

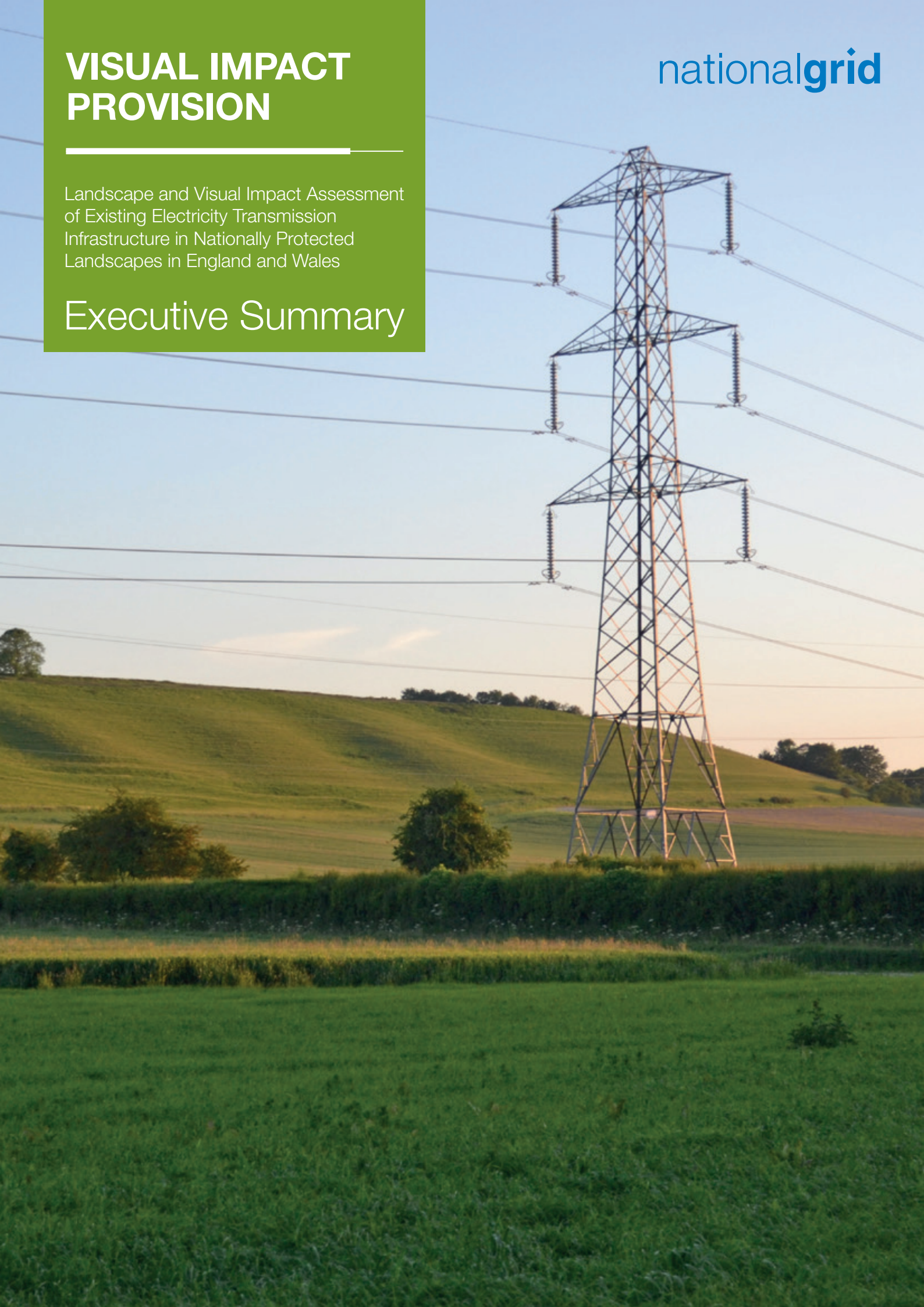
# VISUAL IMPACT PROVISION

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Landscape and Visual Impact Assessment  
of Existing Electricity Transmission  
Infrastructure in Nationally Protected  
Landscapes in England and Wales

## Executive Summary

nationalgrid



# Key findings

The following document is an **Executive Summary of the Landscape and Visual Impact Assessment of Existing Electricity Transmission Infrastructure in Nationally Protected Landscapes in England and Wales**. A copy of the full technical report is available at [www.nationalgrid.com/vip](http://www.nationalgrid.com/vip).



- Major landscape and visual assessment project now complete.
- 130 subsections of transmission line assessed in 30 AONBs and National Parks in England and Wales.
- Eight areas emerged as being highly adversely affected by existing National Grid transmission lines.
- Dorset, High Weald, North Wessex Downs and Tamar Valley AONBs on shortlist along with Brecon Beacons, New Forest, Peak District and Snowdonia National Parks.
- Report looks only at landscape and visual impacts. Other factors such as geology, ecology and archaeology to be considered in next phase.
- Results of the landscape and visual impact assessment enabled project's Stakeholder Advisory Group to consider next options.
- Eight locations to be taken forward for further investigative work and input from local stakeholders and communities.





# Landscape and visual impact assessment

**To inform decision making as to which parts of National Grid’s electricity infrastructure have the worst impact on AONBs and National Parks in England and Wales, the Visual Impact Provision (VIP) project’s stakeholder advisory group needed a methodology which assessed all of the locations against a standard set of criteria.**

The resulting landscape and visual impact assessment (LVIA) enables this in a transparent and equitable way.

The emphasis for the LVIA is on making a comparative assessment of the landscape and visual impacts of the sections of transmission lines that lie within the designated areas and identifying a possible shortlist of candidate schemes for consideration by the Stakeholder Advisory Group in order to decide which ones should be taken forward for more detailed technical assessment.

During the assessment process, consideration has also been given to the issue of transmission lines that lie outside, but in reasonable proximity to, designated landscapes. To address this the authorities responsible

for each designated landscape were approached by National Grid and invited, if they so wished, to make a case for such lines to be assessed. Four cases were made and accepted and so lines adjacent to the Howardian Hills and the Quantock Hills AONBs and the Pembrokeshire and Northumberland National Parks have been assessed using the same method that was adopted for lines lying within the designated landscapes

Experienced landscape planning consultants, Gillespies and Land Use Consultants, were appointed to carry out the detailed landscape and visual impact assessment work, in association with Carys Swanwick as National Grid’s independent adviser.

## Overall approach and method of assessment

**The approach to the assessment is based on the third edition of the published Guidelines for Landscape and Visual Impact Assessment (GLVIA3)<sup>1</sup>.**

There are considered to be considerable benefits in using the accepted and familiar approach of LVIA, which has been in existence for some time and has been scrutinised and debated through preparation and application of three editions of the published guidance between 1995 and 2013.

The specific approach for VIP was developed by Carys Swanwick for National Grid. It was initially outlined in the VIP Landscape and Visual Impact Methodology Statement, which accompanied National Grid’s policy statement on using the VIP and was developed in more detail at the start of the project. The overall approach is best described as a ‘reverse landscape and visual impact assessment’ process, in that it applies the LVIA approach to development which is already present in the landscape. Since the transmission lines in question are already present in the landscape, the assessment focuses on establishing the importance of an impact

which is already known to exist. This is a fundamental difference to standard LVIA of new proposals where impacts, and their significance, can only be predicted.

### Scope and definitions

For the purposes of this work the term ‘Visual Impact’ in the Visual Impact Provision has been interpreted as meaning landscape and visual impacts as commonly understood in the process of LVIA where:

- **Landscape impacts** means impacts on “the landscape as a resource in its own right”. (GLVIA3 Para 2.21)
- **Visual impacts** means impacts on “specific views and on the general visual amenity experienced by people”. (GLVIA3 Para 2.21)

<sup>1</sup> Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment 3rd edition. Commissioned writer Carys Swanwick.

### The method

The aim of the assessment project has been to identify the stretches of existing transmission lines in designated areas that have the most important adverse impacts on the landscape and on people's views and visual amenity. The overall process has been the same for both landscape and visual impacts, as defined above, but the detail has been different for each. The common steps are broadly as follows:

- Define an appropriate study area, sufficient to cover all the potential landscape and visual impacts, for each section of line to be considered
- Identify those aspects of the existing landscape or visual environment that are affected by the transmission line - these can be considered as the 'receptors' (in LVIA language) of the impacts
- Identify, list and briefly describe the impacts of each specific subsection of transmission line
- Assess the importance of each impact identified for each subsection, using a standard assessment framework
- Compare the level of importance of the impacts of each section

### Identifying the landscape and visual receptors

The term receptors is used in LVIA to mean the aspects of the landscape and the groups of people who may be affected by the transmission/pylon lines. For the VIP assessment:

- The landscape receptor is defined as the character of the landscape that is influenced by the transmission line
- The visual receptors are defined, as in GLVIA3, as the groups of people who live in or visit the designated landscapes and are likely to be particularly engaged with views and visual amenity. They are:
  - Local communities (e.g. villages and settlements where, given the emphasis in VIP on public benefit, we consider clusters of dwellings but not views from individual properties)
  - People using nationally designated or regionally promoted footpaths, cycle routes and bridleways
  - Users of the local rights of way network and/or areas of open access land
  - Visitors at publicly accessible sites such as gardens and designed landscapes, historic sites and other visitor attractions or outdoor recreation facilities where the landscape is an important part of the experience

- Tourists staying at caravan parks, campsites and other accommodation where the landscape may be an important part of the visitor experience
- Travellers on recognised scenic or promoted tourist routes

Viewpoints have been selected, aided by consultation with the relevant National Park or AONB officers, to represent the views which are experienced by these groups of people. The number of viewpoints used is not as great as might be expected in a single project LVIA but includes those considered to be most helpful in assessing the impact of the transmission lines and that could be covered in the time available.

### Defining the scope of the work

The number of sections of transmission line, their combined length and their geographical distribution mean that the work involved was substantial. It has been vital to focus resources on assembling sufficient evidence to inform the prioritisation of sections of line for mitigation, without becoming too detailed. After discussions with the Stakeholder Advisory Group and with National Grid, we took these decisions to focus the work as follows:

- The assessment would focus on receptors within 5km of the transmission line, and especially within 2km, unless in exceptional circumstances the survey team considers that there are important impacts between 5km and 10km from the transmission line
- Given the purpose of the VIP the focus is firmly on landscape and visual receptors inside the designated areas, even though some of the lines have an influence on landscapes and people outside the areas. This same principle has been applied to additional lines included in the study that are outside though near to the designated areas. They too have been assessed for their impact on the designated areas themselves.
- Landscape and visual issues are the clear focus of this project. The impacts of the transmission lines on historic environment/heritage assets and their settings in their own right have not been dealt with separately. We have however touched on historic environment issues in terms of their contribution to landscape value and also by considering visual impacts on visitors to historic environment/heritage sites as one of our groups of visual receptors.

### Assessing the importance of the impacts

The key to the project is judgements about the relative importance of the landscape and visual impacts identified. The approach is based on the framework set out in GLVIA3, adapted for assessment of existing transmission lines. It requires judgements in terms of four criteria, namely the:

- **Susceptibility** of the receptor to the specific impacts of the existing transmission line
- **Value** of the receptor affected
- **Size or scale** of the impact (i.e. how much of an effect it has)
- **Geographical extent** of the area or of the group of people that will be affected

Details of the interpretation of these criteria are contained in the full technical report. Separate judgements are made on each both for the impact on the landscape and the impact on the different groups of people. A final judgement on the importance of the impact is based on the profile of the individual judgements. In all cases judgements are initially expressed on a four-point word scale of low, moderate, high and very high.

For **landscape impacts** the judgements take account of the:

- Ability of the landscape to accommodate the transmission line, reflecting judgements on factors related to landform, land cover, scale of the landscape, the nature of skylines, prominent landscape features, apparent human influence, the presence of other 'vertical infrastructure' and perceptual aspects of the landscape including tranquillity. (These factors incorporate the Holford Rules which have for a number of years provided the principal guidance on routing of new transmission lines)
- Relative value of the areas of landscape whose character is influenced by the transmission line, reflecting judgements on factors including the special qualities of the designated area, landscape quality, scenic quality, conservation interests, recreational value and perceptual aspects and tranquillity
- Scale of the impact on the landscape, meaning the degree to which it changes the character of the landscape and how much it effects key characteristics the geographical extent of the area over which the landscape is influenced.

For **visual impacts** the judgements are initially made at individual viewpoints, representing the experience of one or more of the groups of people listed above. The viewpoint assessments are then used to inform an overview of the impact on each of the groups of people. The judgements take account of the:

- Value of the view at each viewpoint
- Scale of the impact, reflecting the dominance of the transmission line in the view, the number of pylons visible and the way in which they are seen relative to one another and to their surroundings
- Geographical extent of the impact, that is whether at one extreme the transmission line is seen at only one or two locations or by a relatively small number of viewers and at the other it is seen at multiple locations across a wide area or by a large number of people.

Scoring is not normally recommended in LVIA but in order to achieve reasonable differentiation between the landscape and visual impacts of different sections of transmission lines in different locations and so aid decision-making, the final step in the process is to convert the verbal assessments into scores so that the assessment subsections can be rank ordered in terms of the score for overall combined importance of landscape and visual impacts.

The scores used are:

Points	Importance
10	Very high
6	High
3	Moderate

These figures were selected to give a reasonable degree of differentiation between subsections without extending the scale unreasonably. It was agreed at the early benchmarking and method development workshops that assessments of very high impact, scoring 10, would be reserved for the worst cases of landscape or visual impact.

# Outcomes of the assessment

**A total of 50 sections of line have been assessed in 26 designated areas and have been divided into 122 subsections each of which has been separately assessed. In addition a further six sections of line that run adjacent to four additional designated landscapes have been assessed and divided into eight subsections, making a total of 130 assessment subsections.**

In order to summarise the evidence from the survey to show the relative importance of the landscape and visual impact for each of these subsections a series of steps have been taken:

- Individual scores for all subsections have been divided initially into three categories – those scoring 0-9, those scoring 10-19, and those scoring 20 or more, which were considered to have high or very high importance impacts. There were 29 subsections scoring 20 or above so the high-scoring subsections were further divided, using 25 as the breakpoint between high and very high impacts.
- The resulting list has been sorted and ranked by combined landscape and visual score for all subsections. Inspection of this first ranking has shown that high scores arise either because one (or very occasionally more than one) of the impacts on landscape or visual receptors has been given a score of 10 signifying a very high impact, or because a score of 6, signifying a high impact, has been given to impact on several of the receptors.

## Suggested shortlist of subsections for further investigation

At the end of the assessment exercise 12 subsections have emerged as having the highest level of combined landscape and visual impacts. They represent eight designated landscapes, including four AONBs and four National Parks and cover several different parts of England and Wales. The areas are, in alphabetical order:

### AONBs

Dorset

High Weald

North Wessex Downs

Tamar Valley

### National Parks

Brecon Beacons

New Forest

Peak District

Snowdonia

## Visual Impact Provision

The twelve subsections, listed in order of combined landscape and visual impact score and by alphabetical order where scores are the same, are:

Designated Area	Subsection	Score
Tamar Valley AONB	YF.1	30
Peak District NP	4ZO.4	28
Dorset AONB	4YA.7	27
Peak District NP	4ZO.2	27
Peak District NP	4ZO.3	27
Brecon Beacons NP	4YU.3	26
North Wessex Downs AONB	YYM.4	26
Snowdonia NP	4ZC.1	26
Dorset AONB	4VN.2	25
Dorset AONB	4YA.5	25
High Weald AONB	4ZJ.1	25
New Forest NP	4YB.2	25

Based only on the evidence from the LVIA project this provides a shortlist for consideration by the Stakeholder Advisory Group leading to decisions on next steps. There are a number of points to note about the list:

- Some of the subsections are contiguous or in close proximity to other subsections of the same transmission line and may need to be linked to form appropriate study areas for further technical assessment;
- There are significant environmental designations in close proximity to some of these subsections. These will need to be carefully considered in considering potential environmental effects of any mitigation proposals;

- There are smaller distribution lines in reasonable proximity to some of the subsections, which means that if mitigation works are carried out to the transmission lines there will still be residual landscape and visual impacts from the distribution lines.

# The Visual Impact Provision

**Ofgem and National Grid have agreed a new set of price controls and incentives for the period from April 2013 to March 2021. This includes a provision of £500 million for electricity transmission owners to mitigate the visual impact of existing electricity infrastructure in nationally protected landscapes in Great Britain.**

For National Grid, which is the transmission owner in England and Wales, this means considering the effects of existing infrastructure on the visual amenity and landscapes of Areas of Outstanding Natural Beauty (AONBs) and National Parks. National Grid calls this the **Visual Impact Provision (VIP)**.

In 2012-13 National Grid prepared a Visual Impact Provision policy setting out how the fund would be used and how stakeholders would be engaged in identifying opportunities for maximising benefits from it. After a public consultation on the draft between July and September 2013 the policy statement was presented to Ofgem for review.

The policy stated that National Grid's objective:

"Is to achieve the maximum enhancement to the landscape from the available funds whilst ensuring that no significant adverse impacts arise as a result".

The policy document included a set of guiding principles and a commitment to the creation of a Stakeholder Advisory Group consisting of stakeholders with national remit for England and Wales, and ways of engaging other stakeholders. National Grid is committed to using the VIP in a collaborative and transparent way.

There have been two major strands of work so far:

- The establishment and operation of the Stakeholder Advisory Group, whose remit is to assist National Grid in deciding how best to use the VIP
- The initiation and conduct of a Landscape and Visual Impact Assessment (LVIA) project to provide evidence to National Grid and the Stakeholder Advisory Group about the relative impacts of the different transmission lines to inform the decision making process

## The Stakeholder Advisory Group

The Stakeholder Advisory Group is chaired by independent environmental advisor and broadcaster, Chris Baines and comprises senior representatives of groups with a national remit in the ongoing protection and enhancement of the landscape, as well as National Grid.

The sixteen member organisations, in alphabetical order, are:

- Cadw
- Campaign for National Parks
- Campaign to Protect Rural England
- Campaign for the Protection of Rural Wales
- English Heritage
- Landscape Institute
- National Association for AONBs
- National Grid
- National Parks England
- National Parks Wales
- National Trust
- Natural England
- Natural Resources Wales
- The Ramblers
- Visit England
- Visit Wales

Ofgem attends meetings as an observer.

To date the group has been involved in:

- Helping to identify priorities for use of the VIP
- Considering the technical outputs from the work
- Considering the views of wider stakeholders who are not represented on the group
- Identifying specific infrastructure and locations which would benefit most from the VIP

In addition National Grid appointed Carys Swanwick as its independent advisor on the technical aspects of the landscape and visual impact work required to inform decisions about use of the VIP. She has been responsible for providing a link between National Grid and the technical aspects of the project, overseeing and liaising with the consultants appointed to carry out the detailed assessment work.

The Group has been involved in discussions about the approach to the landscape and visual impact assessment project, has received presentations and progress reports on the work and has considered the outcomes.



## For further information

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