Norfolk Boreas Offshore Wind Farm

Consultation Report

Appendix 29.3 5th December 2018 onshore works supply chain workshop report

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Photo: Ormonde Offshore Wind Farm

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Summary

The meeting was convened by Vattenfall, having worked on shaping the agenda with a task and finish group, comprising colleagues from Norfolk County Council Economic Development team, Norfolk Chamber of Commerce and the East of England Energy Group.

The hoped for outcomes of the meeting were achieved, following productive and open dialogue involving all participants.

Participants representing SMEs:

- Developed their understanding of Norfolk Vanguard and Norfolk Boreas onshore works, and the services required and timeframe for delivery, and began to develop an appreciation of where collaboration with Tier 1 contractors and other SMEs may enable them to participate in the supply chains of large offshore projects.

- Identified areas where they have a competitive advantage over less local companies, for example siting strengths as:
  - ✓ Local knowledge of the area, constraints and opportunities
  - ✓ Local knowledge of farming and landowners soils, working times etc.
  - ✓ HSE management experience relevant to the local environment and context
  - ✓ Local location means low mobilisation costs
  - ✓ Established relationships with stakeholders
  - ✓ Experienced permanent local staff – with a stake in delivering works in ways that are sensitive to the local environment and local communities
  - ✓ Training/skills partnerships with local companies to bring in local people
  - ✓ Responsiveness & flexibility of SME's combined with established local supply chain links, can mean they can step up to extend a contract scope, appropriately, quickly and efficiently

- Identified specific weaknesses / needs that they (and similar companies) should address in order to capitalise on forthcoming opportunities offered by Vattenfall and the wider offshore wind sector, for example:
  - o Challenges associated with the size of smaller SME: Local labour – it is hard for small companies to employ local labour with the right experience; warranties and insurances; commercial scale and security; the perception that they might be too small to operate / compete effectively in a scale economy
  - o Funding cash flow linked to balanced terms and conditions
  - o Cash flow caused by slow payment terms
  - o Cost of retraining
  - o Paperwork requirements for HSE
  - o Continuity of work to enable investment with confidence
  - o Lack of visibility / no history in this new market / sector – e.g. are wind developers aware that a specialist local signage company exists?

- Explored opportunities, including those potentially offered by local organisations to help address some of these needs through existing / new programmes of support:
  - ✓ Raise awareness of companies and their capabilities by tapping into District Council, chamber of Commerce etc support
  - ✓ Collaboration between SME's
  - ✓ Forums consortia for supply e.g. EDF Nuclear at Hinkley
  - ✓ Collaboration can mean Bite size contracts can work, even on big infrastructure projects
  - ✓ Need to build on and know more detail about skills development
  - ✓ Specific platforms for skills development
  - ✓ Specialist kit – grants for gearing up could be made quicker, to enable agility
  - ✓ LEP funding?
  - ✓ Involvement in larger projects, and as part of collaborative bids can result in cross fertilization of ideas and thus Innovative technical approaches e.g. New lower cost high accuracy [drone] technology and innovative environmental approaches
  - ✓ Opportunity to develop specialist skills via institutions with relevant expertise and relevant offering e.g. East of England Institute of Technology; create a school of engineering in region (UEA); Norfolk – Cambridge Tech Corridor attracting innovation
  - ✓ Early engagement gives companies time to explore opportunities to collaborate to put in more cohesive and attractive tenders and to get necessary accreditations

- Discussed perceived / real threats for Vattenfall / other developers, Tier 1, local business support organisations etc. to reflect on, and develop solutions to:
  - Skills shortage / gaps – local colleges and schools need to provide the right courses to serve need; project management skills is a concern
  - Skilled personnel may be working on other projects – given the number of big projects currently in the pipeline; similarly, materials – high demand can raise costs, challenge availability
  - Payment terms – keeping afloat with ops costs until invoices are paid
  - Uncertainty inherent to the sector – which projects will get CfD?
  - Lack of technical understanding of the requirements of a project of this type of complexity
  - Clarity on timescales – seasonal constraints and resourcing
  - Lack of understanding or 'buy in' from local community
  - Tier 1 impenetrable/incumbent only
  - Overall infrastructure is poor for businesses to grow

NCC and partners were able to:

- Hear directly from local SME about local interests and needs – some of which could feed into shaping / planning / bid-writing for support programmes, to enable and assist local companies appropriately as they enter / grow the local renewable energy sector supply chain

Vattenfall were able to:

- Stimulate interest in the projects,
- Meet prospective suppliers and hear their perspectives on opportunities / challenges, interests and needs
- Learn from the event, and ensure future supply chain events build on this understanding, and address topics relevant to SME, including come back to topics and questions which we are not able to answer in detail at this stage.
- All participants met potential partners and collaborators.

All participants met potential partners and collaborators.

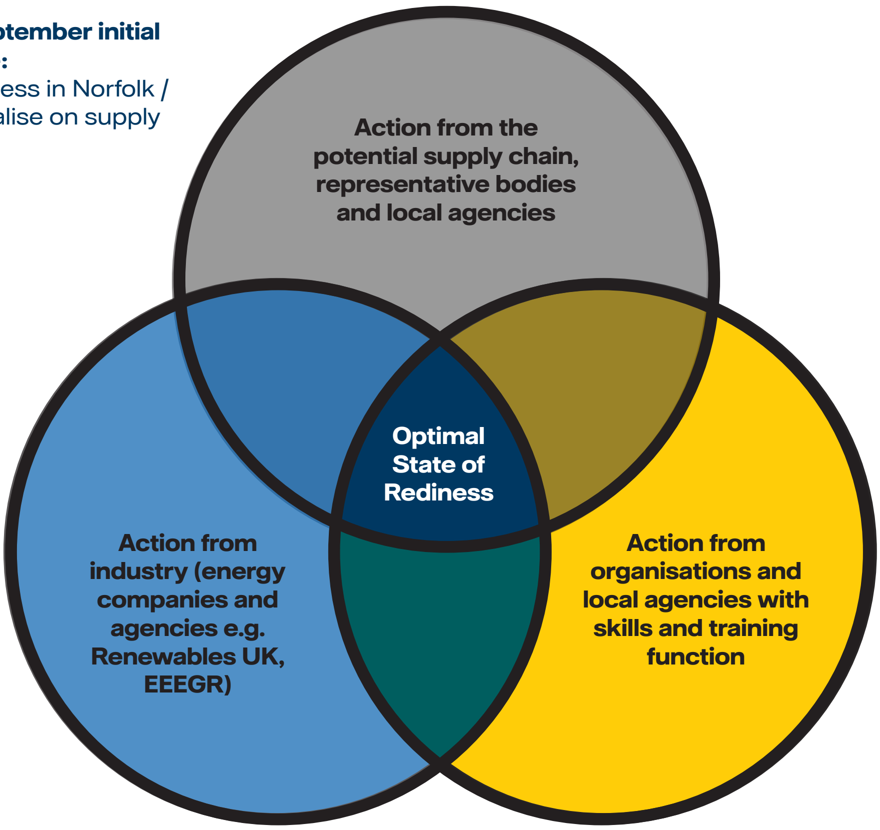
Introduction

On the 5th December 2018, some fifty participants from local agencies, Tier 1 companies and local SMEs came together to hear from Vattenfall about onshore works that would be required to deliver the proposed Norfolk Vanguard and Norfolk Boreas offshore wind farm projects, and to explore their role in delivering these next-generation, clean energy projects. Presentations were also delivered by Tier 1 companies, by Norfolk County Council, The Chamber of Commerce, New Anglia LEP and EEEGR. Workshop sessions informed by the presentations were energetic and productive and result in some clear challenges for all parties with interests in the local supply chain. This report and slide pack provides an overview / aide memoire of the meeting, and is intended to assist all those who continue working on the topics addressed.

The event built on earlier inclusive discussions with local stakeholders, convened by Vattenfall on the 20th September, 2018. The early discussions involving representatives from local government, education providers, business organisations and Vattenfall addressed the question: *"What can we do to support collaborative efforts ensuring Norfolk and the East of England maximise the socio-economic opportunities that Norfolk's offshore wind energy projects bring?"* An action that emerged from the September session was for a task and finish group encompassing a range of interests to work with Vattenfall to develop the agenda for the planned December Supply Chain meeting. This report describes the event shaped by the Task and Finish group's collaborative efforts. The discussions, Q&A and presentations delivered, built on and respond directly to many of the points made by participants during the 20th September event. In terms of how key players can prepare in order to achieve "an optimal state of readiness" to capitalise on the opportunities emerging from the offshore wind sector, you will note here that some of the solutions are already underway.

Ongoing concerted efforts will be required by all interested parties to achieve that goal. However, the energy, interest, motivation and desire to collaborate evident during the 5th December Supply Chain Event and 20th September skills and supply chain discussions are indicators that exceptionally positive outcomes can be achieved.

Output from 20th September initial supply chain dialogue:
Optimal state of readiness in Norfolk / NALEP region to capitalise on supply chain opportunities



Purpose of the meeting

The meeting brought together delegates of Norfolk based companies who have expressed an interest in providing services to the Norfolk Vanguard and Norfolk Boreas projects and/or who represent service areas that could be delivered by local companies, with local government, organisations supporting business, including Norfolk Chamber of Commerce, EEEGR and New Anglia LEP, and Vattenfall to:

- Exchange information about the Norfolk Vanguard and Norfolk Boreas onshore work packages to be offered for tender, give interested companies an overview of these, and of the procurement process, and
- Explore ways in which local companies can be supported by local government, local business organisations, Tier 1 companies and Vattenfall to capitalise on opportunities arising from the offshore wind industry

The style of the meeting was participative, active and engaging, aiming to enable learning of value to all participating, and encourage collaborative and creative solutions.

The findings of the meeting will be used by Norfolk County Council and local enterprise-support organisations to develop programmes for successful tendering.

The meeting report has been shared on the Norfolk Vanguard and Norfolk Boreas Supply Chain pages, as a resource to companies interested in supply chain opportunities.

The meeting was not a "pre-selection process" and did not prejudice the Vattenfall procurement process in any way.

Background information on the projects can currently be found at the Norfolk projects website The land manager information pack may be a helpful short introduction to how the ducting and cable-pull through of the 60km underground cable corridor between landfall and connection to the National Grid will be undertaken. The Request for Information issued by Vattenfall earlier in 2018 has generated a good response, and the RFI remains open for more companies to express their interest.

Agenda

Time	Session	Notes
9.00	Arrivals, registration	Tea & coffee
9.30	Welcome	Short welcome from Cllr. Graham Plant Norfolk County Council Deputy Leader of the Council
9.40	Introduction to the day, each other and to Vattenfall	Catrin Ellis Jones Vattenfall Norfolk Vanguard and Norfolk Boreas Stakeholder Engagement Manager (facilitator for the day).
Vattenfall's approach to procurement		
9.55	Introduction to the Norfolk Vanguard and Norfolk Boreas projects, timeline, and the principles that underpin our procurement process.	Rob Lilly Vattenfall Procurement Manager Setting the scene, how we hope to work with / for Norfolk to deliver and operate the Norfolk Vanguard and Norfolk Boreas projects – maximising local opportunities to capitalise on the projects.
Norfolk Vanguard and Norfolk Boreas – onshore work packages		
10.05	Onshore works packages – structure and requirements	Rob Lilly outlines the onshore work packages, including geographical division of the works, sequencing, timeframe
10.20	Reflection and questions	Participants reflect together in groups first, then in plenary to ask any questions of clarification, share key points.
10.30	**Break** Preceded by short introduction to working session following the break	
What capabilities and characteristics do Vattenfall & Tier 1 contractors look for?		
10.50	Procurement from the perspective of Tier 1 contractors – what commitments we make to clients, stakeholders, environmental standards etc and what we look for from potential partners / subcontractors?	Presentations from industry leading companies: • **JDR** – providers of technology connecting the global offshore energy industry, and • **VolkerInfra** – Lancashire based international cable and pipeline installation contractors
11.10	**Group discussions** How do the general themes you have heard relate to your work package? SWOT analyses – how will your company do?	Facilitated / structured working session. The aim is to explore local strengths and challenges in relation to opportunities presented by Vattenfall's Norfolk projects and the offshore wind sector more widely. The output of the session will lead to help identify strengths, gaps in strengths, common challenges, and what support might be made available (e.g. by NCC, Chamber of Commerce, EEEGR and other business support organisations) to address challenges
11.40	Plenary review of group SWOT analyses	Identifying emergent themes
12.20	**Lunch**	

Gearing up to Grow - identifying support required in Norfolk to address challenges		
13.00	Are you procurement ready? How can you upskill?	Norfolk County Council – Skills & Procurement team leaders will provide information about apprenticeships, internships, where to go for guidance on commercial matters, legal agreements for structured and secure collaboration, and more…
13.15	Gearing up to Grow	Simon Gray, EEEGR: Offshore growth opportunities Nova Fairbank, Norfolk Chamber of Commerce: Your business is relevant Nigel Best, New Anglia Growth Hub Manager: Supporting your aspirations
13.30	Successful tendering – what support for local companies can deliver a winning edge?	Small group discussions: What specific support / actions would make the winning difference to the competitive success of a company tendering for renewable energy project contracts over short to medium term, and a look ahead to the longer term….
14.00	Plenary feedback: “The elevator ask”	Spokesperson from each group outlines their take on “ One key area / type of support that can add most benefit to the offer tendered by Norfolk companies”
14.20	Summing up, next steps	Catrin Ellis jones Vattenfall
14.30	Thanks & close	Cllr. Graham Plant Norfolk County Council

Welcome

Opening remarks
Graham Plant - Deputy Leader, Norfolk County Council

The remarks of Mr Plant helped set the tone for a productive meeting, and encouraged all to maintain the leadership role they were undertaking by becoming involved in this very early supply chain collaboration event. He reflected that large scale infrastructure projects like Norfolk Vanguard and Norfolk Boreas, should they gain consent and proceed to construction and operation, can result in important inward investment into the County and the region. Investment of this kind is vital to help ensure future opportunities and numbers of high quality jobs are enhanced over the next few years and over the long term. He encouraged participants to engage now, so that they can prepare for staff and asset development to get ready for the opportunities ahead, and wished participants well with the discussions.

An overview of Vattenfall & Vattenfall in the UK and in Norfolk. Catrin Ellis Jones – Stakeholder Engagement Manager, Norfolk Vanguard and Norfolk Boreas, Vattenfall

Vattenfall is the Swedish state-owned energy company, employing more than 20,000 people, with operations in Sweden, Germany, the Netherlands, Denmark, Finland and the UK. Vattenfall is the second largest operator in the global offshore wind sector.

In the UK Vattenfall has ten offices and some 400 members of staff. Since 2008, Vattenfall has invested more than £3bn in the UK, primarily in onshore and offshore wind projects, as well as in solar farms and innovative technologies, including heat, e-mobility and providing 100% renewable power to domestic and business customers. Our aim is to help drive the transition to fossil fuel free energy systems while delivering a secure, reliable and cost-effective energy supply.

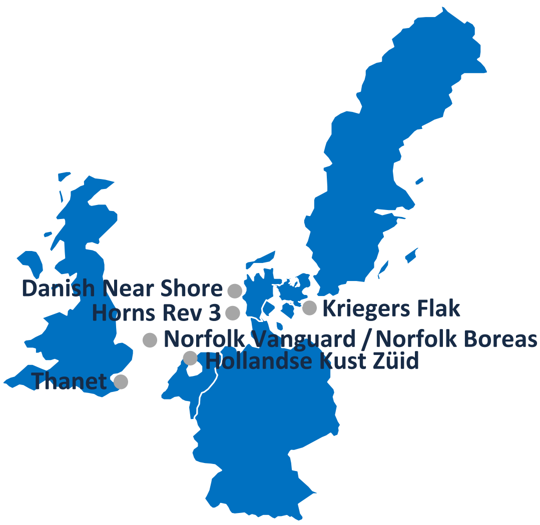
Vattenfall exists to power climate smarter living. We aim to enable our customers to live free from fossil fuels within a generation. To achieve this we are developing innovative solutions to societal challenges; see https://corporate.vattenfall.co.uk/

Norfolk Vanguard and Norfolk Boreas are key to realising this purpose, and to providing the green energy that will power our British electricity supply business, electric vehicle charge point provision (including our first UK contract in South Norfolk), smart electricity networks, and heat networks.

Offshore wind farms in operation

Country	Name	Turbines	MW
UK	Thanet	100	300
DE	DanTysk	80	288
DK	Horns Rev I	79	158
UK	Ormonde	30	150
SE	Lillgrund	48	110
NL	Egmond aan Zee	36	108
UK	Kentish Flats	30	90
GE	Sandbank	72	288
UK	Kentish Flats Extension	15	50
SE	Utgrunden	7	10
UK	EOWDC	11	93.2

Major offshore projects in the pipeline



Country	Name	MW	Commissioning
DK	Horns Rev 3	407	2018
DK	Danish Near Shore	344	2020
DK	Danish Kriegers Flak	605	2021
NL	Hollandse Kust Zuid	700	2022
UK	Thanet Extension	340	2024
UK	Norfolk Vanguard	1800	2025-27
UK	Norfolk Boreas	1800	2026-28

The maps and tables above demonstrate Vattenfall's investment in offshore wind.
Of those offshore projects currently in the pipeline, even the smallest wind farm will be larger than any sites that are currently in operation.

Norfolk Vanguard and Norfolk Boreas are the biggest, projects we are developing today. They represent real opportunities for innovations that can deliver the step changes we expect in tomorrow's far offshore wind farm developments, such as for example the commitment we have made to construct these projects with HVDC transmission technology.

We are glad that you are joining us today, to learn about and influence our procurement processes, and to ensure that you are ready to capitalise on the opportunities that will emerge in Norfolk and in the East of England when these projects are consented, built and operated.

Agreements struck already, like that with Peel Ports to reserve space for the projects' operations and maintenance base in Great Yarmouth, and initiative's like today's early and on-going engagement with the local supply chain, can deliver projects that live up to their names: Norfolk Vanguard and Norfolk Boreas.

Norfolk Vanguard and Norfolk Boreas

Project overview and an early insight into onshore works packages and construction methodology

Andrew Hardcastle – GHD, project engineering consultants

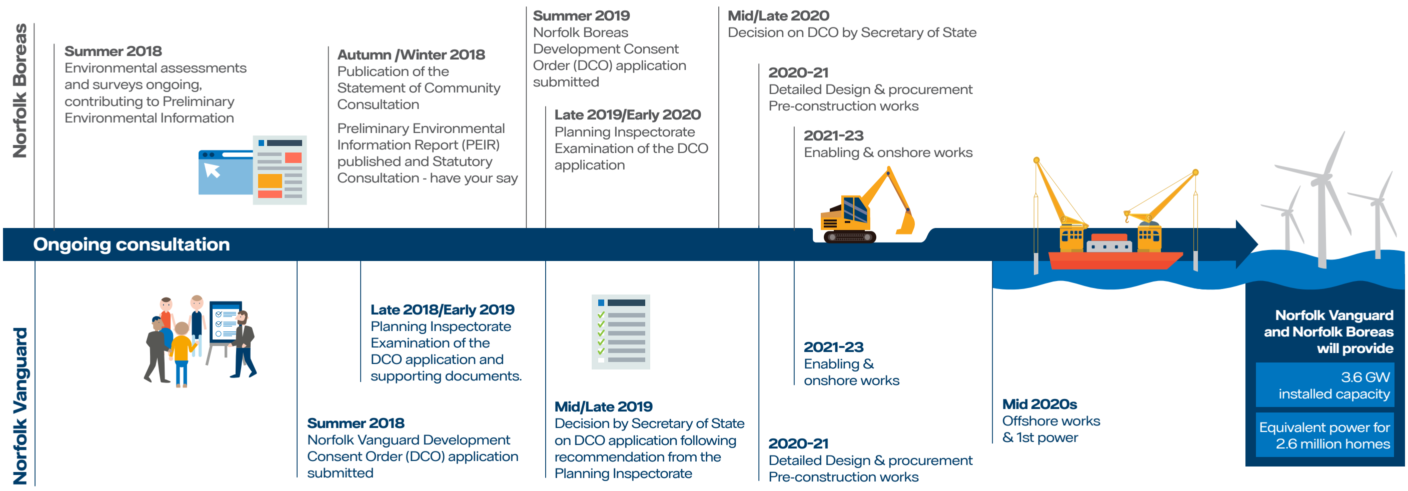
Norfolk Boreas Limited (NBL) and Norfolk Vanguard Limited (NVL), companies wholly owned by Vattenfall Wind Power Limited (Vattenfall), are seeking to develop the Norfolk Boreas and Norfolk Vanguard Offshore Wind Farms respectively in the Southern North Sea.

Each wind farm could accommodate an export capacity of up to 1,800 megawatts (MW), which could generate enough electricity for the domestic needs of around 2.6 million homes in total.

Due to their scale and power generation capacity, both projects are classed as Nationally Significant Infrastructure Projects (NSIPs). Under the Planning Act 2008, NSIPs – major developments such as large transport or energy generation projects – need to seek a Development Consent Order (DCO) in order to be built and operate.

There are two separate DCO applications, one for each wind farm, and these would authorise the construction, operation and maintenance of the proposed offshore wind farms. Norfolk Vanguard is approximately one year ahead of Norfolk Boreas in the DCO process. The former is currently under Examination by the Planning Inspectorate and the latter recently finished its pre-application Statutory Consultation. The indicative timeline below shows where we are in the process, and when we would expect to receive a decision on our Development Consent Order applications for both projects.

Norfolk Boreas and Norfolk Vanguard indicative timeline

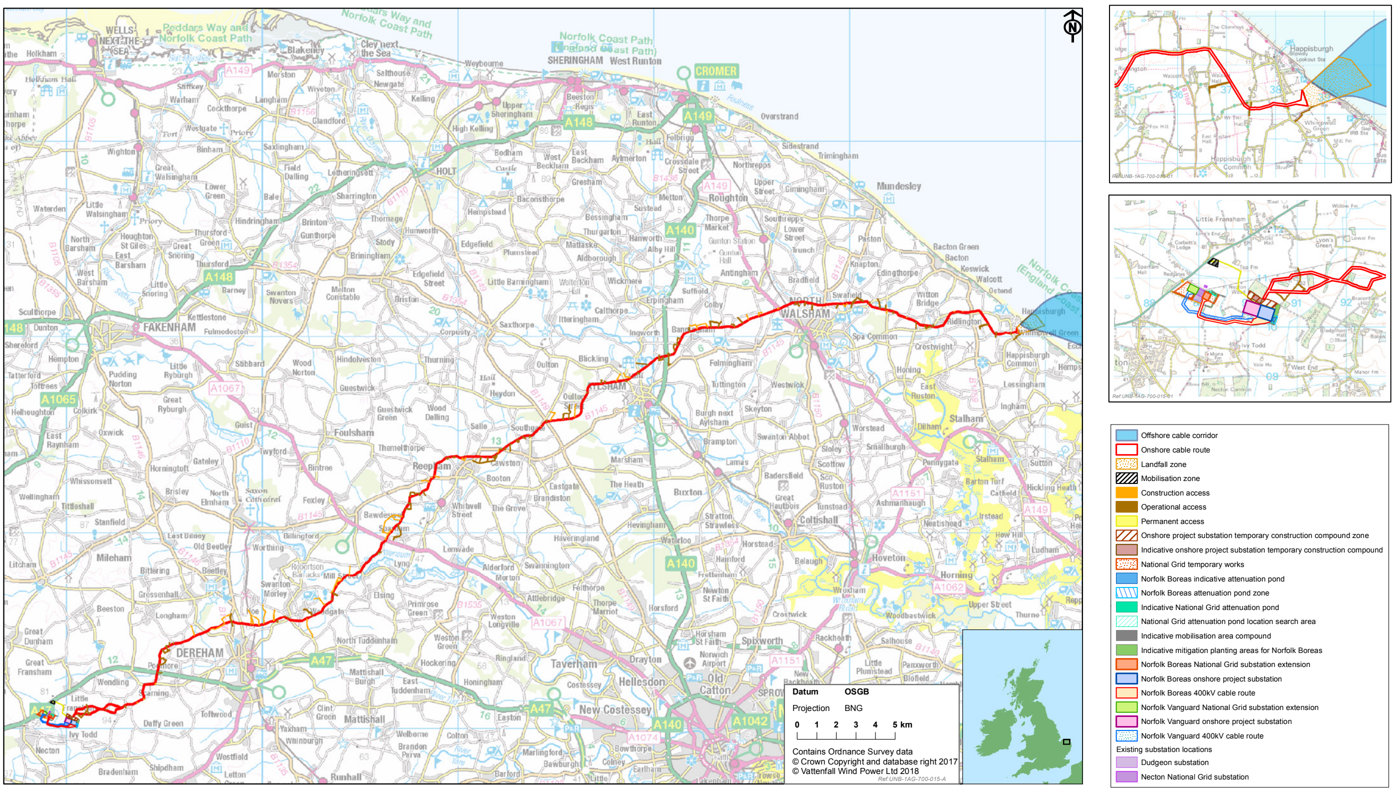


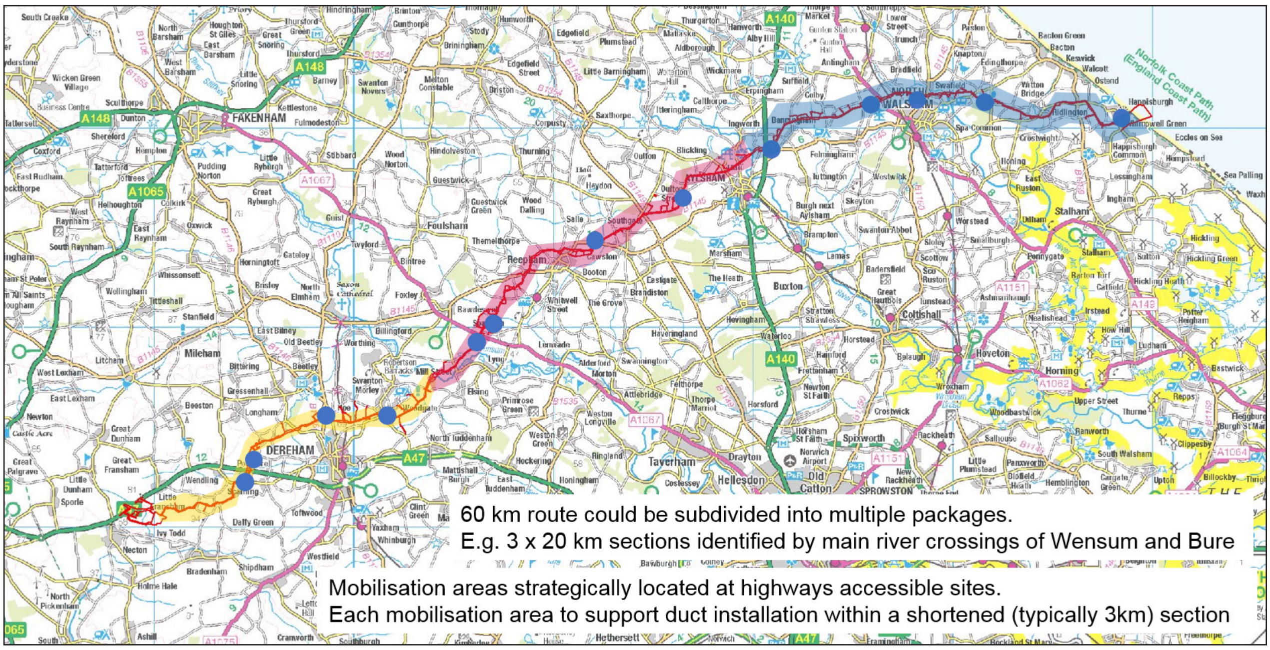
Onshore works are an early focus for our supply chain development, given these works will be undertaken before offshore works, and onshore is where there is huge advantage to involving local SME's who have local understanding, local contacts and will also have their own local supply chain to draw on.

It has been Vattenfall's intent from the outset that the inter-relationship of both Norfolk Boreas and Norfolk Vanguard proceeding to construction and development optimises their positive potential. It also reduces impacts overall during construction, operation and eventual decommissioning. Some of the proposed synergies include the Norfolk Boreas sharing 97% of its 226km^2 offshore cable corridor with Norfolk Vanguard, and both projects sharing 100% of the onshore cable corridor from the landfall to the onshore project substation. The image below shows the cable route corridor which will be shared by both Norfolk Boreas and Norfolk Vanguard.

The onshore cable route is approximately 60km. The construction method is to install ducting throughout this length for both the Norfolk Vanguard and Norfolk Boreas projects in a single construction programme, prior to cable pulling activities.

It is proposed that duct installation will progress in a sectionalised method at a rate of approximately 150m / week, with multiple workfronts operating in parallel along the 60km length. These workfronts will originate from 13 mobilisation areas distributed along the route (shown in blue dots below) which are strategically located at highways accessible sites. The installation of ducting means that this phase of the construction process can be more flexible in its approach, potentially subdividing the 60km length as required, to better suit the supply chain and meet programme requirements. For example, the route could be broken down in to 3 x 20km packages, each being installed by separate contractors to a standard specification, potentially with a separate management contractor layer to oversee the three individual sections.

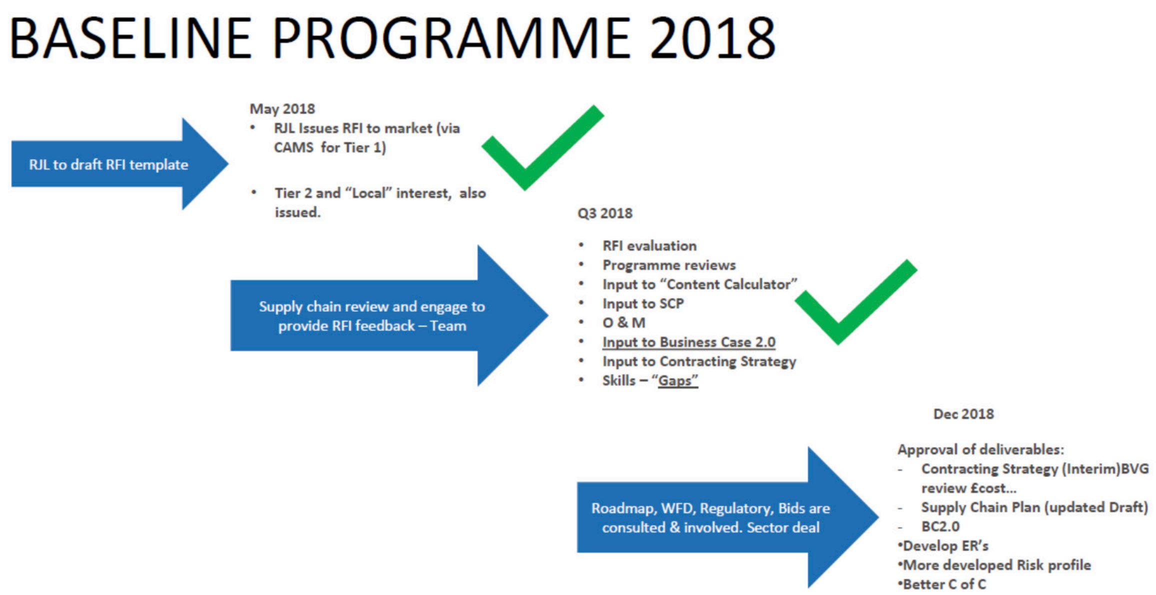




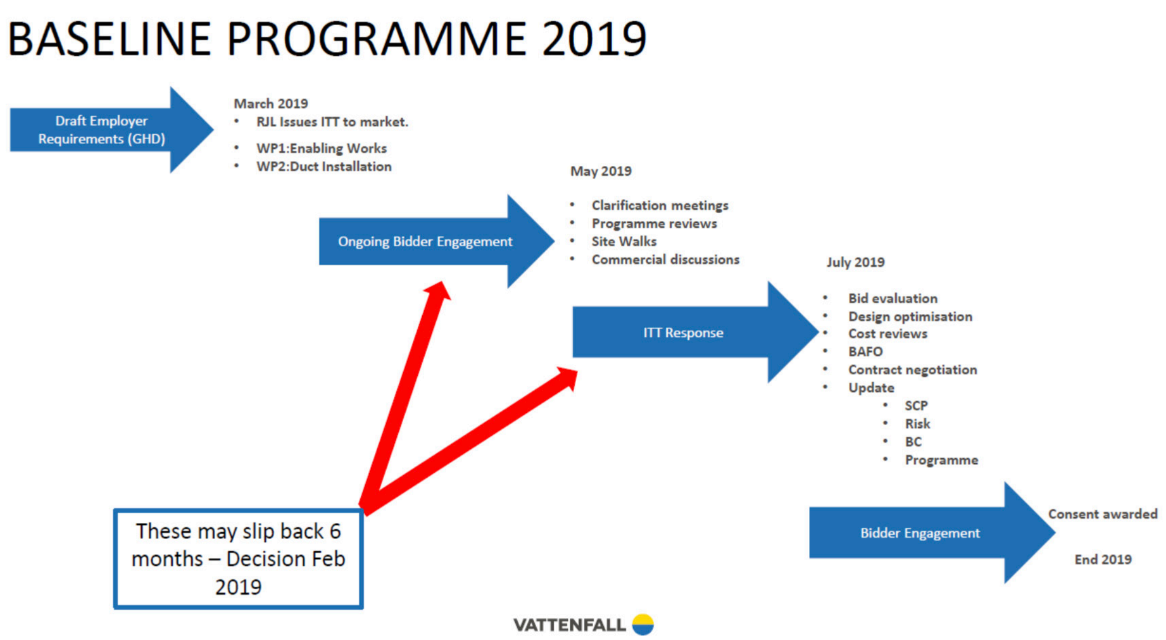
Vattenfall's procurement, onshore construction: timeline and activities

Rob Lilly – Vattenfall Procurement Manager

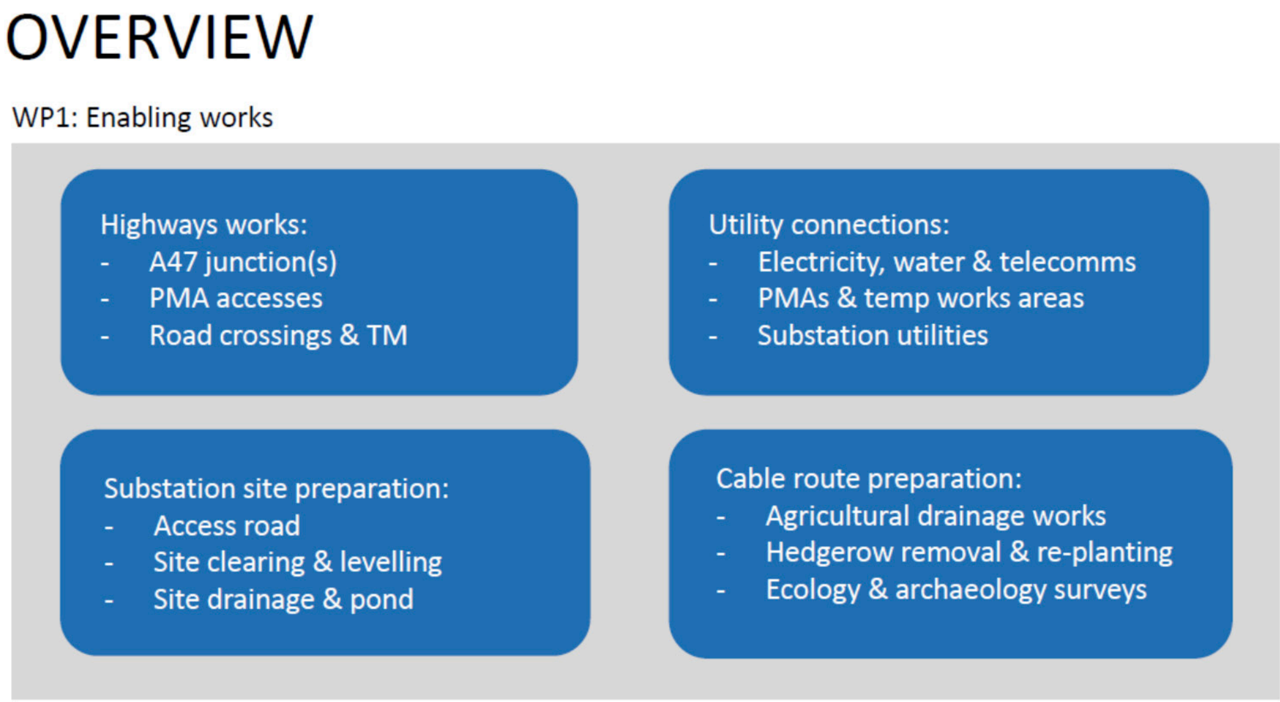
Vattenfall is working to ensure that its projects in Norfolk provide opportunities for local businesses. We are looking at ways to structure the contracts for the onshore infrastructure works, so that the requirements and scopes of work are within the capabilities of local contractors and suppliers. We will also ensure that our 'first tier' suppliers make use of local firms to source materials and services, if it is cost-effective to do so.



Procurement activities completed and to be completed before year end are shown above.



The timeline of activities for the onshore construction procurement process planned for 2019 are outlined above.



By approaching the market with a flexible approach to the size of contract (rather than several larger contracts) scopes, Norfolk Vanguard has created opportunities for many more potential suppliers.

An overview of the works packages currently identified as relevant to enabling works where shown as an example of the kind of detail that will be shared by the project through 2019 and beyond.

Anticipating questions which participants would be keen to have answers to early, contract evaluation criteria that potential bidders will measured on were discussed.

Compliance with Vattenfall scope would be considered and evaluated in terms of:

- Technical
- Programme
- Commercial
- Contractual
- O&M (where specified)
- HSSE
- Quality
- UK & local content (skills)

Preliminary Q&A

Following the presentations, participants reflected on what they heard at their tables. Tables were mixed, and there was a member of the Vattenfall team in most small groups to answer questions about the projects and to facilitate discussions. Also participating in the meeting, and an extra resource for those with more technical / detailed engineering questions, was Rob Driver – Senior Electrical Engineer and Package Manager.

The notes below provide an overview of the points and questions and answered raised during plenary discussions, following small-group reflection.

Q. How are smaller and medium sized companies able to engage with Tier 1? Will there be management contracting?
A. VF are engaged with the local economic partners in a plan to ensure local companies (Inc. SME's) are given support, information and access to the project team. Once T1's are appointed, they will be obligated to support VF with supply chain engagement and VF will monitor and report on the level achieved.

Q. Would there be an opportunity to improve the environment along the cable corridor as part of the reinstatement?
A. Yes, in a limited number of locations, for example where the pertinent land interests want to drive such changes forward, for example gaining necessary consents, and are able to sustain any long term changes through appropriate management.

Q. Please can you provide more details about the construction process, including when it is taking place and how it will work?
A. A useful reference document regarding the cable route construction process and associated timescales is provided on the Vattenfall website here.

Q. How will payment conditions work? 'Flow down terms and conditions'
A. VF can share "standard T & C" and contracting information for low, medium & high value at the planned meetings we will convene through 2019. They need some explanation and context. Buying equipment is different to buying services and we need to be able to explain these nuances appropriately so we provide SMEs with information that is pertinent to their interests.

One might consider a table of payments, looking similar to that shown below, for example

- Under £10k – 30 days
- £10-50K – 45 days
- Over £50k are likely to be payment milestones or monthly consolidated payments

Q. Will offshore wind developers work together?
A. Yes, at level of Offshore Wind Industry Council, and Renewables UK for example, we already do. Furthermore the region is acutely aware of the development required to meet the government's desired outcomes described in the Industrial Strategy, and are collaborating, including in the East of England to reach an agreement with Government on a Sector Deal. See Offshore Wind Industry Prospectus 2018. Prepared by ORE Catapult and the Whitmarsh Supply Chain Review Team on behalf of the Offshore Wind Industry Council (OWIC).

Q. Will you reflect on lessons learned and provide a debrief post project?
A. Our proposed construction methods have been developed partly as a result of some of the lessons learned from other projects of this nature, particularly in the Norfolk area and we will continue to reflect and improve from our projects both during and post construction.

Q. Will there be visibility of the tender programme?
A. Yes, we will provide an update on the tender programme in Q1 2019.

Q. How we do get involved in the pre-construction and development phases of the project?
A. Please ensure you are signed up to the Vattenfall Request for Information. For more details, refer to the Vattenfall website supply chain page.

What capabilities and characteristics do Vattenfall & Tier 1 contractors look for?

Representatives Mike Wells and Peter Cooke from Tier 1 contractors, JDR and VolkerInfra, respectively, provided an overview of their services and discussed what they look for in potential partners and subcontractors when delivering a variety of work for clients.

JDR is a world-leading provider of technology connecting the global offshore energy industry, and highlighted its commitment to quality, safety and innovation. It prides itself on the high standards of Health and Safety, which is the main criteria on which it assesses contractors tendering for work. Other important capabilities it looks for include agility in responding to the needs of the customer and having a high standard of ethics and integrity.

VolkerInfra is a Lancashire based international cable and pipeline installation contractor, which supports clients with upgrading and renewing underground cable infrastructure. It also prides itself on high standards of Health and Safety which the supply chain will be assessed on. The scope of works VolkerInfra procure and the upcoming project opportunities were explored in more detail.

Workshop session

SWOT analysis undertaken by companies potentially interested in tendering for Norfolk Vanguard and Norfolk Boreas onshore works

Having heard an overview of the opportunities that the Norfolk Vanguard and Norfolk Boreas projects would be likely to provide in the area, Vattenfall's procurement principles and bid criteria, as well as the timing of the next steps in the procurement process through the remainder of 2018 and 2019, and beyond, as well as listening to the ethos, interests and needs of pertinent Tier 1 contractors, each table undertook and exercise to consider their companies' (internal factors) Strengths and Weaknesses and relevant (external factors) Opportunities and Threats that may influence their development and preparations over the intervening period before procurement begins, and help them consider how they can gear up to grow / become winning players in the tender-process.

Outputs from each table are typed on the following pages.

Table 1

Internal factors	External influences
Strengths • Track record • Wide range of experience • Having several team members with over 20+ years industry experience giving best practice from lessons learned • Innovative • Personal approach • Local supply • Industry knowledge • Working collaboratively for lateral thinking to benefit the project • QHSE • No Lost Time Injuries /Total Recordable Injuries in 2018 • 300,000+ MHRS	**Opportunities** • Tap into District Council support • Chamber can reach a broad section of business community – get the message out there • Represent sector groups • Opportunities for the District Council to link with other local businesses and organisations • Working with Vattenfall to redress the issue for the construction industry and create a local 25-30 year legacy • Develop the next generation skill sets
Weaknesses • Ageing work force • Local labour – it is hard for small companies to employ local labour with the right experience	**Threats** • Lack of capacity in local markets (resources) • Lots of projects drive up costs • Visibility of long term legacy • Local infrastructure in Norfolk is poor • Overall infrastructure is poor for businesses to grow • What support is available for businesses to grow? • Are there enough experienced companies in the local region? i.e. Great Yarmouth on and offshore

Table 2

Internal factors	External influences
Strengths • We reduce risks to people in line with HSE values • Experts in the field of speciality • Local knowledge • Responsiveness • Flexibility of SME's • Training/skills partnerships with local companies to bring in local people • Local resources and knowledge of local supply chains • Local multiplier	**Opportunities** • Collaboration between SME's • Opportunity to gain experience in new markets for local businesses which will help the local economy • Growing local economy
Weaknesses • Limited to scope of experience • Vast number of contracts to manage • Is using SME's sustainable? • Will SME's still be in business? • Warranties and insurances • Commercial scale and security • Scale economy	**Threats** • Payment terms – keeping afloat with ops costs until invoices are paid • Not enough available local skills • Skilled personnel may be working on other projects

Table 3

Internal factors	External influences
Strengths • Local knowledge • Contacts • Stakeholder engagement • Local resources and capacity • Good reputation • Good track record • Good safety record • Good quality record • Specialist skills • Already able with all accreditations suitable but need to be on Radar	**Opportunities** • Foundation for new things and relationships • Disruptive improvement – innovation • This is the first time North Norfolk District Council has been involved • EEEGR should be helping to lead • Collaborative working • Need to build on and know more detail about skills development • Specific platforms for skills development • Specialist kit cost? • LEP funding? • Innovate UK grow opportunities • We can see and hear but Vattenfall must now deliver – actions count
Weaknesses • Awareness • Appreciate relevance • Not on radar • Timely detail regarding procurement and tender process • Relationships really understood – take time to get right • Detail of project to create solutions	**Threats** • Knowing the level of accreditation in a timely way • Specific expectations and the amount of time for delivery • Unreasonable terms and payment terms • Unreasonable systems • Project management skills is a concern

Table 4

Internal factors	External influences
Strengths • Competition • Personnel • Quality signage to stand up to the harsh weather environments • Specialist knowledge in our sector • Proactive • Experienced project management contractor • Planning • Communication • HSE management • Local knowledge of farming and landowners soils, working times etc.	**Opportunities** • Skills knowledge • Growth within the sector • Future investments • Stability • Consolidate local supply chain • Training • Knowledge sharing • Expand local facility • Good local knowledge • To meet new clients in the local area • Supply signage to EPC's of transition pieces, jacket foundations and nacelles
Weaknesses • Time • A signage company unknown in the wind industry • Knowing details of local supply chain	**Threats** • Shortage of quality staff over the short period of the project • Skills shortage • Availability of local resources i.e. stone/aggregate • Understanding exact scopes and requirements • A contractor that would cover signage in their scope • Quality people • Skilled people • Experienced people

Table 5

Internal factors	External influences
Strengths • Established relationships with stakeholders • Local location means low mobilisation costs • Opportunity to extend a contract scope • Local knowledge of the area, constraints and opportunities • Own local supply network	**Opportunities** • Forums consortia for supply e.g. EDF Nuclear at Hinkley • Collaboration with other SME's • Bite size contracts • Further wind farms export • Innovative technical approaches • Innovative environmental approaches • Innovative community engagement • East of England Institute of Technology
Weaknesses • History of renewable projects • Access to process for new companies • Transport infrastructure • Communication infrastructure	**Threats** • Tier 1 impenetrable/incumbent only • Clarity on timescales – seasonal constraints and resourcing

Table 6

Internal factors	External influences
Strengths • All Energy' region renewables including oil, gas and nuclear • STEM events • Apprenticeship scheme • Graduate scheme • Offshore/onshore training facility • Potential for SNS 2019 dedicated Vattenfall supply chain event • ASCO can provide locally based waste management solutions • Shallow water • Seabed conditions • Strong winds • Benign sea states • Proximity to market • Proximity to the end user: London, South East, Midlands • John Henry Group to help fill the Labour gap (construction)	**Opportunities** • Create a school of engineering in region (UEA) • Early engagement gives companies time to explore opportunities to collaborate to put in more cohesive and attractive tenders • Early engagement gives time to get necessary accreditations • Joint training, certification and currency for offshore workers across oil, gas and offshore wind • Taking existing skills and services and mapping to new (but linked) requirements the project brings • Developers and operators (OWIC) to work together to leave a lasting legacy • Lasting legacy includes supply chain developed, STEM/schools, colleges and universities, and infrastructure improvement • JDR has a low local content due to location of facilities • Vattenfall to work with apprentices in East Anglia • Skilled onshore/offshore training • ERSG can provide recruitment services when required, either in the form of contractors when the projects are at their peak, or whether it is for full-time staff/personnel • Pipeline of major projects for many years to come, including renewables, oil, gas, nuclear, network, distribution, storage, community generation
Weaknesses • Lack of a school of engineering • Purchasing decisions based on 'lowest cost' model creates race to bottom • Improving the infrastructure brings power, broadband and roads • Poor infrastructure brings poor opportunities	**Threats** • Which contracts will get CfD? • Change in administration creates uncertainty of government strategy • Lack of export opportunities • Local infrastructure, including roads, accommodation and amenities • UK port costs and ownership vs European competition (in particular low countries) • Lack of technical understanding of the requirements of a project of this type of complexity • Lack of understanding or 'buy in' from local community

Table 7

Internal factors	External influences
Strengths • Experience Engineering Procurement Installation Commissioning (EPIC) contracts • Local content • Quality workmanship • Experienced permanent local staff • New management to provide future of business • Existing collaboration with national surveying company who verify our accuracy • Substantial experience (since 2012) of drone operations including work on EA1 for multiple Tier 1 contractors • Turnkey capability for design, engineering, supply, installation and commissioning	**Opportunities** • New lower cost high accuracy (RTK) drone technology • Change legislation to allow longer range drone flights (Operating Safety Case) • New battery technology • Design innovation • Norfolk – Cambridge Tech Corridor attracting innovation • Develop local skills • Benefit to region to become a hub of expertise • Business collaboration to develop opportunities and attract others into the region (stability through scale) • Other business opportunities with participating companies • Chance to design, plan and be innovative • Involved early in the contract and not last minute
Weaknesses • Funding cash flow linked to balanced terms and conditions • Availability of suitably skilled pilots and "data crunchers" • Cash flow caused by slow payment terms • Cost of retraining • Paperwork requirements for HSE • Continuity of workload • Regional connectivity requires improvement, including transport and tech • Subcontract funding	**Threats** • Brexit • Maintaining support of stakeholders • Drone "hobbyists" who claim to be able to do mapping and surveying, but can't – damages the perception of drones • Continuity of contracts to service apprenticeships skills development • Lack of support for UK content when faced with commercial decisions • Skills gaps – local colleges and schools need to provide the right courses to serve need • Poorly defined scopes of work/supply • Conflicting codes and standards • Procurement strategy – opex as well as capex • Existing perception that drones are not accurate enough – challenge is myth-busting • Cost of retraining • Paperwork requirements for HSE

Additional notes collected and feedback provided during plenary session includes:

- Tier 1's must walk the talk
- Contracts being split up into smaller sizes is positive
- Encouraging to hear Vattenfall is thinking about biodiversity – could there be a net gain?
- Seeking to promote the supply chain benefits for future generations is positive
- Appropriate apprentices are required to deliver the project
- Heat balance: free draining at the coast (winter spray inland summer) and possibly deeper cable ducts – 150?
- Please provide information on running track practicalities
- 20km is manageable
- What is the value of the onshore duct installation?
- Where do medium contractors fit in if Tier 1 are looking for small contractors?
- Will there be need for a management contractor from the supply chain, or will Vattenfall supply this?
- Supply chain development, aggregation and joint working (collaborative working between SME's and encouraging/incentivising joint working)
- Improve road, rail and communication infrastructure
- Improve skills development for civils and engineering – through work in junior schools, senior schools, colleges, universities and private providers
- UK content, local content (East of England)
- Developers to work together
- Aggregate issues for joint action/solutions – OWIC?
- Learn from other sectors – oil and gas, automotive, aerospace, defence
- Promote the pipeline of opportunities – who is doing what and when – CfD rounds/Crown Estate
- Would like to know more information about the IT requirements for the onshore construction phase and during the ongoing operational phase
- Provide clarity and understanding of a simplified pre-qualification process accessible to SME's
- Ideal vs reality – 'we are never going to be approached directly'. How do we know who to speak to and when?
- Need more detail and clarity on the scope of works
- If packages are so big (to reduce risk) will Tier 1 put a package together and make links locally? Is this the way Vattenfall will work?
- Should be on the invitation to tender (contractual obligation)
- If there is no Tier 1 would Vattenfall project manage this aspect?

Gearing up to Grow

Identifying support required in Norfolk to address challenges

Peter Wright – Economic Development Officer and Jan Feeney – Employment and Skills Manager, Norfolk County Council

Peter Wright detailed the procurement process and the constraints on the local supply chain. He discussed how a collaborative approach to procurement between the client and the supply chain promotes efficiency and provides value for money savings in the delivery of a project. Peter referred to research undertaken by Fujitsu, which reported that 58% of SME's said that collaboration with large companies was the most viable route to winning major contracts. He discussed some barriers to this type of collaboration, and some means of overcoming obstacles to growth, and outlined plans by Norfolk County Council (NCC) to develop support for SMEs that can help address challenges and meet their needs. He thanked participants for sharing their SWOT analyses and urged them to consider what support they might take-up, should it be provided by NCC and partners to help them gear-up to grow.

Jan Feeney discussed how NCC and Vattenfall have collaborated already on a skills strategy to support the creation of a local, highly skilled workforce that can deliver the ambitious plans of the East of England offshore wind sector. Jan discussed the NCC's ambition to improve skills through apprenticeship schemes and repeated Peter's request for feedback from the supply chain to understand how best NCC can support them to achieve the skilled and motivated workforce that will give them the confidence and capacity to apply for offshore projects works packages – particularly in relation to onshore works, where local companies really have a competitive advantage over other suppliers.

Simon Gray – Chief Executive, EEEGR

Simon Gray provided an overview of the offshore wind industry in East Anglia and the opportunities for contractors to pick up work through various projects in the region. He explained EEEGR's work to support and represent the interests of the region's 'cluster' of developers, supply chain, skills providers and more, and highlighted that companies established in the region are already providing services to offshore wind farms in the Southern North Sea, and that opportunities will grow, for local development and for export to other markets in the UK and beyond.

Nova Fairbank – Head of Policy, Governance and Public Affairs, Norfolk Chamber of Commerce

Nova Fairbank discussed Norfolk Chamber of Commerce's role in connecting, supporting and giving a voice to businesses in Norfolk. Nova highlighted the importance of improving these areas and encouraged attendees to register their interest as a supplier on the Vattenfall website.

Nigel Best – Manager, New Anglia Growth Hub

Nigel Best explained the growing business fund, small grant scheme and growing places fund that businesses can apply for through the New Anglia Growth Hub. Nigel highlighted collaboration and support in the industry as key factors for turning weaknesses into opportunities for the supply chain.

Workshop session: Successful tendering – what support for local companies can deliver a winning edge?

The workshop session that followed next aimed to identify how third party organisations, including Norfolk County Counil and the Chamber of Commerce and partners, might help SME's to address weaknesses and threats by delivering relevant support packages. Participants were asked to identify what support would help them gear up to grow.

Below are the outputs from each discussion group.

Table 1

What support could make the winning difference with gearing up to grow?
In the short term (up to three years) • Staff development funding for degree level and above • We need to know what we need to know • District Councils and public sector to engage via sector and member groups • Collaboration and communication within business support sector • We need help getting HGV drivers – struggling with salary cost of licenses and ageing population • Tier 1 and the developer must 'walk the talk' not just talk it • 'Sell' the industry better and show it is exciting, not dirty e.g. through social media
In the longer term (three – ten years) • Lessons learned and a debrief session post project to ensure best practice delivery on future projects • Collaborative approach to developing skills • Innovation lateral thinking (CfD) • Have visibility of the tender programme so there can be advanced engagement with the local contractors • Make it easy for young people to stay interested in the sector – infrastructure entertainment • Do we need to look at planning constraints i.e. regarding aggregates and future projects • Recruit young people as soon as possible e.g. the aviation academy • Innovation in what we do and how we do it

Table 2

What support could make the winning difference with gearing up to grow?
In the short term (up to three years) • Aid in more onerous tender processes and longer procurement • Support with the impact of tendering on resourcing • Support with the impact of tendering on cash flow • Publication of tenders on multiple portals • Payment to access tender portals (particularly for private developments) • Accreditations and qualifications need to be more common • Collaborative training across companies (rather than individually) • Improved broadband infrastructure • Improved mobile phone reception • Improved infrastructure to support access and transport • Improved infrastructure for future developments such as electric vehicle charging • Divest away from central Norwich bases
In the longer term (three – ten years) • Succession planning • Education courses for future skills – commonality on career paths • Syllabuses to be coordinated • Advertising of career paths • Transferable skills post wind development

Table 3

What support could make the winning difference with gearing up to grow?
In the short term (up to three years) • What accreditations are needed and how do we get them? • Joined up approach on the business case for grants • Exploration time for grants • Engagement/inspiration ethos • Clarity on the specifics of the wider infrastructure • Be provided with the procurement strategy early • Time to speak to the right person e.g. NGT work and meet the buyer event
In the longer term (three - ten years) • O&M - engaging range of local people • Leaving a legacy to improve skills • It is hard to look beyond three to five years • Continued improvement on being able to speak to the correct person • Provide a service review • Feedback during and after the project to further help business development and improve the training process • Investment → capacity →innovation

Table 4

What support could make the winning difference with gearing up to grow?
In the short term (up to three years) • More visibility of procurement strategy • Early and clear understanding of PQQ and evaluation crite • Access to apprenticeship levy • Specific 'kit' for the engineering skills centre - East Coast College Lowestoft Campus
In the longer term (three - ten years) • Develop a centre of excellence for energy

Table 5

What support could make the winning difference with gearing up to grow?
In the short term (up to three years) • Shorter process for grant approval • Money for 'improvements' equipment • Upskilling current staff • Loans for upskilling • In kind offer e.g. venue versus ££ for joint courses • Future forecast of projects confidence in taking on apprentices • Planning vs cash flow issues • Help looking after placement students • Involve companies in the selection process for placement schemes • ISO900 and successful tender writing courses
In the longer term (three - ten years) • Support for career development • Initiatives in house to develop the current staff - there are resourcing problems at a senior level in the region and there is less of a tendency to move for a job at higher grades

Table 6

What support could make the winning difference with gearing up to grow?
In the short term (up to three years) • Consortiums and joint ventures for manufacturing and installation • Larger scopes of works • Less interfaces • No 'margin on margin' • UK finance support – similar schemes to UK EXP FIN • What does the bid look like and is there a template that can be shared? • A major supply chain event at SNS 2019 May 15 and 16 where Vattenfall and all Tier 1 contractors will be exhibiting • Lessons learned feedback session • Feedback as to what factors helped companies to win previous bids • Feedback as to what factors helped companies fall short of winning previous bids • Innovation support • Tender writing support • Provide information on accreditation • Provide information on training requirements • Provide information on transferability • Could we merge different projects with one solution e.g. EA1 North/EA3, Norfolk Boreas and Norfolk Vanguard with one trench with multiple cables? *[Answer from Vattenfall – one trench for cables of multiple projects of different developers is not practicable, not least due to different landfall and connection points, however synergies arising from enhanced understanding of pre-construction, construction reinstatement etc. methodologies is a potential opportunity]*
In the longer term (three – ten years) • O&M frameworks and repair call off agreements – needs to be understood at the time of the bid, not as an afterthought • Standardisation of design • Detail what careers will be required and what roles do these positions play in this industry • Clarity and certainty on policy in the wake of Brexit

Table 7

What support could make the winning difference with gearing up to grow?
In the short term (up to three years) • Contract payment milestones to help with cash flow • Costs of industry specific training (BOSIET, GWO, STCW) • Support in getting systems accredited • Strategic framework agreements for both projects • Government support for warranty capital – warranty bond (similar to what is done for UK exports) • Visibility of tender plan • Quick payment in under 30 days • Fair retention for two-and-a-half years
In the longer term (three – ten years) • Continuity of orders work • Stability of policy towards O&M activities • Skills development of staff – need projects for this to happen • Early engagement with supply chain to develop solutions • Financial assistance for appropriate day release opportunities • Funds for investment in longer range drone equipment • Funds for investment in helping with costs of extra Civil Airline Association permissions • Major capital investments

During a supplementary feedback session, the attendees raised the following ways they can be supported in both short and longer-term. The short-term support includes:

- Warranty bond support
- Payment support
- Shortening the process to apply for funding
- Small grant schemes from NALEP available until 2021
- Access to an apprenticeship levy including training on how to access this
- Vattenfall to communicate the procurement strategy back to the supply chain

Longer-term support includes:

- Plan now so skills can develop in the sector
- Market the offshore wind sector using multiple communications channels
- Focus on leaving a legacy through projects such as the Sheringham Shoal museum

Summing up & next steps

Catrin Ellis Jones encouraged attendees to register their supplier interest on the Vattenfall website to ensure they are kept up to date on procurement as the Norfolk Boreas and Norfolk Vanguard projects progress. Catrin explained the feedback from the group activities and completed feedback forms would be summarised in a report and circulated to attendees. The report would also be published on Vattenfall's website to a wider audience are aware of the discussions and next steps.

She noted too that the questionnaire feedback would be used in the first instance by NCC and the Chamber of Commerce to refine a bid they were intending to present to the NALEP, which would enable them to develop some of the additional support identified by participants as useful / necessary, to help them capitalise on the opportunities ahead, resulting from the growth of offshore wind development.

Catrin thanked participants for their contributions, and for the energy and enthusiasm with which they had participated, and encouraged them to register their interest on the Norfolk Vanguard and Norfolk Boreas supply chain pages, if they had not done so already.

Catrin then invited Vince Muspratt and Rob Lilly to close the session.

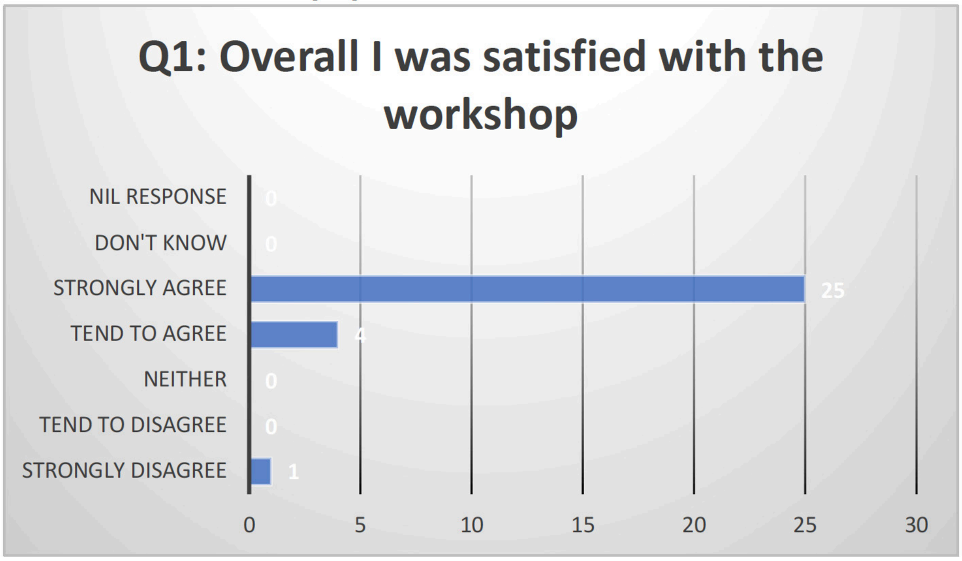
Close

Rob Lilly Vattenfall UK Procurement Manager, thanked participants and speakers for contributing to a productive workshop, and concluded by remarking that he felt the meeting had met expectations in terms of:

- Enhancing Vattenfall's understanding of local capabilities, to help scope drafting and Contract Strategy optimisation
- Enhancing the local supply chain's understanding of what is required and how to work with Vattenfall
- Jointly identifying gaps in terms of skills, staffing levels, scopes & knowledge so that:
  - ✓ Vattenfall are informed,
  - ✓ The supply chain, with support from local Econ Dev Stakeholders are encouraged to grow, and are equipped to realise opportunities from offshore wind.
  - ✓ Our children have a pathway into renewables.

Vince Muspratt, Assistant Director of Economic Development and Strategy, Norfolk County Council, thanked attendees for participating in a productive workshop and for their contributions. He said that NCC were determined to take a leading role in enhancing economic development in Norfolk and enabling opportunities for the local supply chain arising from the offshore wind potential of the Southern North Sea, by investing (including with financial support) in programmes that encourage participation & collaboration in tender processes. Vince expressed his thanks to Vattenfall for facilitating the workshop and for providing early and transparent engagement with the supply chain. He remarked he'd not seen a developer in the region be so committed to maximising local opportunities and leaving a lasting legacy through its engagement with schools, the University of East Anglia, business groups and more. He concluded by reiterating this is an exciting time to work in East Anglia's offshore wind industry, and through more collaborative working there will be a greater chance for all to reap the rewards.

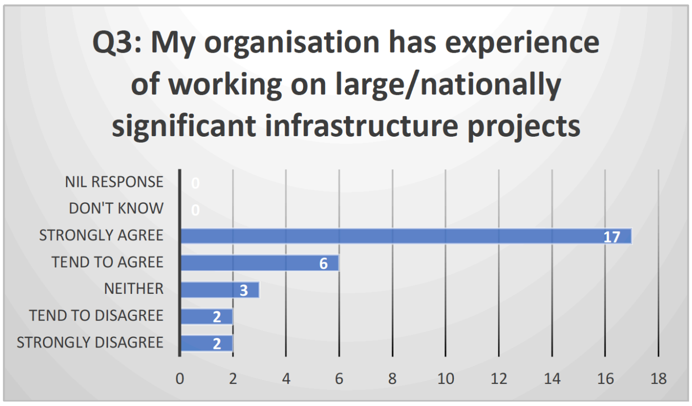
Evaluation / questionnaire feedback

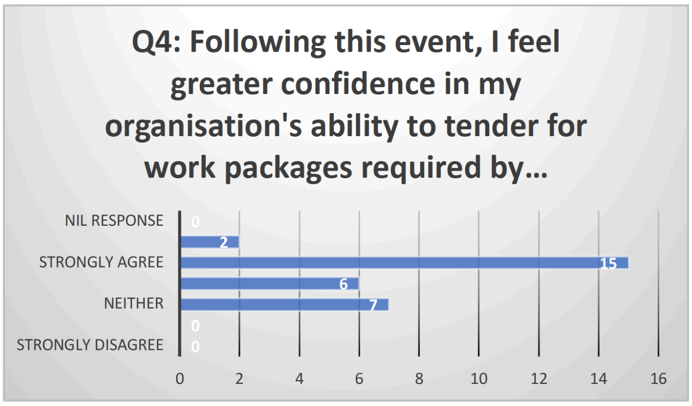


Comments:

- Very focussed on delivering relevant information to the companies in attendance
- Very good format, good attendance and quality of attendees
- Very interesting
- Great to meet Vattenfall and other stakeholders from the supply chain
- Lots of views and observations from many diverse companies. Chance to express my views directly to client (Vattenfall)
- Very useful outline of the project and preparation if asked to tender Good to be sitting around a table with people of different backgrounds and interests
- Good to see a new approach to suppliers
- Working groups well balanced to give differing and interesting viewpoints about SC, concerns and the project
- Good presentations and good work groups
- Vattenfall could have detailed / highlighted what type of local supply chain companies will be needed
- Excellent communication of the project from Vattenfall
- No expectation really. As a medium sized company, we have not encountered this type of workshop in our industry in our area
- Event was informative and [initiated] discussions and proactive actions
- Answered my question about supply chain opportunities
- Positive overall feeling, great ideas
- Very interactive and engaging, well organised, good venue
- Very good forum as an intialiser to the supply chain
- Great to hear Vattenfall's progression and reassuring to hear how they intend to [engage] with SMEs
- The team were informed and friendly and felt like there is a different format / approach to these projects looking ahead
- This is an innovative approach which allows all players in the supply chain to take part and interact very early in the process. I have not seen this done before and it speaks volumes Vattenfall's positive / caring values
- Good venue, clear presentations, useful networking and good to have opportunity to express views / concerns / aspirations

Comments:
- Learnt about Vattenfall
- A few new contacts and understanding of the project now
- Yes, the access to other stakeholders will be useful
- Networking with participating companies - business opportunities. Range of support available from local councils
- Excellent detail given as to what Vattenfall are looking for
- Pre-construction phase opportunities. Other funding and training schemes
- I believe [some organisations aiming to represent the sector] talk a good game, but can be smarter and more efficient in delivering tangible benefits to SMEs, eg: facilitating cost sharing of industry relevant training and accreditation to SMEs
- There were no main players bigging themselves up
- Didn't answer the question asked
- We could possibly supply direct to Vattenfall
- The various viewpoints about SC and variety of organisations and what is of concern to them trying to access the SC met with similar questions that MIGSOLV also has
- Highlights the requirements (or hurdles) for tendering
- Met some local supply chain companies
- I met potential new clients
- Local and industry investment opportunities and grants
- Onshore works elements - previously involved offshore. Vattenfall strategyThe supply chain event in Spring
- Future opportunities and funding
- Volume of projects in the pipeline. Further reassurance of potential future business
- We met some people directly connected with the project at Vattenfall for the first time and had some very useful conversations
- Further understanding of the project and networking with like minded companies
- Create understanding of likely requirements of supply chain and timescales for delivery

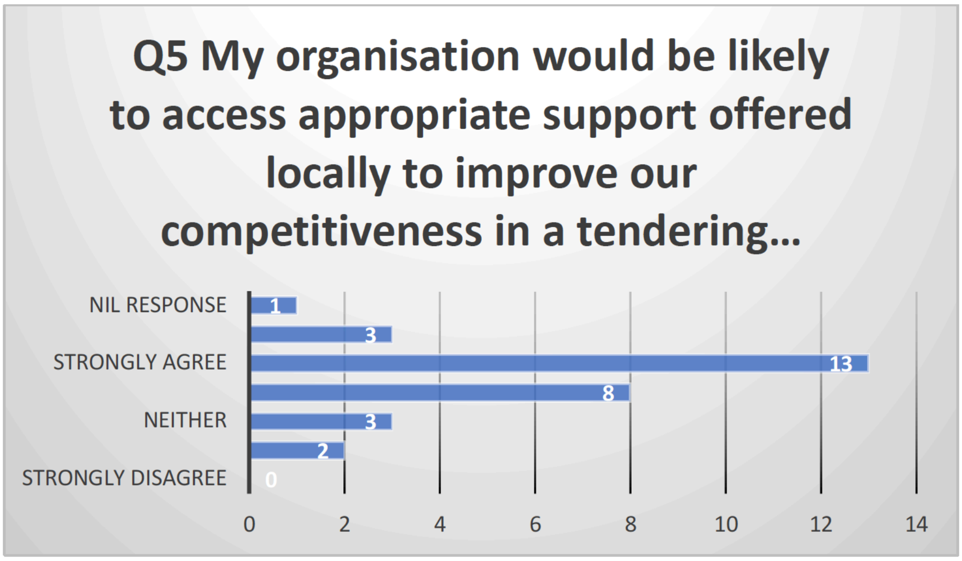




Comments:

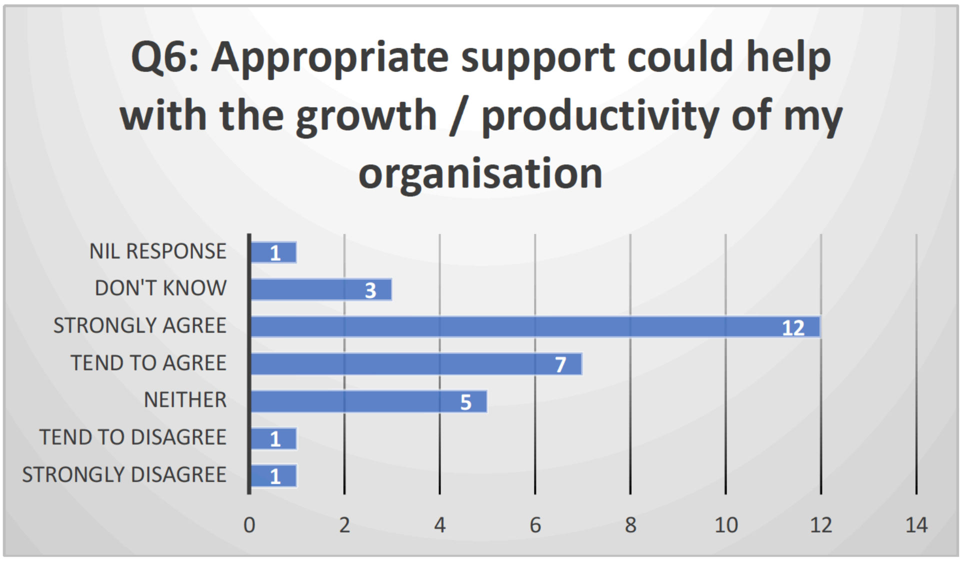
- Due to Vattenfall's willingness to engage better with tier 2 contractors, I feel 3Sun Group is better placed
- I think we were always capable of tendering large projects successfully (see Q3), but Vattenfall approach makes me confident that we can work successfully with them
- This is the sort of work we are experienced and good at. Could use much of our local labour, plant and supply chain
- Feel similar. With regards to tendering, it all depends how packages are split up.
- Still need more clarity on tier 1 contractual obligation to procure from local supply chains
- It does grow confidence to see the willingness to engage. Still early days. Hopefully, a tier 1 won't manage it and source based on price only outside the region
- Vattenfall are treading new ground in this area and it's good to be a part of, and get, an early insight
- We tend to supply subcontractors
- Good to hear that opportunity is there for SMEs and look forward to that developing as a reality
- Very keen on getting involved in drainage and trenching works
- Concerned that contracting strategy will favour very large companies
- ODE tender for major packages so not applicable

- The confidence that Vattenfall will procure from SMEs
- Realisation that smaller companies can fit within larger projects
- Yes, if companies such as Vattenfall directly connect to tier 3 companies
- It came across that Vattenfall really do care for the local supply chain and now aware of future meetings to come in 2019
- The procurement strategy has not yet been fully developed. We look forward to future developments
- There remain areas which are unclear to do with the project - specifically who we approach over being considered for the tender process - especially if the project is handed to a tier 1 contractor in the future
- NOT DIRECTLY INVOLVED in the processes discussed, but ERSG will welcome taking part in the bidding for scopes of work for the provision of personnel to Norfolk Vanguard and Norfolk Boreas
- We are familiar with the demands of working on a large scale project in terms of resourcing and delivery, but equally the plan to break it down into sections is welcome and offers opportunities for collaborative and cross-discipline working



Comments:

- 3Sun have engaged with the LEP and are current members of EEEGR to boost opportunities and competitiveness
- The support programmes presented will benefit the SME more than 3PR. However, it is good to know about them to keep one eye on them
- Looking at the local direct grants, but more to assist with on-going work rather than tendering process
- Our business has sufficient scale and resources to not require help. However, it would be welcome if offered
- Already starting application process for “Keep +” funding
- To perhaps help our tender process
- Any opportunity for support, collaboration, networking through other organised events can only be of help
- Spare apprentice involvement for back-up work (apprentice could not undertake site work)
- Introduced funding and advice opportunities I hadn’t previously known about
- Learn about some support that we were not currently accessing
- Not applicable
- Apprenticeship and/or graduate recruitment support
- Local and specified funding and grants
- All our clients would benefit from support within the tendering process
- We would access this portal if it’s available
- LEP funding
- Not sure we would require or knew how this support would benefit us
- Potential small grants for new machinery or “upskilling” existing staff
- Any support to help improve our competitiveness, be it financial or otherwise, is always beneficial
- LEP / apprenticeships / local authorities, etc. Lots of interesting and relevant discussion and presentations and food for thought
- Access to upskilling funding, finding the correct resources required, tender writing skills workshops (tailored to sector)



Comments:

- Assistance with apprenticeship levies could help increase our apprentice intake back to its previous level
- As Q5
- Some knowledge of the scopes of work to be tended would allow the preparation of commercial proposals
- Support can be measured by ease of cashflow
- As Q5, we have enough scale and internal resources to rise to the challenge
- Turnover and our ability to take on additional staff
- Infrastructure of local area (Wi-Fi, alternative meeting venues like this - always city centre). Sharing training costs amongst SMEs that's required by the energy sector.
- Unaware at the moment
- Support to have access to the most appropriate people to talk to
- With respect to training, etc, this could really be true
- Sustainability
- Support will always be a help, especially appropriate of course
- Growth in personnel numbers. Increase in turnover and profit margins. Business growth generally
- Supply chain forecast, when available, allowing to plan skills required
- Our continued engagement will help
- Turnover and continuity of work
- Driving further efficiencies out of our practical operations by the introduction of new / innovative technology / ideas is always something we are looking at
- Additional growth and expanding succession planning
- More effective systems management, career development initiatives in-house to ensure we have the correct skills at the right grades to ensure long-term efficiency. Staff retention, win rates increasing, repeat work for measurables

Any other comments:

- Very good event. Thank you for the invite!!!
- Many thanks for the invite
- Thoroughly enjoyed the day. Look forward to discussing project development and developing procurement strategies with the Vattenfall team and tier 1 contractor
- This is a great opportunity for us and the region
- Good open and genuine feel to the day. Feels like procurement team open to direct and constructive communication and ideas
- Definitely a very warm, welcoming event. It would be so good to see this "story" being documented and the social impact being showcased. This is a very positive opportunity. Thank you for inviting us Very enjoyable, but also productive.
- A very informative day
- Very good and open discussion well before any start to project
- Please keep me informed on this project and other similar within the UK
- In all a useful and informative day
- Very good workshop, with right level of information put forward. Next level of detail would be required at next workshop to more understand opportunities available
- Moving forward: would be helpful to receive an invite to network with other relevant companies within our "scope of works" ie: to be able (as a tier 2/ 3 company) to liaise with tier 1
- A well structured event
- Thank you for all involved, great day and a lot of knowledge taken away
- Thank you for the invite
- A good start to engaging with local services
- Thank you for today!!
- Good event. Well organised and informative. Felt like a fresh approach by Vattenfall. Please ENGAGE with us and allow us to show you how we can help deliver your projects going forward
- Reiterating my comment on Q1 around the positive message Vattenfall sends out to the local community on ensuring everyone is involved at such an early stage. No other developer shows this commitment or care (that I know of) and so it has been a privilege to have taken part. Thank you

List of participants

Name & organisation / company

Table 1
Rob Lilly – Vattenfall
Mike Wiseman – ODE
Stuart Smith – PWE
Alan Welton – Seaward Safety
Andrew Wright – Miles Drainage Ltd
James Frary – William Morfoot Ltd

Table 2
Andrew Hardcastle – GHD
John Breheny – Breheny Civil Engineering
Mel Maritz – Hexcam
Nick Saunders – Norfolk Woods and Hedges Ltd
Tim Smith – Red7Marine
Andrew Hacon – 3sun Group
Gary Slingsby – Middleton Aggregates Ltd

Table 3
Susan Falch-Lovesey – Vattenfall
Peter Cooke – Volker
Simon Turner – ASCO UK
Dominic Boullé – MIGSOLV
Jamie Cottington – Russell Eng
Tim Sisson – William Morfoot Ltd
Stuart Quick – North Norfolk District Council

Table 4
Nova Fairbank – Norfolk Chamber of Commcerce
Garron Lees – ODE
Arron Burrows – Next Geosolutions
Andy Fenwick – Middleton Aggregates Ltd
Francesco Ghillani – ERSG
James Drury – H&Askham Ltd
Stewart Damonsing – North Norfolk District Council
Amy Smith – Broadland District Council

Table 5
Peter Wright – Norfolk County Council
Dr Rachel Saunders – The Ecology Consultant
David Manning – MIGSOLV
Denise Hone – Stowen Clean Energy Ltd
Stephen Scowen – Broadland District Council
Terry Carmichael

Table 6
Jan Feeney – Norfolk County Council
Simon Gray - EEEGR
Dean Sanders – Tele-Fonika Kable / JDR
Michael Wells – JDR
David Corder – ASCO UK
Paul Harrowing – MacKinnion
Steve Henry – Steve Henry Group
Natalie Ghazi – Vattenfall

Table 7
David Reid – Vattenfall
Peter Robotham – Miles Drainage Ltd
John Nortcliffe – Hudson Architects
Paul Thomson – Sembmarine SLP Ltd
Andy Bodycombe – Hexcam
Steven Cox – Blaze Manufacturing Solutions
Julian Clanton
Graham Plant – Norfolk County Council

Others supporting discussions were:
Rob Driver – Vattenfall – providing engineering expertise and strategic technical overview to support group and plenary discussions
Catrin Ellis Jones – Vattenfall – meeting design & facilitation, strategic corporate / project overview
Tom Warren – Copper – support facilitator

Photography by Julian Claxton/CHPV

Thank you to the staff at The Nest, Norwich - who made everyone feel very welcome at their bright, light-filled venue, part of the Community Sports Foundation.