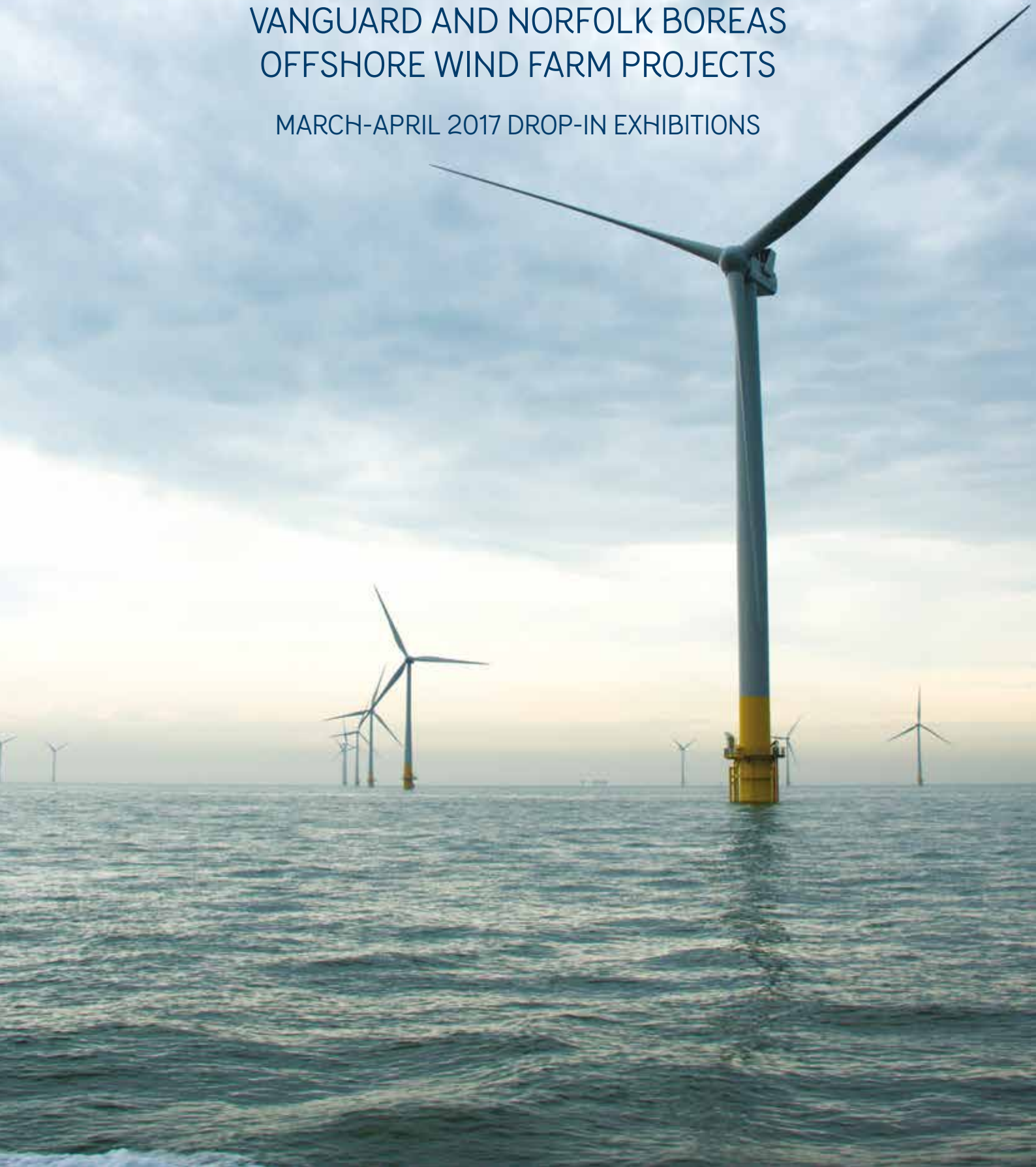


HEARING YOUR VIEWS II

A SUMMARY REPORT OF THE NORFOLK
VANGUARD AND NORFOLK BOREAS
OFFSHORE WIND FARM PROJECTS

MARCH-APRIL 2017 DROP-IN EXHIBITIONS



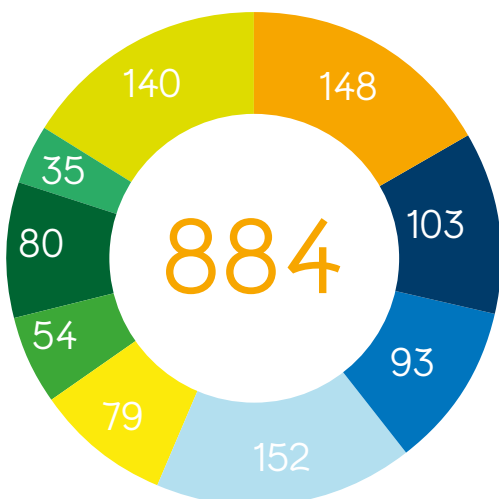
INTRODUCTION

Thank you to all those who came to meet us at the public drop-in events held in Norfolk from 21st March to 1st April. The events provided us with an opportunity to illustrate how feedback from the events we had held back in October 2016, along with other sources of data, has helped us continue to develop our proposal for the Norfolk Vanguard Offshore Wind Farm. They also allowed us to introduce local communities to Norfolk Boreas, a second Vattenfall offshore wind farm proposal which could potentially share much of its infrastructure with Norfolk Vanguard.

What was particularly encouraging about the events was that, while we were happy with the attendance in October, more people appeared to be aware of the Norfolk Vanguard project than at the autumn events and there was a modest increase in attendance of 12%. This increase may have been because this time we held events at nine locations, namely Necton, Dereham, Reepham, Aylsham, North Walsham, Bacton, Happisburgh, Norwich and Great Yarmouth whereas in Autumn last year we held seven events. Requests from the local community in Reepham prompted convening an event there. We also held an additional event in Bacton, enabling coastal communities living near potential landfall locations to attend either the Bacton or Happisburgh events.

We are also very pleased to report a significant increase in feedback levels from participants. Between 21st March and 19th May 2017 we received 268 feedback form responses as opposed to 105 following the October events, an increase of 150%.

Drop-in event attendance



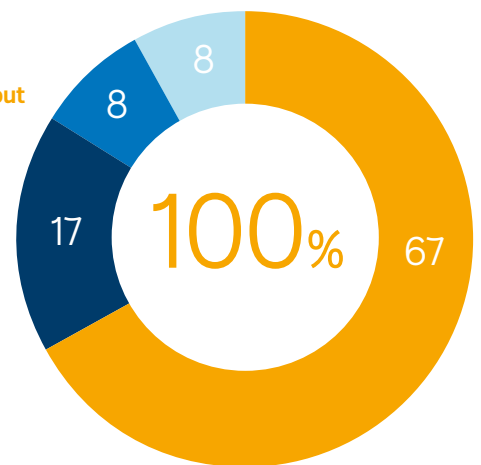
The graph above shows 884 people signed into the March-April Drop in Events.

The following summary report contains a top line analysis of the data gathered from this feedback. A full report of all the data received in answer to the feedback form accompanying the information presented during our March / April 2017 drop-ins is compiled in "Hearing Your Views II – Full Report".

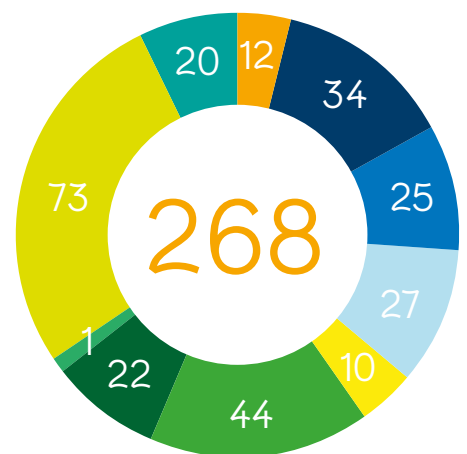
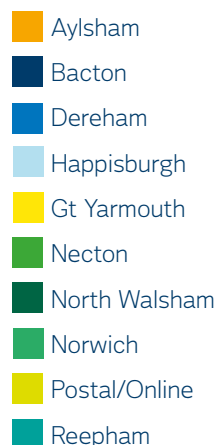
All feedback received either via feedback form, email, mail or telephone conversations, will be compiled and summarised in the 'Full Consultation Report'. This will include feedback gathered during the statutory consultation due in November 2017. The Consultation Report will be published as part of our final Development Consent Order Application in Summer 2018.

As at the last round of exhibitions, the majority of the people who answered our question on how they had heard about the drop-ins, referred to the newsletter delivered to over 35,000 households. We also ran a series of adverts in the local press promoting the events and 8% of people stated that this has been the way they had heard about the events. We also wrote to people who had registered their interest in the project, as well as to stakeholders, inviting them to participate.

How did you find out about the event?



feedback forms per venue and online/postal



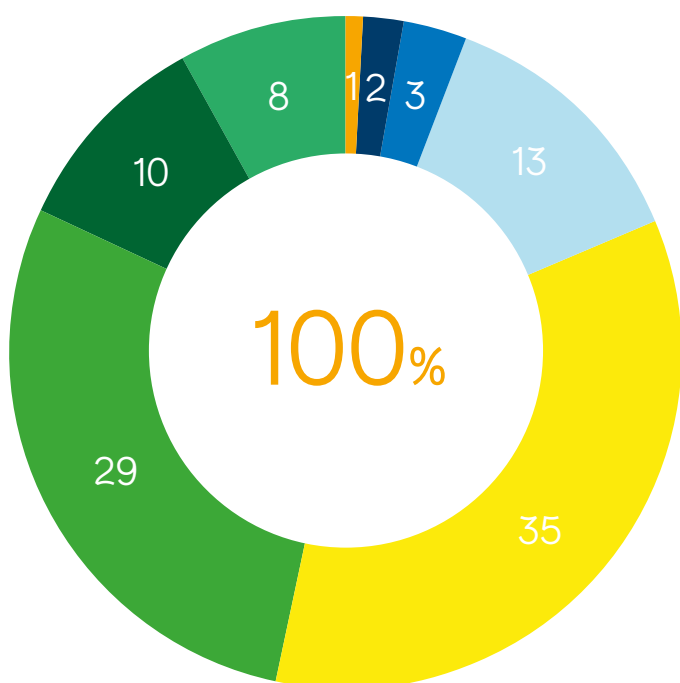
GENERAL DEMOGRAPHICS

It is extremely useful for us to understand who attends the events so we can make sure there aren't any large gaps in a community's make-up which aren't being properly represented. For instance, because of access issues in certain very rural areas.

We were extremely pleased to see that our choice of venues resulted in a representative group attending - the profile of respondees was typical for a public consultations – see below.

Age groups

■ Under 18
 ■ 18-25
 ■ 26-35
 ■ 36-50
 ■ 51-65
■ 66-75
 ■ 75+
 ■ No response



In total over 65 students visited drop-in sessions. However as they did not complete feedback forms, or did not answer the age question, its not reflected here.

We made an effort to engage with those that are traditionally harder to reach – which includes younger people and students. This included delivering sessions in 3 schools/colleges in advance of the drop-in's to encourage participation (Dereham 6th Form, Reepham College and University Technical College Norfolk - UTCN). In total we engaged with just over 400 students in advance of the programme.

The first drop-in at Dereham College attracted over 50 students who were able to talk to various team members. In total over 65 students visited drop-in sessions. Notably, younger people did not respond to feed-back forms to the same degree as older participants.

THE PURPOSE OF THE SPRING DROP-INS

The Purpose of the open drop-in exhibitions was to:

- Re-introduce Norfolk Vanguard and Introduce Norfolk Boreas
- Demonstrate to the public how the plans have evolved and how the feedback from the last round of public drop-ins has affected the plans
- Display the refined plans for Norfolk Vanguard and Norfolk Boreas
- Seek public comments and feedback on how to improve the project design and consultation process

We chose the format of a drop-in exhibition, open to all, because it provides an informal yet structured space over a defined period of time. People arrive at their convenience and stay as long as they like. They can find out about us and our project proposals and contribute their views in an atmosphere we hope was conducive to conversation.

Norfolk Vanguard and Norfolk Boreas team-members, including technical and environmental experts, were on hand at the drop-in events to answer questions and explain the material, maps, interactive maps and early stage digital animation and illustrative models on display. In response to the request from the October 2016 drop-in events, we provided more visual aids in the form of annotated diagrams, maps, interactive maps and interactive digital models to help participants envisage the proposals and see them in a local context. In order to generate illustrative models, we had to choose a location for the purpose of the model to show examples of project infrastructure in the local landscape. Regrettably, some people were upset by the models, feeling they reflected pre-determined or preferred locations for infrastructure siting. Most however, were reassured by our explanation that the models in no way reflected any decisions about siting infrastructure such as the project substations. These are complex decisions, and they require significant investigation which is continuing.

All the printed materials displayed at the drop-ins are available **here: bit.ly/NVdocs**. We posed questions to encourage local participants to inform and influence our thinking.

In the next pages, we give you a snapshot of the range of views and comments we gathered, via feedback forms, completed at the events, and from some 75 forms returned later via freepost or via the web.

At 12 pages, this summary report is quite long. We believe it reflects the quantity and quality of the feedback received and that it will give you a good overview of the type of issues and ideas raised. If you want more data, a complete transcription of the feedback returned is included in the Hearing Your Views II – the full report is available **here: bit.ly/NVdocs**.

COMMUNITY FEEDBACK

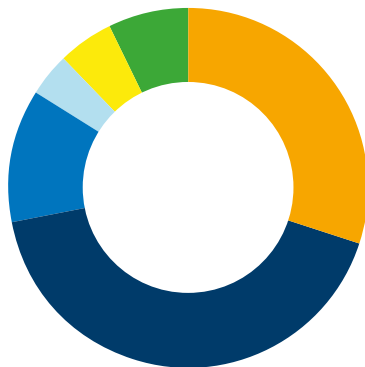
NOTE: THE DATA ILLUSTRATED IN THE FOLLOWING PIE CHARTS IS FROM 268 COMPLETED FEEDBACK FORMS

The initial introductory materials at the drop-in events, talked about how the Norfolk Vanguard and Norfolk Boreas projects work together, strategically combining infrastructure where possible in order to minimise impacts. The material also pointed out benefits in terms of project efficiency, including in terms of environmental impact assessments, and consultation where appropriate, as well as showing how the projects would require separate Development Consent Order applications. The first questions were to check that people agreed with our approach of linking the projects where possible and relevant.

The results here show overall responses

The material presented explains clearly that Norfolk Vanguard and Norfolk Boreas are subject to Separate Development Consent Order processes

- 30% Strongly agree
- 42% Tend to agree
- 12% Neither agree or disagree
- 4% Tend to disagree
- 5% Strongly disagree
- 7% Don't know



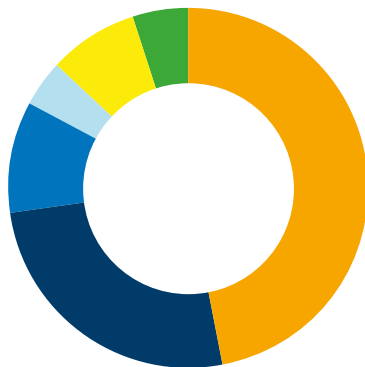
I understand how my comments will help inform the development of both projects

- 23% Strongly agree
- 39% Tend to agree
- 11% Neither agree or disagree
- 10% Tend to disagree
- 8% Strongly disagree
- 9% Don't know



It makes sense to co-locate infrastructure for both projects where possible in order to reduce potential impacts, maximise opportunities and help reduce energy costs

- 47% Strongly agree
- 26% Tend to agree
- 10% Neither agree or disagree
- 4% Tend to disagree
- 8% Strongly disagree
- 5% Don't know



I am reassured the Environmental Impact Assessment processes, including consultation will lead to the best possible environmental solutions for Norfolk Vanguard and Norfolk Boreas

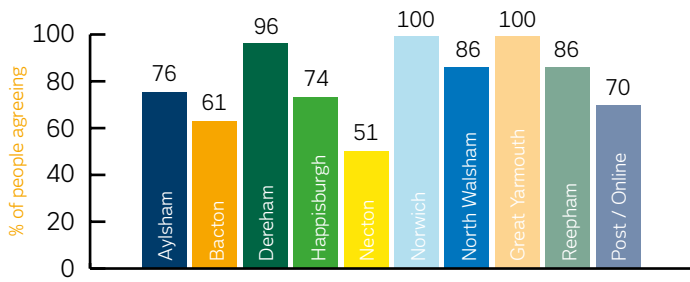
- 18% Strongly agree
- 30% Tend to agree
- 15% Neither agree or disagree
- 9% Tend to disagree
- 14% Strongly disagree
- 14% Don't know



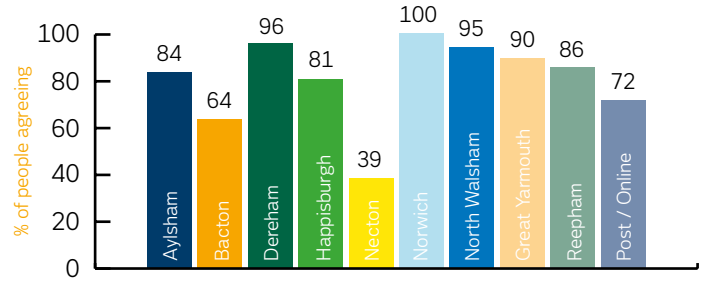
There were variations in how people responded to the questions from location to location. For example, while most understand how their comments will “help inform the development of both projects”, we note some significant differences in responses from location to location. (Note only one feedback form was received from Norwich).

Note in the following pages, the use of italics denotes the views of participants, as they have expressed them in response to questions in the feedback forms.

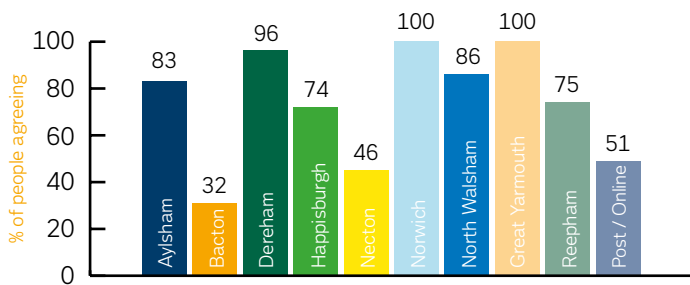
The material presented explains clearly that Norfolk Vanguard and Norfolk Boreas are subject to separate Development Consent Order processes



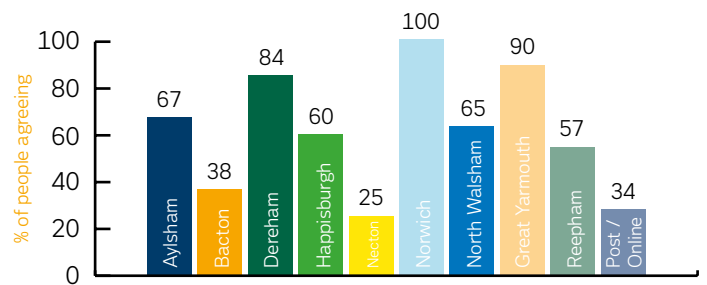
It makes sense to co-locate infrastructure for both projects where possible in order to reduce potential impacts, maximise opportunities and help reduce energy costs.



I understand how my comments will help inform the development of both projects



I am reassured the Environmental Impact Assessment processes, including consultation will lead to the best possible environmental solutions for Norfolk Vanguard and Norfolk Boreas



This illustrates that where there were a higher proportion of people expressing concerns about potential local impact associated with the siting of onshore infrastructure, such as project substations and / or cable relay stations (if required, in the case of AC power transmission being determined as the best solution), or indeed who expressed negative views on whether the project should be developed at all, responses reflect greater levels of disagreement overall with statements and questions posed. This is mostly observed in responses returned at the Necton and Bacton drop-in events, and to a degree reflected in postal / online responses, as a high proportion of those returning feedback forms after the events (via free post or online) made clear their opposition to the project, or aspects of it.

Explanatory comments

A selection of the comments, explaining people's answers to these questions is shown below. All quotes are shown in italic font. Many comments are process related, with a high degree of scepticism expressed by some, including some who indicated that they will continue to scrutinise the process – a level of involvement and oversight we welcome:

- There seems to be a lot of information available to the public and lots of thought to the environmental impact of the project.*
- The presentation was done in great detail and covered all the areas that one would have a question about. Well done.*
- We're trusting you guys to make sure that nature, the environment and historic sties are protected properly.*
- It'll be a mix of environmental consideration weighted by financial considerations.*
- Environmental impact on residents doesn't seem to be important.*
- Impressed by the breadth and depth of the EIA process.*
- So far so good. The approach appears thorough and robust. But this is still early days and I would hope that this level of rigour follows through to when the more detailed aspects of the proposal need to be considered and agreed.*

- A lot of work has been for now, however once the actual site has been confirmed then there will need to be a more focussed process on the land site.*
- Regular newsletters informing and explaining environmental impact assessments, eg archaeological discoveries, wildlife impacted, habitat impacted, and the solutions, or suggested solutions to overcome the challenges.*
- I am an environmental researcher who has written on the politicisation of the EIA process and while I do appreciate community consultations like this one and the genuine desire I sense from Vattenfall employees to do good, I know there will be environmental costs to this that aren't necessarily well understood or accounted for, however hard we try.*
- As with most things, seeing is believing!*

Other comments expressed dismay / concern relating to possible local impacts:

- The cabling is not a problem. It's the dreadful relay stations that will destroy Edingthorpe - a lovely quiet and pretty village. Our property will be worth nothing.*
- Disruption and any impact should be kept to one landfall rather than two. Relay stations should not impact on noise or light pollution.*
- The 'Blighting' effect caused by the extraordinary time-scale scope, and vagueness of the scheme which will leave far too many people in limbo in relation to a whole raft of issues at the level of ordinary lives for far too long in any event.*
- I think whatever consultations [you] have will still result in you putting these substations just where YOU want to.*

We will continue to engage in an open and transparent fashion, providing information in a timely manner as our proposals are refined. Our Environmental Impact Assessments continue too, and we shall be presenting data for review and comment in an iterative and structured fashion as required in the Planning Act 2008.

ONSHORE WORKS: LANDFALL

As during the March-April 2017 drop-ins, the onshore project proposals were refined compared to those presented during the October 2016 drop-ins. Participants generally felt more able to comment on specific proposals, such as the outline 200m underground cable corridor, and zones potentially appropriate to site necessary onshore infrastructure. In addition, in response to requests for more information, more visual aids enabled participants to understand the kind of infrastructure the project may require and their function.

Below, we present some examples of the responses received. Here we emphasise the responses received from drop-in locations close to the infrastructure in question and from online/postal responses where we know the respondent provided contact details close to the geographic area being discussed. (All the responses are available in the full report). We asked:

- **What [additional] aspects or features, do you think need to be taken into account when choosing the landfall location? Do you wish to highlight any factor(s) that should influence decision making above other considerations?**

From Bacton and Happisburgh, comments noted potential constraints and opportunities associated with all three possible landfall locations presented during the March-April drop-ins.

Constraints associated with landfall at Bacton

- Opportunities to invigorate rural generation.
- The Gas Terminal infrastructure will have a significant impact as well as the marine c.z.; avoiding gas pipelines and existing terminal will be challenging - better perhaps to bring in both Vanguard and Boreas at a single site but not within the Gas and MCZ areas - e.g. Happisburgh possible too to improve the coastline at Happisburgh at the same time, reducing erosion.
- Blast area from gas site. Loss of two energy sources, not one, if worse was to happen.
- It makes sense to have everything in one place. Why risk damage to a marine conservation zone if not necessary?
- Not Bacton Green as large number of people swim, play on beach and surf there because of nearby car access. Prefer Walcott Gap.
- Bacton already has the gas works which has resulted in extra traffic on the narrow roads. Holiday caravan sites will be affected resulting in loss of income for site owners.

Ideas and comments supporting landfall at Bacton

-if it has to be in this area it should adjoin with Bacton Gas Works to minimise the visual impact.
- I have been informed that there will be substations the size of five football fields in a farmers field near North Walsham Road Bacton with associated noise. Are you intent on completely surrounding Bacton with large industrial sites? Completely ruining the appeal of living in Bacton a small North Norfolk village. Farmers will apparently be compensated, what about all the other residents in the locality where house prices are

Notes:

Several of the comments featured here were echoed by other participants. Here are some preliminary responses which we hope can help clear up misunderstandings / answer common queries.

¹ We have investigated two potential sites within / immediately adjacent to the Bacton Gas terminal, there are technical and space constraints making these options inappropriate.

already suppressed owing to the Bacton Gas terminal. Surely it makes sense to come ashore where other existing wind sites are already up and running. Alternatively, ENI Gas Site at Bacton has effectively closed down. What little bit is left is being used by its neighbour Perenco. There is a huge, underused wired off site which has 24hr MOD Police protection ready to be utilised.¹

- The presence of an MCZ, which has already been breached elsewhere² should not prevent landfall at the only logical place ie Bacton. The other areas have issues such as erosion, proximity to landmarks such as Happisburgh lighthouse, Happisburgh church etc, and would cause an unacceptable blight on the landscape (relay stations).
- Industry is already evident in Bacton so this would avoid industrialising Happisburgh where the coastline is precarious. Focus the industry to enable security and logistics to be optimised and create economies.

Concerns over coastal erosion³

- Coastal erosion in the whole area is a major problem. Talk of rocks forming a lagoon to protect this area seems a great idea and would ease the flooding issue particularly in Walcott/Bacton. Walcott/Bacton is a small area to choose for landfall, Happisburgh probably the best location.
- I think that the coastal erosion problem is being underestimated. The coastline is disappearing at a rate not expected. What effect will that have on any groundworks and will the groundworks increase the loss?
- Concerns over Happisburgh is huge. What is the time frame of the project if the area is being eroded so quickly? If Happisburgh church only has 40-50 years left, is there any point? Will this affect the erosion even more?
- The area in Happisburgh South where there is no sea defence is fast eroding. The land is vulnerable to becoming an inland bay or exposed to the sea and so need to consider strengthening the cliffs etc
- We see no problem with landfall at Happisburgh South so long as appropriate sea defences are constructed on the beach side of the cliff to stop any excess erosion caused by construction disturbance of the cliff. Bearing this in mind the intended landfall area is the lowest part of the cliff and if breached will be catastrophic for Norfolk.

Constraints and opportunities associated with landfall south of Happisburgh:

- Personally I am pro onshore cables presenting at Happisburgh South if at all feasible
- Running a holiday let business next to Happisburgh Lighthouse, am concerned about effect on guests of engineering works.
- Impact on local residents
- Road access
- How can you expect people to respond in a questionnaire to a nebulous idea which could nevertheless have a massive impact on flat, open countryside in an area of quiet beauty?

² The Marine Conservation Zone is a new designation. No infrastructure has been consented nor located within it, since the designation granting it legal protection was awarded.

³ We have commissioned a study to investigate the impact of coastal erosion on the area and its long term implications for our proposals. This study, along with planned site investigations providing detailed geological and geotechnical information, will enable us to ensure that any works we undertake will not exacerbate coastal realignment processes. We are also engaging with relevant organisations regarding coastal issues.

CABLE RELAY STATIONS

We asked:

- **Tell us what you think about the cable relay station options (you may wish to refer to the numbering on the map). For example, you might highlight aspects or features, you think need to be taken into account when choosing a cable relay station location? Do you wish to highlight any factor(s) that from your perspective are more important than other considerations?**

At the drop-in events, we presented information about the cable relay stations, with annotated diagrams and digital models showing their size and the kind of infrastructure they would house. We asked participants to comment on the seven options presented, as well as inviting any other feedback they wished to present on the topic of cable relay stations.

At both Bacton and Happisburgh drop-in events, there were numerous concerns and constraints described in relation to all of the seven possible zones identified. Many expressed concerns regarding proximity to specific local features, such as Bacton Priory or Edingthorpe Church, others were more general and related to the general rural nature of the area, arguing that industrial infrastructure should not be allowed to inflict negative visual and noise impacts on the area. Several people suggested utilising brownfield areas within the Bacton Gas terminal. As noted above, such ideas have been explored and have presented technical issues which has led to us discounting them. We asked:

- **Tell us what you think about the cable relay station options**

Many people expressed concern, anger and distress at the thought that cable relay stations might be sited near them. Some people followed this type of approach through to a natural conclusion stating that CRS “need to be away from houses”. Others considered means of reducing visual and noise impacts, for example:

- *Noise is an unknown and in an area of almost total silence the hum of relay stations would have a huge impact on residents. So either put it right next to the Terminal or out in the middle of nowhere.*
- *Choose (if you must) low-lying areas. Some of the plans show high ground locations. An environmental blight.*
- *Use natural features - woodland, undulations - to minimise visual impact*

Use planting to minimise the impact and soften noise ??

- *It is only right that considering the impact this will have wherever it is sited that it should be encased in something making it look like an agricultural building.*
- *The station should have minimal visual impact - maybe screening with a green (trees) boundary.*

AC versus DC

Several participants at the drop-in events, and others writing subsequently, including representatives of the Campaign for the Protection of Rural England, Norfolk noted that deploying DC technology would remove the need for cable relay stations at all.

- *...the possibility of siting a cable relay station inland from Happisburgh South will cause massive visual disturbance to many properties in the area - and given how flat the land is, will not easily be hidden. Living very close to one of the proposed sites raises real concern about noise. Surely DC technology should be used to avoid such structures.*

Participants also noted benefits associated with deploying DC technology with respect to the underground cable corridor, for example:

- *If the cabling is sited quickly and effectively I'm hoping it would have no long-term impact. If DC is used I believe cabling would be reduced and the project would generally lead to less local*

The point or question is summarised very succinctly by this contributor:

- *Why choose DC?*

This question is answered in considerable detail in our FAQ document, available [here: bit.ly/NVDocs](https://bit.ly/NVDocs). The technology associated with offshore wind projects is progressing extremely quickly. This means that new offshore wind projects are becoming increasingly competitive, and that offshore wind will be one of the lowest cost sources of new power in the 2020s.⁴ To date, all offshore wind projects in the UK use AC rather than DC technology to transmit power from the turbines to the National Grid. However, several of the latest generation of offshore wind farms being developed are looking seriously at the possibility of deploying DC technology, and are urging the supply chain to respond to this new demand. Given that construction of the Norfolk Vanguard and Norfolk Boreas projects would not begin construction until the mid 2020s, we are seeking a Development Consent Order that leaves the options open for DC and AC technology to be deployed, thereby future-proofing the project, and enabling us to use best-in-class technology as it becomes available.

⁴ <http://www.renewableuk.com/news/news.asp?id=327446>

THE UNDERGROUND CABLE CORRIDOR

We asked:

- **Please tell us about any features (and if relevant their location) within the cable corridor you'd like to be considered as the plans are refined?**

Several participants chose to outline specific features and areas they wished to ensure were given proper consideration and protection, to ensure negative impacts are avoided or minimised, and that appropriate efforts should be made to mitigate for impacts or reinstate the land quickly:

- *Protecting the Blickling estate. Not causing damage to any archaeological areas on the route*
- *The close proximity of the cable route to the town of Reepham brings it into conflict with a number of public footpaths and sites of natural history interest, which provide popular walking routes for informal recreation linked to the nearby Marriot's Way.*
- *Munns Lane - ancient trees, diverse species found in an untouched ancient lane. Also land is marked as a flood risk, compaction will make problem worse...*
- *100m wide working corridor seems very wide. Consideration to farmers crops and logistics.*
- *land to revert to previous aspect*
- *There is already nervousness that the landscape will be environmentally damaged but assurances should be made that with time the environment will be re-established.*

Several people recognised that impacts associated with underground trenching would be temporary, but that the timing and planning of construction should be sensitively managed, and that temporary compounds to house equipment and facilities for workers during construction should be considered with care:

- *Please avoid the nesting season when trenching*
- *This doesn't bother me because they will be buried. The mess and the trucks will though. We only have one car lanes. How do you think you are going to access ??*
- *I would just ask that the cables are laid as quickly as possible to minimise disruption particularly during the holiday season because of tourism.*

- *Greater consideration needs to be given to the location of longer term construction compounds and support infrastructure to minimise ?? to rural landscape and reduce vehicle movements on narrow country lanes which will destroy verges and remote habitats*

Over the summer (2017), ongoing work will continue to consider traffic management plans, the location of temporary compounds, the siting of and options for local deployment of trenchless cable laying techniques including horizontal directional drilling, and discussions with landowners. This work will enable further refinement of the cable corridor, and the production of plans, including traffic management plans, for consultation later in the year.

A small number of people expressed concern about possible impacts of electromagnetic radiation associated with electrical cables, and some asked whether buried cables might cause greater electromagnetic effects than overhead lines.

- *Residents very close to the cable corridor are worried about magnetic fields around the cable.*

The design of the cables and their installation underground results in the associated electromagnetic fields being either contained within the cables themselves (in the case of electric fields) or within a small spatial envelope around the cables (in the case of magnetic fields). The electromagnetic fields associated with buried cables comply with the recommended government guidelines set to protect public health. See also our [Frequently Asked Questions](#) for more information.

Some people expressed their approval for Vattenfall's decision to bury power cables underground, and they suggested opportunities that might arise from these works, for example:

- *We don't have any problems with the corridor. Planners have worked hard.*
- *At Colby Primary School we would like the cable corridor to come as close as possible so that the children can get a first-hand look at the project in action!*
- *Use this opportunity and lay fibre optics to enhance Norfolk's broadband capability. Work with BT Openreach from early stage.*



Cable pulling preparation

PROJECT SUBSTATIONS

Norfolk Vanguard and Norfolk Boreas will connect into the existing National Grid substation near Necton and local people had many comments in response to this question. Unfortunately, some people responded angrily or with distress to the illustrative model presented to show what AC and DC substations might look like in the local landscape. Despite assurances to the contrary, they felt that the location chosen to illustrate the infrastructure reflected a preference of Vattenfall to locate the project substations between the existing substation and the village of Necton. We asked:

- **What aspects or features, do you think need to be taken into account when choosing the best location for project substations? Do you wish to highlight any factor(s) that should influence decision making above other considerations?**

In response to the question, some participants suggested principles they felt should be adhered to in order to minimise the impact of project substations, including during construction. Several people expressed a desire for substation infrastructure to be located close to existing infrastructure:

- *Not within 1/2km of any houses*
- *Not on the Necton side of the existing one, noise constraints would be broken*
- *Because of the height of some of the buildings it would be better lower them into the landscape to minimise the impact on the local environment*
- *With correct colouring to buildings - i.e. M&S building Milton Keynes - the large building's impact will be greatly reduced.*
- *Initially impact on local infrastructure - e.g. traffic, noise etc. Once established ongoing impact of traffic noise and visual screening*
- *not closer to Necton - noise was bad during building of Dudgeon. NO CLOSER*

Others suggest "alternative" locations:

- *Towards Necton wood where it would be naturally screened.*
- *Can you locate the Vattenfall substation further away to the east of the village (and Dudgeon substation)*
- *To relocate onto the rural side of the A47, not Necton side*
- *We think the opposite side of the A47 would be far better and would not affect so many households. We are concerned about the adverse effects on our physical and mental/emotional health.*

Taking into account landscape assessments, preliminary environmental assessments, community views and landowners discussions, we have narrowed our search area for project substations, and intend to continue to engage locally in order to find the best locations for project substations within this refined zone. We will also be engaging with local people regarding screening and other opportunities to reduce impacts associated with project substations.

LOCAL OPPORTUNITIES AND BENEFITS

During the October 2016 drop-ins we asked what local opportunities you were keen to explore in relation to Vattenfall's investment in Norfolk. The answers received were varied, and included suggestions that could perhaps be undertaken alongside onshore works, like improving local communications, access or road upgrades, enhancing archaeological understanding, and contributing to the resilience of coastal communities.

Many expressed hopes around opportunities for business, jobs, up-skilling and education. This time, we asked a similar question, some familiar themes re-emerged as well as new ideas.



Mark, like all the staff working on the operations & maintenance of our Kent cluster of offshore wind farms, lives locally

We asked:

– **What ideas do you have, and why are they important?**

- Opportunities for youngsters to be trained in all aspects of this operation, from construction and plant to the design and manufacturing of wind turbines and generating equipment. From Management to research and development. Local colleges, 6th forms encouraged to open courses for youngsters to access the industry.
- Involve schools - to enhance understanding and give ideas for future careers.
- Opportunities for students in rural Norfolk to experience a nationally important power engineering project. Educational aspects of planning, science, engineering, environment combined with improving aspirations and broader knowledge of careers in renewables.
- Education of both adults and young people alike about the project etc. Concern and care for the local environment and perhaps enhancing it outside of the affected area
- environmental education; looking at marine as well as land. Primary, secondary and further education
- Training and skilled job opportunities to people in local area (Norfolk)
- Apprentices. Sixth form technical college students visits/work experience when the project gets properly underway.
- It is vital that there are opportunities as well as training available in this industry to our young generation. Well paid jobs are necessary to stop the brain drain.
- The scheme should employ local contractors
- I manage the Norfolk Biodiversity Information Service and the Historic Environment Record. Any new records or data gleaned from the EIA work could very usefully be handed over to these record centres for future use (to help inform future decisions).
- Archaeology/eco exhibitions and updates
- I think it's important that local business is not unduly affect - i.e. public house, holiday accommodation etc.
- Fibre optic cabling included to enhance broadband and other comms
- Lay fibre optic cables in the trenches to villages along the path of the trenches
- Help nurture individual and local investment in renewable energy.
 - promotion of household solar schemes, subsidies for PV ??
 - assist community buildings to convert to renewable energy. Necton Community Centre, already grid source heating. Community looking for funding to install solar panels.
 - Parish Council manage 134 streetlights - would like to have local solar/wind energy supply - would save approx £3000 and Parish Council funds annually.

- Upgrading/improve Worlds End Lane, Reepham which is sole access to several properties and Town Council allotments and which will be adjacent to or crossed by cable route.
- Local road upgrades. The A47 at Necton has several accident black spots. Promotion of safety and ease of travel which is getting more difficult due to an excess of housing in the area.
- If the Happisburgh South option is chosen as the Landfall Zone site then shoring up the possible access roads; Barton Way and Rollesby Way. Making these access roads suitable for heavy traffic would be essential in the short term. Again the cost should be considered in the light of the considerable value to the community that rely on these roads as these are currently maintained by the residents, of whom most are retired. If these roads were tarmac-ed or concreted (or a mixture of one or both at corners etc) this again would benefit the local farmers, who also use heavy farming vehicles on them.
- provide erosion solutions for the village of Happisburgh, offshore reefs (like Sea Palling)
- clean and reshape the beaches

You may have read in our project Newsletter, issued in June 2017, and / or in the local press / via social media that already we are beginning to work with local schools and colleges, as well as making contact with other education and training providers in order to support local initiatives where we can. We also had the pleasure of providing a local student, who approached us at one of the October drop-ins, with work experience.

We are keen to ensure that Norfolk businesses derive as much benefit as possible from the project, which is why it is great that a local environmental consultancy is supporting our Environmental Impact Assessment work.

We will continue to look at some of the other ideas you note above, as well as consider other opportunities as they arise.



Vattenfall staff have worked with motivated students studying at University Technical College Norwich (UTC)

NEXT STEPS

All those who have participated to date have informed our thinking in varied and important ways, helping us to refine the project proposals. The newsletter sent during the middle of June, informed people of the refinements to the Norfolk Vanguard and Norfolk Boreas project proposals following the latest phase of work, including reviewing your feedback

and responses (outlined in this summary report, and compiled in full in the Hearing Your Views II Full Report). The map showing the revisions and key findings is also shown here.

It's not too late to shape the project. We will be talking to more people over the summer – new faces as well as people we've talked to already. Your ongoing involvement is important.

Refining project proposals with your help

Our electrical and geotechnical engineers, ecologists, landscape, traffic and noise specialists and other team members have been studying all the data gathered so far, including your feedback, and have refined our project proposals. While there are only minor changes to the underground cable corridor at this stage, we have been able to refine the focus of our landfall, cable relay stations and project substation search areas.

This map is an overview - you can review the entire route in more detail by using our interactive map on the website (norfolkvanguard.vattenfall.co.uk), which allows you to zoom in for more detail.

Landfall Search Zones – we are focussing our landfall search to an area south of Happisburgh village. This:

- Avoids offshore cables traversing the Marine Conservation Zone
- Accommodates the co-location of Norfolk Vanguard & Norfolk Boreas transmission cables
- Means maintaining two cable corridor options near landfall for now in order to accommodate cable relay station options (if required)

Cable Relay Station (CRS) Search Zones – we are focussing our searches on what we formerly called zones 5 and 6: They offer:

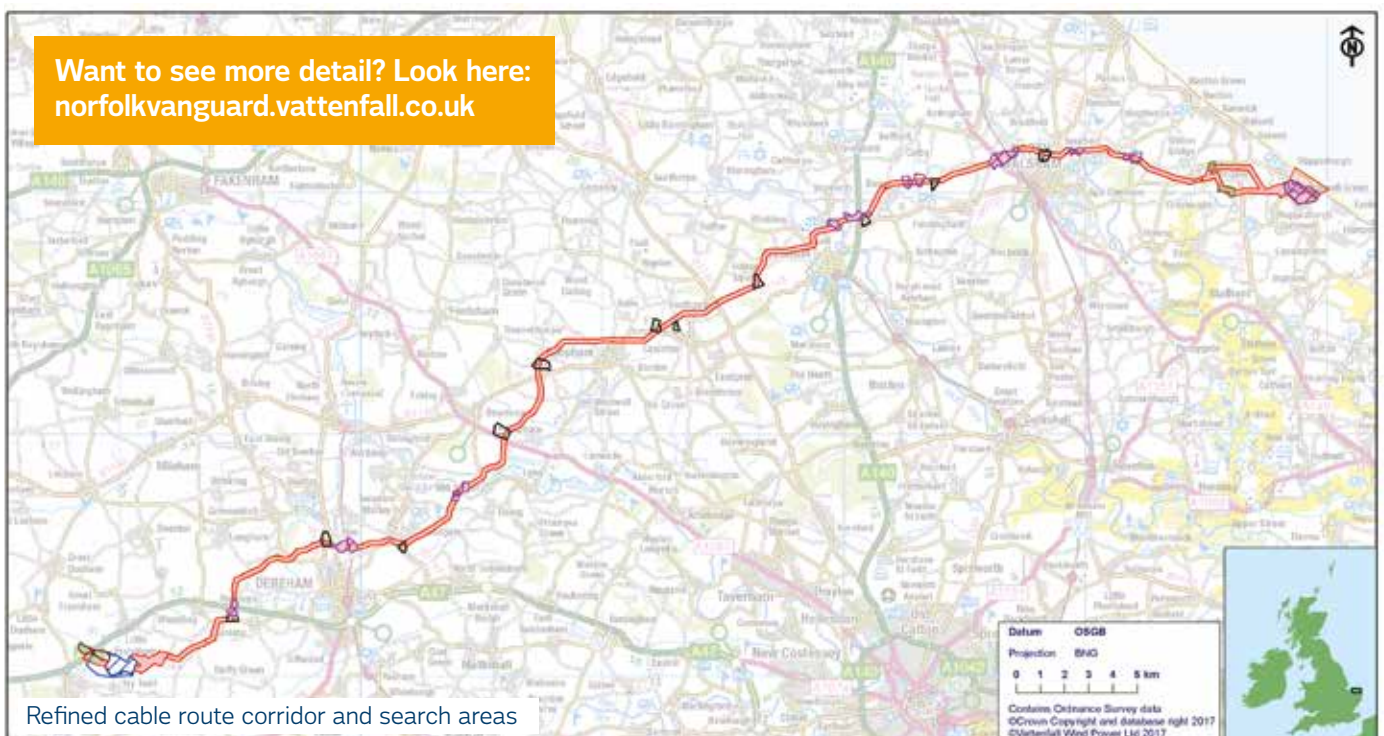
- Relative seclusion – they avoid villages and clusters of housing
- Space to co-locate project CRS should they be required
- Good access
- Natural screening and topographic characteristics that we can work with to help minimise visual and noise impacts

More work is required in order to determine the best location of the CRS should they be required (in the case of an AC power transmission system). Applying for consent for both AC and DC technologies helps us future-proof the projects, meaning we can deploy best in class technology when we are ready to begin construction in the early 2020's.

Onshore Project Substation Search Area –

this has been reduced. The search for the best location for project substations is focused within an area to the east of the existing Dudgeon substation. This area offers:

- Relative seclusion – maximising the distance from clusters of housing, without being too distant from the existing National Grid substation
- Natural screening and topographic characteristics that we can work with to help minimise visual and noise impacts



SURVEY UPDATE

We are undertaking numerous surveys as part of our Environmental Impact Assessments e.g. background noise surveys, traffic counts, viewpoint photos. These provide vital information helping us to refine our proposals further. Ecological surveys will be continuing throughout the summer, along the cable route and in the search areas. Site investigations will begin with some geotechnical drilling to help understand the nature of the strata we might encounter as we consider the best locations and methodologies to undertake Horizontal Directional Drilling, or other trenchless cable laying techniques, for example within the revised landfall zone, under the Wensum and the Bure, and under other linear features such as roads and railways.

STATUTORY CONSULTATION

In the Autumn we will begin what is known as Statutory Consultation on the Norfolk Vanguard project. This is a really important opportunity for local people, stakeholders and experts alike to comment on the proposals we'll share then, as well as comment on the findings of our preliminary environmental investigations.

Our next newsletter – look out for it in October 2017 – will highlight our Autumn drop-in consultation events. Feedback you provide then, will inform the final Norfolk Vanguard proposals we submit to the Planning Inspectorate in the Summer of 2019.

Norfolk Vanguard timeline

June-August 2017 – Develop and publish a Statement of Community Consultation (detailing how local communities will be involved in the formal or statutory consultation for the project)

January 2018 – Feedback to you and others and available on-line

Mid-End 2019 – Secretary of State decision on the application expected



Summer 2017 – We'll be attending local events to meet some of you again, and new faces too

Spring-Summer 2018 – Vattenfall makes an application for a Development Consent Order for Norfolk Vanguard

November 2017 – Consult on the Preliminary Environmental Information Report which will outline the initial results of our environmental assessments, as well as a more detailed project design. We'll hold a third round of drop-in exhibitions then too

THANK YOU

Thank you again, for the welcome to your communities and your interest in the project. We look forward to working with you again over the coming months. We will keep updating the project websites to let you know of any informal opportunities to engage with us, and of course, you can just make contact directly, if you want us to listen to ideas and comments you would like to make before the Formal Consultation in the Autumn. Your views are important to us.

Contact us

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