea, Rural, C2DE)*

> *Once they are underground, if they are sensible enough to put in some kind of draw cable, it must be easy to change them underground that it is to change them 50 meters in the air. (Swansea, Rural, C2DE)*

Better and safer use of the four scheme areas

Participants who support the VIP project considered that while the changes to how people use these areas might not be drastic, it would improve the way people as well as the wildlife enjoy these areas.

Safer for children

A small, but notable number of participants shared concerns about the dangers of children climbing the current steel lattice pylons, despite the presence of warning signs. These participants felt that undergrounding would eliminate this concern.

> *If the children are playing in the fields, going off for a walk with the dog, I'd worry where the big pylons, because where it says keep out you know what they're like, they want to go in. They don't know what's down there, but it's always worried me with them because I did it as a kid. You can die. (Peterborough, Rural, ABC1)*

> *It's safer in some respects as well, because people can't climb up them, they can't throw a fishing rod onto a power cable that's underground. (Swindon, Urban, C2DE)*

Potential boost for tourism in these areas

Participants considered that removing the pylons is only going to assist in preserving the natural beauty of the four scheme areas and this might have the positive effect of encouraging tourism.

> *It would bring more tourists to the area. (York, Suburban, ABC1)*

> *I mean the potential for tourists particularly in places like Peak National, Lake District, Snowdonia, these areas the main industry there is tourism and it's just so much nicer without visual impairments like transmissions lines. (Swansea, Rural, C2DE)*

Better outcomes for wildlife, specifically for birds

Participants considered that, in the long-term, undergrounding will positively impact on wildlife and specifically on the way that birds use the area. The key benefit was deemed to be one of safety, with birds no longer being able to cause damage or be harmed by the power lines.

> *There are no longer birds flying into power cables, in terms of ecological impact on wildlife. (Swindon, Urban, C2DE)*

> *You're over there listening to wildlife not the whistle from a pylon or something. (Swansea, Rural, C2DE)*

> *P1. I do think they're [pylons] a danger to bird life.*
> *P2. Swans and things like that going on them.*
> *(Peterborough, Rural, ABC1)*

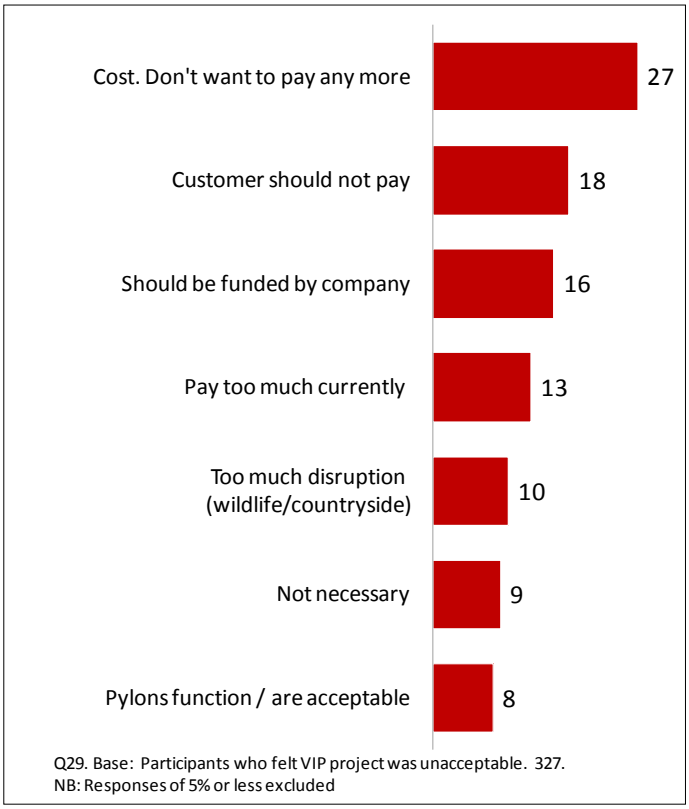
Local job creation

Participants realised that the undergrounding process would require labourers to dig the trenches and carry out manual tasks during construction. Participants saw this as a great advantage as the VIP project would provide opportunities for employment in the four scheme areas.

> *Yeah so going underground as well there's another benefit in terms of employment. It's going to create a lot of jobs to be digging. (Peterborough, Rural, ABC1).*

6.4 Reasons for opposition

Figure 21. Main reasons for opposing the VIP project



The main reasons given in the survey for not supporting the VIP schemes were related to the cost of the project and objecting to bill-payers having to fund it. The key reasons given included that they do not want to pay anything extra for their energy (mentioned by 27% of those saying it is unacceptable), that customers should not have to pay for it (18%), that energy companies should pay towards it (16%) and that energy bills are high enough already (13%).

One in ten (10%) believed it would have too much disruption, one in eleven (9%) did not think it was necessary and a further 8% thought that existing pylons are working perfectly well already.

While discussion group participants were quick to agree the VIP project offered a number of benefits, these were cautiously weighed against a range of potential negative outcomes – some of which participants felt may be mitigated with more information, but they were unwilling to fully accept the VIP project without this information.

The key reasons mentioned for opposing the VIP project included:

- That the project is not fundamentally necessary, it is for aesthetic purposes only.
- Regardless of whether a good idea, in principal, consumers should not need to pay for the work.
- Disruption to wildlife during construction and unknown long-term effects.
- The ability to maintain the underground cables and the associated costs in doing so.
- If given the choice, participants would choose to spend their contribution on other issues which they view as more important.

The project is not a necessity

The biggest critique of the VIP project was that it is purely for aesthetic purposes; it is not necessary in their view. Participants considered that they would find the project more acceptable if the current pylons had come to the end of their life and needed replacing anyway. The essence of this opposition filtered through a range of opposing conversations.

> *I do think it's better that you can't see them. But I think if they're there anyway and people still go and visit these places, then, if it's not broken then why fix that? If they're going to replace them then yeah it kind of makes sense that they can put underground ones in, but [not] if they're just doing it to make it look better. (Peterborough, Rural, ABC1)*

Personally, unless there was any real advantage to doing this, I think if it's just aesthetics, I think it's a lot of hassle for something that's not necessarily broken. (Swindon, Urban, ABC1)

P1. If the pylons are already there why are they doing it?
P2. I just think it's a waste of money if the pylons are there anyway and they've been there for years...
(Edinburgh, Urban, ABC1)

In principal, consumers should not have to pay

The second major opposition to the VIP project was that while participants were on board with the concept, in principal, they do not think consumers should have to pay. Generally, participants thought the amount presented was affordable. However, there were three main reasons why they did not think consumers should have to pay. Firstly, as noted above, the work was viewed as unnecessary and therefore the project was not deemed cost effective or worthwhile.

Yeah of course it's affordable but it's the principle. (Edinburgh, Urban, ABC1)

It's not because it's going to cost 73p. 73p is neither here nor there, it's like a third of a cup of Costa. But as you say it's the principle of it. So no, I wouldn't be happy to pay anything at all. (Peterborough, Rural, Low Income and Power Reliant)

Secondly, some participants' tarnished view of the energy sector led them to think that the highly profitable energy companies should pay. Most participants who opposed the VIP project in principle agreed that the energy sector should foot the bill for the VIP project.

I mean it's 25p, it's irrelevant, but it's the principle of being asked to invest in their infrastructure and in their business more than the amount of money. (York, Suburban, C2DE)

P1. I've got the big-ticket question here how much profit did they [energy companies] make last year?
P2. That's what I was going to say. Why can't the supplier stand the expense?
(Edinburgh, Suburban, C2DE)

If they want to go ahead they should pay for it out of their profits, not pass it on to poor customers like me who barely manage at the moment on their very low incomes. I am cold most of the time to keep my energy bills down. (Survey participant, Urban, D)

Thirdly, for some participants, it was the fact that an increase in their bill would not result in an improvement for them personally. They thought the cost should be localised or at least paid by AONB / National Park users who will reap the benefit.

I don't think is it necessarily fair to charge everyone when it only benefits the people who are going there or live there. (Peterborough, Rural, C2DE)

They are necessary, however they aren't used in my area so why should I pay more each year when other costs are rising too. It might not seem like much to start with, however it all adds up eventually. (Survey participant, Suburban, C2)

I imagine when people learn what the cost is and what the extra charge will be and it won't obviously be just to the people in those areas it will be to the whole network, I think people will probably find it unacceptable because then it will be a case of, well hang on a minute I'm paying for this why aren't you doing it in your back garden. (York, Suburban, ABC1)

This position was particularly noticeable in the discussion groups held in Scotland, where there are no VIP schemes planned.

P1. Now I'm really against it, don't get me started it's like HS2 railway we're all paying the bill for that, why? So [it will] take them half an hour less to get to London from Birmingham.
P2. So, we're paying for England
(Edinburgh, Suburban, C2DE)

P1. I know it's not a lot, 73 pence a year, but it's like nothing getting done in Scotland so it's all for down South and I think if you put that together that's a lot of money...
P2. I changed my [acceptability] score because all of these are in the south right if they had been spread evenly across the UK it would have been fine. If there had been one in Scotland it would have been a different answer.
(Edinburgh, Suburban, C2DE)

Disrupting the wildlife in the short and long term

Participants – those supporting and opposing the VIP project - shared great concern for the wildlife. They were worried about the short and long-term impacts undergrounding might have on the flora and fauna, both during the construction process and once the cables were underground.

I just still would have concerns about the knock-on effect it would have to surrounding wildlife and stuff. You can't go like digging up massive areas for long periods of time without it having some effect on the natural balance of things in that area. (York, Suburban, C2DE)

You have got diggers, tractors there, digging up all that land, that's disturbing the wildlife, they have got to go somewhere. (Swindon, Urban, C2DE)

Aren't we going to be upsetting the animal rights and animal welfare people as well? We'd be destroying badger sets and holes or whatever, underground? (York, Suburban, ABC1)

Some participants queried the ability to restore the land to how it was prior to the undergrounding. They were dubious that the impact on the visual landscape and the local wildlife would be minimal. There is a desire for more information on the short and long-term impacts of undergrounding (explored in the 'Issues for clarification' section of the report).

With the pylons then yes, you've got the pylons that you can see but the land around it and underneath it is left alone. Whereas if you go underground the land above it has to have – there's restrictions on what you can do and what you can plant. And hedge rows, and to me hedge rows and trees, that's the nature. That's the beauty. And if you can't plant them within 200 metres…you're making more of a blot, because you look at it and you think look at that just big empty space and then around it is all trees. (Peterborough, Rural, C2DE)

The *cost associated with maintaining the underground cables*

The ability of National Grid to maintain the cables and the associated costs in fixing any damage was another cause for concern. Some participants felt that without this information, it was not possible to give a fully informed opinion on how acceptable they found the VIP project.

> *There would be other problems as well, what you said was like if the pylons are up as they are now and there's a power [outage, we] could probably visually see where that problem is. If there's a power cut and it's underground, it's going to take far longer probably to find it. (York, Suburban, ABC1)*

> *The pictures when there is no pylons, obviously it's a lot more pleasant, but again it's like we all keep saying about the cost. When they dig up five miles of ground or whatever and that cable goes down it's going to be a lot more expensive to put it right because then they've got to start digging all over again haven't they to find the fault. (Peterborough, Rural, ABC1)*

> *[Negatives to undergrounding are] the cost, the time, especially if something goes wrong. The cost to fix a problem, are they going to know where it is? Are they going to have to dig that whole route up to find the problem? I know with the pylons they give a reading, if there's something going on they can pinpoint the problem more quickly. (Swindon, Urban, ABC1)*

More pressing matters to spend money on

Some participants felt that there were other, more important public goods and services, that if given the choice, they would rather spend their money on. Participants exemplified this point by saying that they would rather contribute towards improving the healthcare or education system than towards improving the visual outlook of the landscape through the VIP project.

> *I think there are so many needy services out there, just take the NHS or education, whatever, if we all gave one pence, two pence, five pence a week or a month, that would be millions. That would be more nurses, more doctors, better services. I think that's more important than the energy companies filling their pockets. (Swansea, Suburban, ABC1)*

> *Is it really money worth spending? Is it not worth spending somewhere else that's going to make a difference to people's lives as opposed to what the countryside looks like? (Peterborough Rural, Low Income and Power Reliant)*

6.6 Bill-payers' response to project cost levy period

The household cost of £0.73 per year for the next 25 years is affordable

As already mentioned, most discussion group participants tended to find the proposed household cost of £0.73 per year for a period of 25 years affordable and acceptable.

> *That's quite reasonable to be fair and 73p it's not a great deal of money in the scheme of it. We probably throw 73p a year down the drain without even realising it. (Peterborough, Rural, ABC1)*

> *P1: Personally, I think it's value for money, I would have expected the cost to an individual to be much higher than that. I do think it's value for money, yeah.*
> *P2: I was surprised at how much it cost. It's quite good.*
> *(Swindon, Urban, ABC1)*

For participants that accepted and supported the VIP project, they were not typically averse to paying a higher annual cost over a shorter period of time. The total cost was seen as reasonable and easily affordable, and many were equally if not more happy to pay over a shorter period of time, such as over 10 years.

For the participants opposing the idea of contributing to the schemes at all, the payback period was irrelevant, and they objected to the levy whether over a short or long period.

The levy should come with transparency

As mentioned in the introduction section of the report, many participants were generally distrusting of the energy sector. Although most were willing to financially contribute towards the VIP project, they caveat their response with a request for transparency from National Grid. They want National Grid to clearly show how their contribution is funding the VIP project, so that they can be reassured it does not become absorbed as a permanent bill increase.

> *P1. For me it wouldn't bother me doing it over 10 years, five years like you say it's [the amount is] not life changing. If you're doing that over five years and you said that then increases the cost to four quid over the five years that wouldn't bother me in the slightest, but I'd want to know that it wasn't then going to be just be absorbed into my monthly bill going forward quietly. I'd want to see it probably itemized somehow as these projects.*
> *P2. Yeah you want to see it itemized on your bill or at least you could go back to [supply] companies or National Grid's account, see it itemized and then see it drop off after the 5 years, 10 years or 25 years. You don't want to see it then become another charge under another name; that would annoy me.*
> *(Swansea, Rural, C2DE)*

> *I agree with the transparency point because what's to stop whoever Scottish Power putting your bill up by a hundred pound a year and blaming it on projects because if we hadn't been to this tonight how would we know. You know what I mean. (Edinburgh, Urban, ABC1)*

There was also some cynicism that the quoted cost would be as stated and would not increase. Some feared that the cost is only the element that National Grid would charge and that energy

suppliers or DNOs would add to it. Others equated the schemes to previous large-scale infrastructure projects for which costs have escalated far beyond the original estimates.

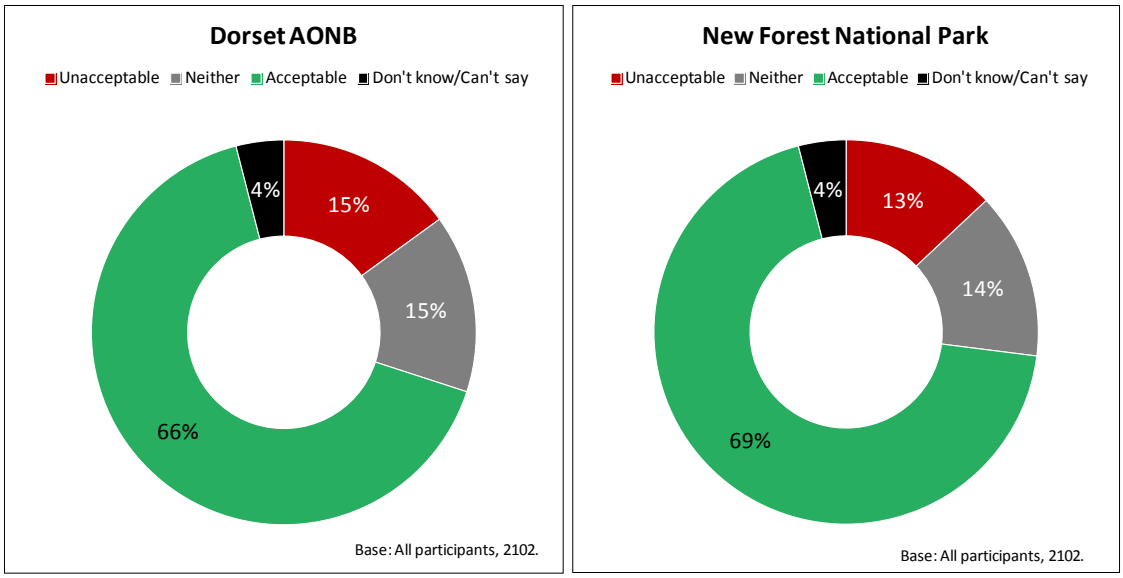
> *Your problem is the National Grid would charge the 73p, it's going to be all the other companies that put the prices up. So that 73p realistically to you it's probably going to be £170 but for the purpose of this the National Grid they are probably saying it's going to be 73p. (Peterborough, Rural, ABC1)*

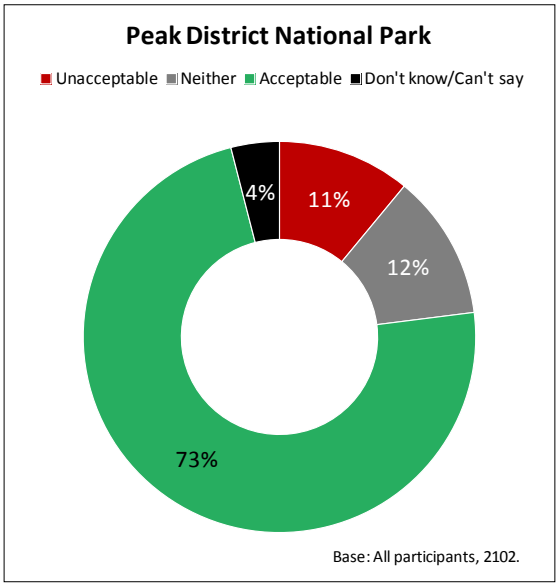
> *Whilst it will be beautiful to see no pylons, we have seen them for years and again the little person will suffer, and it will end up being a lot more than 60p. (Survey participant, Suburban, AB)*

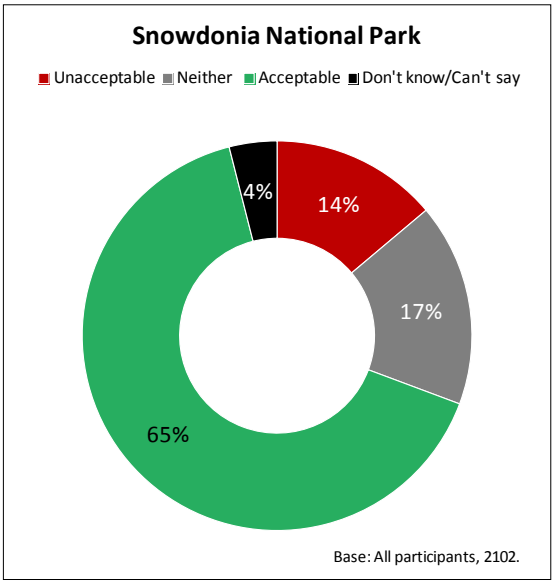
6.7 Acceptability of individual VIP schemes

Each of the four VIP schemes were found to be acceptable by at least 65% of survey participants. About two thirds of participants found the Dorset AONB (66%), New Forest National Park (69%) and Snowdonia National Park (65%) acceptable. While a slightly larger majority of nearly three quarters (73%) found the Peak District National Park scheme to be acceptable. 15% or less thought any of the VIP schemes were unacceptable.

Figure 22. Acceptability of the Dorset, New Forest, Peak District and Snowdonia schemes







In the discussion groups the majority of participants did not distinguish between the four schemes and found them all equally acceptable or unacceptable. Responses were based more on principle, rather than the specifics of the individual scheme.

There was a small tendency for participants to be slightly more concerned with the ability to re-plant and restore the land in the dense forest area of the New Forest National Park. The New Forest National Park also raised the most concerns regarding the impact of the undergrounding construction on the wildlife.

> *I think there's going to be a lot of disruption to the New Forest, because they've got to divert that way. It's quite a small area. It doesn't seem as appealing as the other one [Dorset], because it was just fields, whereas [in the New Forest] you've got forests and trees and the habitat. (Swindon, Urban, ABC1)*

> *The New Forest you've got animals walking around the New Forest and all sorts of wildlife and it's alright somebody in an office saying that they'll be considerate – but diggers and things go in and stuff gets ripped up and pieces of hedgerows or whatever might be really on balance a natural. (York, Suburban, C2DE)*

There were very few differences brought up between the other three proposed VIP schemes. The Welsh groups were more vocal about Snowdonia, largely because it is the only VIP scheme in Wales and they are most familiar with that area. A handful of participants also raised concerns about how the Trans Pennine trail in the Peak National Park would be re-routed during the construction period and how this might impact on tourism to that area, but overall, they thought each of the four schemes was worthwhile.

6.8 Areas requiring clarification

There were several areas which group participants wanted additional clarity on, either to be able to provide a more informed response on the VIP projects, or for general interest. These included:

- Whether there are any additional technical benefits to undergrounding beyond a lower risk of weather and storm damage. For instance, is it more cost-effective in the long-term

- How maintenance of the underground lines works
- Whether the 'hum' emitted from power lines would have any negative effects on underground wildlife, or to the geology of the area
- How well tested underground lines are – are they already used in AONBs/National Parks?
- Are there other undergrounding projects planned in other areas?

7 CONCLUSIONS

Summary

- A majority of bill-payers (66%) support the VIP project and find it acceptable for consumers to pay for it via increases in their electricity bill. Unacceptability is relatively low, at 15%.
- The most common reason for support of the VIP project is that it enhances the country's most beautiful landscapes, at an affordable cost. The cost per household is generally seen as low, but there is recognition the total cost is substantial. Those supporting the project are open to a shorter payback period, given the perceived low per-household cost.
- The level of acceptability is high considering the underlying negativity that bill-payers express towards the energy sector and organisations involved in it. Moreover, the minority's opposition to the VIP project is often underpinned by hostility to the energy sector and rejection, in principle, that consumers should bear the cost of this project.
- As would be expected, users of these protected landscapes are more favourable toward the project than non-users. However, bill-payers who never visit these areas are still twice as likely to support it than not. Acceptability is relatively high across most types of bill-payer. Bill-payers who believe that electricity infrastructure in the countryside is necessary, is not ugly or who do not notice it all show acceptability levels of 65% or above.
- As might be expected, acceptability declines with income and is lowest among those who find it hardest to pay for their electricity bills. However, in all except the lowest income band, more than half of bill-payers find the project acceptable. Across all bill-payers, regardless of income group, a higher proportion find it acceptable than unacceptable. Although bill-payers perceive electricity bills to be high, the bill increase that the VIP project would incur is generally considered to be affordable.
- Younger bill-payers are also less likely to find it acceptable, however this is typically due to apathy or being unable to give a view one way or the other- they are no more likely to say it is unacceptable.
- Bill-payers do have some concerns about the VIP project – namely potential environmental damage (either during construction, or as an ongoing unintended consequence), questions over the benefit of such a scheme where existing infrastructure is still fit for purpose, and the appropriateness of consumers footing the bill when the energy sector is considered so profitable.
- However, through the weighing up process that bill-payers undertake to assess the acceptability of the VIP project, a significant majority conclude that it is money well spent and acceptable for consumers to cover this cost.
- There are a number of issues that bill-payers seek clarity on to enhance their acceptance of the project, including transparency in the payment process (this is seen as a key hygiene factor), assurances that the use of undergrounded power lines is well tested and brings no adverse side-effects to the area, and that maintenance costs are not excessively high when compared to overhead lines and pylons.

APPENDICES

All appendices can be found within the separate document titled ‘3155 VIP Report Appendices’