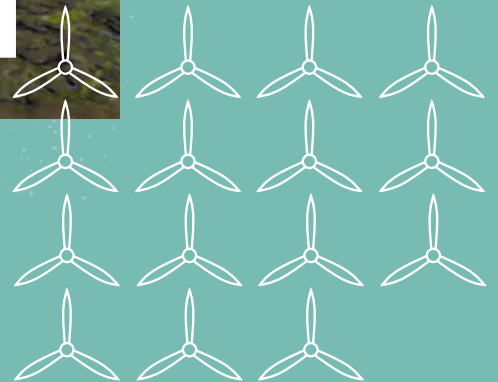


# Building Shetland's energy future

SEPTEMBER ISSUE 2023



SSE Renewables are proud to be one of the Lerwick port sponsors of the event this year.



TRANSMISSION

### About SSE Renewables

SSE Renewables is a developer and operator of renewable energy across the UK and Ireland, with a portfolio of around 4GW of onshore wind, offshore wind and hydro. Part of the FTSE-listed SSE plc, its strategy is to drive the transition to a net zero future through the world class development, construction and operation of renewable energy assets.

SSE Renewables owns nearly 2GW of operational onshore wind capacity with over 1GW under development. SSE Renewables also has the largest offshore wind development pipeline in the UK and Ireland at over 6GW, of which around 3GW is in construction or consented.

### About Viking Energy Wind Farm

Viking Energy Wind Farm (VEWF) is a 103-turbine onshore wind farm set around the central Mainland of Shetland. The £580m project is owned by SSE Renewables and construction began in the autumn of 2020.

### About SSEN Transmission

SSEN Transmission, operating under licence as Scottish Hydro Electric Transmission, owns, operates and develops the high voltage electricity transmission network in the north of Scotland. Its network consists of underground and subsea cables, overhead lines on wooden poles and steel towers, and electricity substations, extending over a quarter of the UK's land mass crossing some of its most challenging terrain.

SSEN Transmission powers the communities its network serves by providing a safe and reliable supply of electricity, taking the electricity from generators and transporting it at high voltages over long distances through the transmission network for onwards distribution to homes and businesses in villages, towns and cities.

We are committed to inclusive stakeholder engagement, and conduct this at an 'Accomplished' level as assessed by AccountAbility, the international consulting and standards firm.

### AA update

SSEN Transmission works to achieve the externally accredited AA1000 Stakeholder Engagement Standard. This is considered the 'gold standard' in stakeholder engagement accreditation. Our AA1000 Stakeholder Engagement Standard score as of June 2022 is 82% with a top-tier rating of "Advanced" in the AccountAbility Stakeholder Engagement Maturity Ladder. This is a 20% increase on our 2019/20 score and demonstrates our commitment to continuously improving our stakeholder engagement practice.

### Keeping in touch

We are keen to hear your feedback, so if you have any questions about the newsletter or the works currently underway please contact:

SSEN Transmission Community Liaison Manager Thea Groat [thea.groat@sse.com](mailto:thea.groat@sse.com) / 07901 127 205

Viking Energy Wind Farm Stakeholder Engagement Manager [Julie.Graham2@sse.com](mailto:Julie.Graham2@sse.com) / 07586 282236

To find out more about the projects and to register for updates please visit:

[www.ssen-transmission.co.uk/projects/Shetland/](http://www.ssen-transmission.co.uk/projects/Shetland/)  
[www.vikingenergy.co.uk/](http://www.vikingenergy.co.uk/)

# Viking Energy Wind Farm passes key point in the project with installation of final turbine



Caption:

Just over three years since breaking ground on the project, we are celebrating the successful installation of Viking Energy Wind Farm's 103rd and final Vestas V117 wind turbine.

Turbine installation at Viking Energy Wind Farm, which when operational will be the most productive onshore wind farm in the UK, commenced in February 2023 and in just over six months the team has successfully installed over 1,000 components on site.

Reaching this milestone has seen the project battle some very challenging working conditions, from frequent heavy rain and the biggest snow storm to hit Shetland in over 20 years, to rolling fog which drastically reduced visibility across the site. However, the biggest challenge was the wind, with speeds often reaching over 78mph. Our team have worked to track every weather window over the last

six months, allowing them to continue to make significant progress, whilst safely lifting each component in place. The 103rd turbine was installed ahead of schedule with installation works initially expected to be completed by autumn 2023.

Over the last month, the project has progressed at an impressive pace, the installation of the final wind turbine is yet another milestone reached in the Viking Energy Wind Farm project. It follows on from the completion of the turbine component delivery campaign which saw over 280 convoys completed during a six-month spell.

The project remains on track for completion in autumn 2024, with commissioning works set to continue. When fully operational, Viking's 103 turbines will operate in the 4.3 MW power mode and generate up to 443MW of wind-powered clean green electricity.



## General update

Over the past few months, the teams here on the Viking Energy Wind Farm project have celebrated success in several areas.

We are coming into the latter stages of civil and electrical construction now, so naturally, goals and targets that had been set as far back as 3 years ago are now being met and the vision of the wind farm is no longer a design or set of plans, but a physical reality, and one that we are very proud to have been part of.

The HV cable installation was completed on Monday 14th August. The total amount of HV cable installed across the wind farm is a massive 478km. Fibre (159km) and earth (97km) have also been completed, with all cables now running directly from each turbine down to the central point at the HVDC platform.

The process of producing an efficient design and the logistical and topographical challenges encountered to get us to this point has taken the hard work, determination, and efforts of everyone involved and the project considers this a major milestone.

The remaining cable works involve the completion of backfilling (the process of covering the buried cables back to existing ground level), and the checking testing of the cables.

Once cabling is complete, the main aspect of works on-site for our Principal Contractor, RJ MacLeod, will be completion of reinstatement. The reinstatement works completed to date on site have been excellent, and using a combination of mainland and local contractors, the



Reinstated cable works ongoing, from East of the A970 coming down towards Sandwater Road.



Sandwater Road and B9075 looking West.

infrastructure required to facilitate the wind farm will be land formed and tied into the surrounding landscape and re-seeding will commence very soon.

At the height of construction, the number of staff on site exceeded 250 persons, all working on the various aspects to get us to where we are now. Over the next few months, the numbers on site will reduce significantly as we look to move into the commissioning phase of the turbines and complete all major civil and electrical works.

This will mean that the vast array of plant and machinery will be gradually de-mobbed from Site and returned to local contractors or back to the mainland. Finally, Sandwater Road will commence the next phase of construction. Over the past two years, Sandwater road, adjacent to the existing B9075, has been a haul road, and more recently used as one of the main access points for turbine component delivery.

Over the coming months, the road will be upfilled to final level before the final preparations are put in place next year for handover to the public. This will see Sandwater road become the new public road and the existing B9075 will be de-adopted. The new road will be single carriageway road, wider than the existing B9075 and ultimately safer for the public.

## Wind Turbine Installation and Control

With the turbine installation phase of Viking Energy Wind Farm (VEWF) now complete, the commissioning of the control systems is presently well under way. To collate all the required data, we have laid just under a hundred of miles of fiberoptic cable linking to one 'nerve center'- the Supervisory Control and Data Acquisition system, or SCADA for short. The signals are sent from each turbine to the Wind Turbine Generator (WTG) SCADA system at the speed of light, allowing us to oversee instantaneous data from all 103 turbines on one screen. This allows us to monitor and respond immediately to anything within any of the turbines or the SCADA system itself, 24 hours a day, 365 days a year.

Sensors on the turbines provide data to the SCADA system, whether it's temperature, wind speed or output power, we need all the available data to build the model for the site. This data is stored on servers and as trends develop, we can utilise the SCADA system to increase site efficiency and output. The Viking Energy Wind Farm also benefits from the experience gathered within SSE Renewables vast fleet of existing onshore wind farms, operated and controlled using SCADA systems, incorporating our operational knowledge from the very outset.

The strength of the SCADA system affords us the ability to control Viking Energy Wind Farm, maximizing the availability of the site whilst being able to respond to the volatility of demand. With this fluctuation in demand SCADA is the 'brain' that automatically responds to requirements in the connection agreement to control power production, to contribute to balancing the network, or to limit power output in response to instructions from the network operator, via SSE Renewables' central windfarm operations control centre which is located on mainland Scotland.

The Viking Energy Wind Farm operates in a challenging environment which is statistically the windiest place in the UK. It is the responsibility of the SCADA system to ensure we can control the turbines and power down in times of extreme weather events. The remote capabilities of SCADA improve the safety on site, eliminating the requirement to send engineers out in dangerous conditions, using the smart software to diagnose problems and automatically shut down the turbines.

During this exciting time at Viking, with turbine installations now complete, much of our momentum will transfer into the commissioning of our SCADA system and getting the turbines online. This will take an extended period of focused time and require a lot of work. Given the way the Viking Energy Wind Farm team has pulled together so far, this will be an extremely challenging yet rewarding phase of the project to complete and help Scotland take another giant leap towards its Net Zero objectives!



Caption



# 2023 Ornithology Highlights

Another breeding season has flown past and again VEFW have VEFW have been committed to not disturbing nesting birds during construction works to avoid the disturbance of nesting birds during construction works. Whereas in 2021 and 2022 the focus was on preventing disturbance at ground level, in 2023 the focus was of a more vertical nature.

Back in November 2022 the Environmental Team evaluated all the data collated in from 2020 to 2022 and were able to develop a "heat map" of areas where ongoing works, including turbine erection, had the potential to be disrupted on the basis of habitual nesting patterns of certain species. This was issued to the relevant contactors allowing them to reschedule their works in order to minimise disruption to the birds and the programme.

We have found that with the tracks and other infrastructure installed the ground nesting birds have already accustomed themselves to these and it has been noted they are choosing to keep their distance. Our old friends the great black gulls who posed a risk in 2021 and 2022 in the northern arrays were present again and were again successful in breeding, even with a 155m wind turbine now on its doorstep.

A regular pair of Merlin also returned and set up home in close proximity to the build location of three turbines but the merlins were non-plussed at goings on. However, when it came to constructing the final sections of the turbines the risk of disturbance was deemed too high and so the completion of these three turbines was delayed until breeding was complete. This plucky pair reared 4 chicks and were, a strong and robust brood when eventually the fledged. The chicks were ringed in the usual way by the local birding community.



courtesy of MBEC – VEFW Ecological Clerk of Works

The impact of avian flu has decimated many colonies of sea birds across the country, and Shetland noted its own decline in numbers; 60% reduction which reflects the reduction noted across Shetland as a whole. In 2022 the number of usual nesting pairs of bonxies (great skuas) on the wind farm was similarly reduced due to avian flu and all were unsuccessful in bringing chicks through to fledging due to mortality. It has therefore been pleasing to note that, all be it a reduced population on the windfarm, those that have survived and returned have produced some chicks as opposed to a complete failure last season.

Wider than the windfarm boundaries, the annual surveys were carried out as per previous years. Preliminary results indicate that for most species the number and distribution of breeding territories are similar to 2022, with only small changes in-line with normal year-to-year variation. These include several species of high conservation value such as red-throated diver, whooper swan, merlin, whimbrel, curlew, golden plover, ringed plover and dunlin. Several pairs of sparrowhawk, a recent colonist of Shetland that preys on small birds and nests in woodlands, were noted hunting over the open moorland of the windfarm. Given an additional rise in starling numbers, we are sure these pairs will enjoy some happy feasting as they settle into their new habitats.

2024 will bring a new perspective to the bird communities but given their tolerance to the changes in the landscape we would expect them to thrive.



Bonxie



132kV cables

## 132kV cables and grid compliance

Located in the heart of the beautiful landscape of Shetland, Viking Energy Wind Farm has committed to harnessing the power of nature to generate clean, renewable energy. With a dedication to sustainability and environmental responsibility, we are proud to play our part in mitigating climate change and securing a greener future for generations.

Our team has worked diligently to ensure that the Viking Energy Wind Farm meets the highest industry standards. The successful completion of the 132kV cable installation, along with ongoing adherence to stringent grid code regulations, marks a significant milestone in our journey toward a more sustainable energy landscape.

The 132kV cable installation enhances our wind farm's ability to transfer clean energy efficiently to the grid. With this upgraded connection, we can now provide a more reliable and consistent power supply, contributing to the overall stability and resilience of the wider power network.

At VEFW, our commitment to quality and safety remains unwavering. Throughout the process of working towards 132kV cable and grid code compliance, we have implemented rigorous testing, inspections, certifications and processes to ensure the safety of our operations and the protection of our natural surroundings.

We extend our heartfelt gratitude to the local community, stakeholders, and our partners for their unwavering support throughout this journey. Together, we have made a positive impact on sustainable energy development in Shetland, creating a brighter and cleaner future for everyone.

As we celebrate this milestone, we look forward to continued collaboration and innovation in the renewable energy sector. VEFW remains dedicated to exploring new possibilities, pushing boundaries, and contributing to a more sustainable tomorrow.



# Hares to a good cause: Viking Energy Wind Farm sponsors CLAN's 'Big Hop Trail'



Viking Energy Wind Farm and SSE Renewables are proud to be a sponsor of the Clan Cancer Support's 'The Big Hop Trail' event which coincides with the organisations 40th Anniversary.

Clan, the north east's leading cancer support charity, has partnered with Wild in Art to bring a new art trail to the north-east, Moray, Orkney and Shetland between July and



September 2023, with 40 hare sculptures designed and decorated by artists from across the country being the focal point to celebrate the charity's commitment to supporting people affected by cancer.

SSE Renewables' very own six-foot hare sculpture, named 'Dark Skies', can be found on Victoria Pier in Lerwick and has been designed and decorated by Anne-Marie Byrne a Suffolk based artist. The hare will be auctioned off in Aberdeen on September 18th to help raise money for the charity.

As part of the sponsorship package, local Shetland School, Baltasound Junior High School, has received an education pack for students to use in class and have also been gifted a smaller decorated hare.

"Clan provides a lifeline service to residents in Shetland offering a wide range of support as they travel to Aberdeen for life saving cancer treatments, so we are incredibly proud to sponsor their Big Hop Trail."

Download the Big Hop trail map at [www.thebighop.co.uk](http://www.thebighop.co.uk)

# Tree planting at Holmsgarth Brae

SSE Renewables have again supported tree planting with Lerwick Port Authority and Bells Brae School as part of an annual rewilding and paper payback project. This took place at Holmsgarth Brae in Lerwick. We provided the 150 trees, stakes and cages which were all hardy native species grown, supplied locally by Shetland Amenity Trust and helped with the planting.

It has been wonderful to once again be involved with this project and to spend a morning with the pupils of Bells Brae School who have taken such an interest in their natural environment and issues affecting the planet such as climate change.



Tree planting

# SSE Renewables sponsored Shetland Pride for a second year

We were lucky enough to be one of several sponsors who were approached by organisers to help the festival. SSE Renewables donation was used to fund several items including arts workshops to create banners for the parade, gazebo type stalls for the Pride Village which were situated in Gilbertson Park and volunteer training in vital event support skills including First Aid.

Shetland Pride trustee, Wayne Leask said: "We're so pleased that as one of Shetland's most prominent employers, SSE Renewables is supporting Shetland Pride again. It is only with their help and that of our other sponsors that we can host Shetland Pride for a second year and, after the success of last year's event I know that it will yet again be a celebratory event which the whole community will come out to support. Yet again, promoting equality, diversity and inclusivity is at the heart of the festival and we're pleased to see SSE Renewables and the Viking Energy Wind Farm team supporting LGBTQ+ people in Shetland."



The event was great fun but it was also an important opportunity for everyone in Shetland; from companies like ours to individuals in the community, to celebrate the diversity and inclusion of all. We look forward to being involved again next year.



Pride: Left to right are Wayne Leask - Shetland Pride Trustee, Gary Mouat - Chair of Shetland Pride, Julie Graham - VEFW Stakeholder Engagement Manager, Scott Summers - Shetland Pride Trustee, Joyce Davies - participant and volunteer, Martin-John Turner - participant and volunteer



# The Tall Ships Race 2023



Last week I discovered that playing my part in SSE Renewables being a headline sponsor for Tall Ships has been a really important journey for me both professionally and personally. That journey started with a relaxed chat with Lerwick Port Authority 2 years ago which led to me writing the business and resource cases in order to secure the funds and ended by sharing drinks with guests and colleagues onboard a beautiful 3 mast schooner which usually spends its life in the Caribbean.

It sounds so easy when I put it like that but the months in between were full of long to do lists of all things big and small that would take this from a good event to a great one. I was at times wracked with self-doubt and not sure we could pull it off. I am sure my teammates were sick of hearing about what was happening – accommodation block booked (18 months in advance) GoPro on order, VR

headsets for the tech tent, branded goodies, photographer secured, sailing gear for our trainees, guest lists and spreadsheets galore; the lists felt endless. It took everyone on the Viking team to want to take part, which they all did, it took an attention to detail that in the last few months had me working late into the night and it needed the most fantastic event as an awesome platform.

So, was it worth it? Absolutely! Did we do SSER proud? Yes, we did! Would I do it again? Without a doubt. SSE Renewables branding was there for all to see as were the baseball caps and rain ponchos being so proudly worn along with so many smiling faces.

As a Community/Stakeholder Engagement Manager it is sometimes hard to see where you fit or what value you bring to a project, because so long as it is 'on 'time' and



## Ellie sets sail on Swan

SSE Renewables Graduate Engineer Ellie Lawton set sail on Swan as a sail trainee in the third leg of the Tall Ships race to Arundel. She arrived safely and a few days later once again took to the water for the return voyage to Shetland. Ellie has had the most amazing adventure aboard Swan and is certainly bitten by the sailing bug. SSE's other sail trainee local girl, Helen Balfour also completed the trip to Norway aboard The Patricia.



Start of the Tall Ships race

'in budget' from a construction perspective, that's what really matters. But the people who live with what we build are just as important and working closely with them and helping them adjust to the change of view from their kitchen window is vital. As I watched members of the community on that deck chatting and sharing a drink with the site team, I no longer underestimated what I do.

My ethos has always been to work with a community to give them what they need and how they need it and while this can be much harder than saying 'here you go a nice big cheque' it certainly places you in the heart of where we work and live.

**Julie Grahams**  
Stakeholder Engagement Manager



# African Drumming in Shetland!

Joy Duncan, Shetlands own African drumming instructor, arranged for world renowned djembe master Sidiki Dembele, who is originally from Ivory Coast, to come to Shetland and visit local schools to share his drumming skills. Approximately 600 young people got to share this amazing experience.

The sessions were joyous with all the pupils joining in and singing along. A portion of the class then got up and did African dancing. SSE Renewables and Viking Energy Wind Farm were thrilled to partially sponsor this event.



African drumming with Sidiki Dembele and Joy Duncan



## Shetland young people showcase their innovation at STEM Celebration event

Young people from schools across Shetland showcased their innovation at a STEM Celebration event organised by SCDI's Young Engineers and Science Club (YESC) in June. They displayed an amazing range of different activities, experiments and research projects that the schools and clubs had been taking part in over the school year.

Around 85 young people gathered at Shetland Museum & Archives to compete in a variety of Science Technology, Engineering and Maths (STEM) challenges set by industry who provided an insight of the different career paths available in the STEM sector.

Schools received a free STEM Resource kit to take part in the Pylon Challenge to create a model that transferred renewable electricity from an offshore tidal energy turbine to homes across the islands. The celebration inspires pupils to showcase their innovation and helps them develop valuable skills and knowledge whilst encouraging uptake in STEM subjects and careers.

The event was delivered through funding from both SSE Renewables and SSEN Transmission.

"Employees from SSE Renewables had a great time at the event earlier this month and we were really encouraged to see how many young people took part and have a keen interest in the challenge of achieving net zero. It was great to be involved in the judging of the competition as part of the



Presenting certificates to some of the worthy winners: Thea Groat, SSEN-Transmission and Andrew James, SSE Renewables

day and we were impressed at the high level of entries. We hope the young people took something away from the day and would like to thank SCDI and everyone involved in the event for inviting us to be sponsors."

**Julie Graham, Stakeholder Engagement Manager, SSE Renewables**

"SSEN Transmission is proud to have supported the Shetland Celebration of STEM Event at the Shetland Museum and Archives. The event involved around 85 pupils from primary and secondary schools across Shetland and it was the perfect opportunity to provide the pupils with an insight into the different career paths available within the STEM industry. We would like to say well done again to the winners and to everyone who took part in the challenges. SSEN Transmission will continue to work with young people to help inspire and develop the future workforce and provide a pathway for school leavers into the wider energy sector."

**Thea Groat, SSEN Transmission Community Liaison Manager**

## Supporting local communities in Shetland



The Viking Community Fund continues to support all local communities in Shetland. The advanced fund is operating during the construction of the wind farm and as of August 2023, 364 projects have received over £777,000.

An example of the great support being provided to a wide range of projects The Shetland Care Attendant Scheme has received £18,133 to expand their services. The programme gives unpaid carers the opportunity to have much needed quality time on their own. The support provided by Viking Community Fund provided local carers with 756 hours of support.

Enhancing community assets is important for the fund as it ensures communities have the facilities they need now and for the future. South Mainland Up Helly Aa (SMUHA) received £9,750 from the Viking Community Fund to provide the building materials needed to enhance the Galley Shed.



Shetland Youth Orchestra

The Shetland Youth Orchestra also received £4,500 to purchase new equipment and to run their summer activities. This programme provides young people with valuable musical tuition and helps introduce an appreciation for orchestral music.

For more information about the Shetland Community Benefit Fund or to make an application please go to: [scbf.org.uk](http://scbf.org.uk) or scan the QR code.





# Shetland HVDC Project Construction Update

## Civils update

As the civil construction activities wind down and the number of workers from BAM Nuttall decreases at the converter station, the attention remains on the last of the external works. These works include surfacing, landscaping, final finishes, and watercourses. Thankfully Shetland has had a lovely, dry summer this year and the team have been able to carry out the required works without any delay.



Landscaping and final finishings



**Lookahead:** The focus will remain on the completion of the external civil works, along with final testing of mechanical and electrical equipment.



Siemens Energy Clean Air GIS fitted inside the AC substation

## AC Substation

The 132kV AC substation is still progressing through Stage 1 commissioning and is on schedule with an aim of completion by the end of this month. Transmission control centre testing (testing the signals back to the Perth control room) is ongoing with no issues to date.

The 132kV clean air gas-insulated switchgear (GIS) has undergone a full high voltage test over the period which passed 100%. This is a significant milestone for the project, Siemens Energy and SSENT as the clean air GIS is the first of its kind in the UK. The success of this milestone has proven the collaboration and workmanship of the build has been carried out to the highest standard.



# HVDC Technology Update

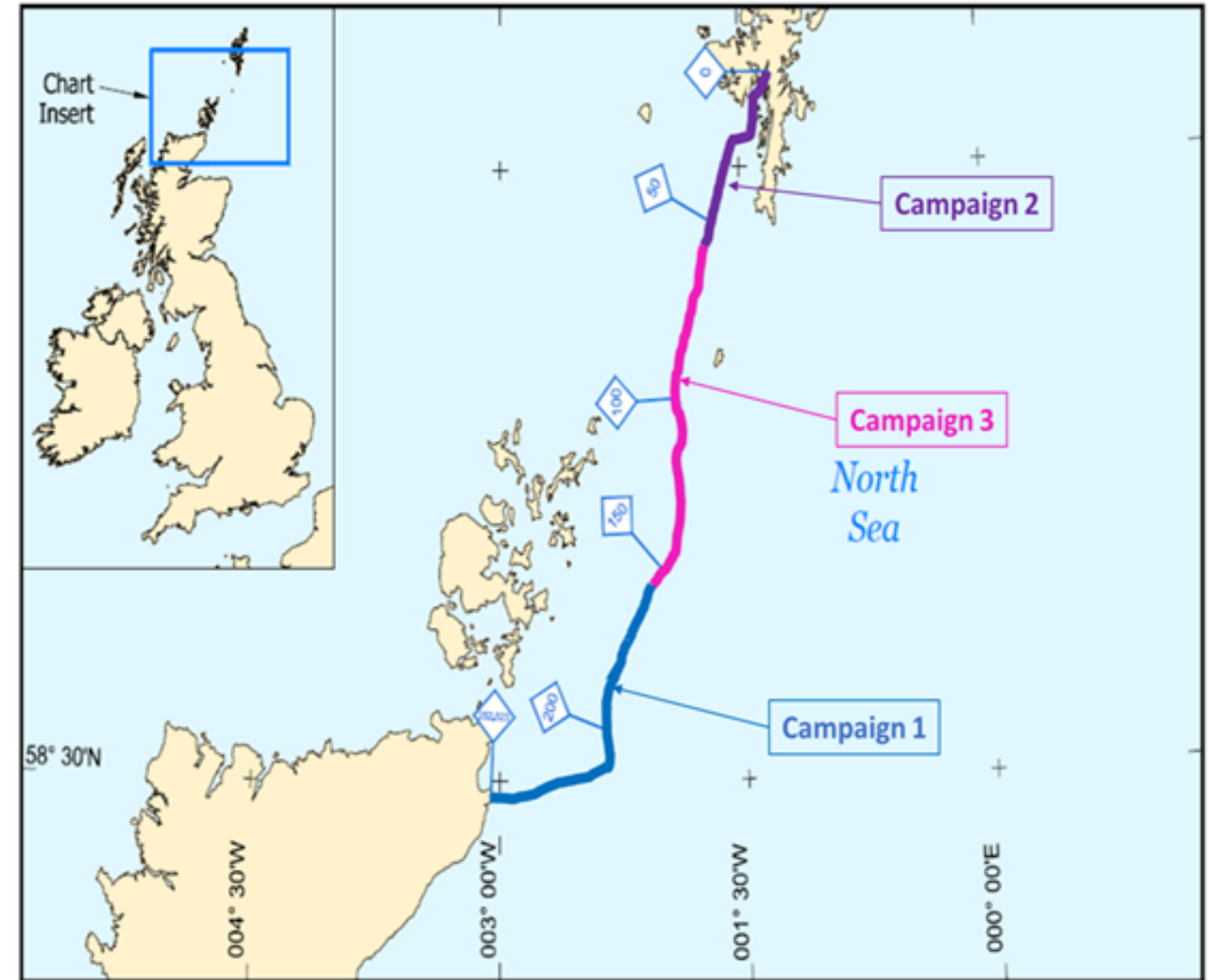
Within this period Hitachi Energy reached a major milestone when the converter station control computer system was brought online. This computer system is a central and critical component of the HVDC station as it serves as the "brain". The system oversees and manages various operations and processes related to the high-voltage direct current (HVDC) power transmission.



Control Room testing



Disconnecter Switch



Map showing the locations of the different campaigns.

# Subsea Cable Installation Update

Our Cables Team has achieved another major milestone by successfully completing the cable lay between Noss Head and Kergord. Campaign 3 is progressing well with the Grand Canyon III performing the last of the trenching. This step is crucial in safeguarding the cable before finalising the design with additional rock placement.

During September, the Flintstone vessel, in collaboration with the Deme Boskalis Joint Venture Company, will set sail from Norway. Loaded with locally sourced rock, it will

travel to and from the site, constructing rock berms for Campaigns 2 and 3. This safeguarding measure will ensure the subsea cable's durability over its 40-year life span.

This month will also witness the Hound Dog vessel's arrival at the Weisdale Voe. This task involves completing cable burial near the shore, which remains pending. This phase, anticipated to last around 21 days and will rely on divers to ensure the project's success.

## Lookahead:

- Continued progression through Stage 1 commissioning, focusing on testing of equipment to Station Control System links.
- Testing of the connection between Kergord and the Transmission Network Control Centre, which is based in Perth.
- Lifting operations for installation of Reactor Hall Air Handling Units.



# Shetland Renewable Connections Update

## Gremista Grid Supply Point (GSP)

The full link involves creating a 22km dual circuit connection between the new Gremista Grid Supply Point (GSP) and the Kergord Substation, which is currently under construction as part of the Shetland HVDC link, using a combination of overhead line and underground cabling.

Once complete, this link will provide a connection to Shetland's local electricity distribution network, connecting the islands to the GB energy system for the first time and helping to secure Shetland's future electricity supply.

Principal contractor Omexom-Morgan Sindall Infrastructure (OMSI) are making final preparations to mobilise for the construction of the Grid Supply Point at Gremista, where SSEN Transmission will install the new grid transformers and control buildings. Underground cable work on the first section of undergrounding by Morgan Sindall Infrastructure commenced in July. Overhead line works by NorPower commenced installing the new 132kV wooden poles in late August.

## Kergord to Gremista Transmission Link

### Underground cable

Work on the first section of undergrounding is progressing well between the Kergord substation and Sandwater, with enabling works and access tracks being created to support the underground cable installation. The ducting for the underground cable will begin later this year, allowing for the installation of the full underground cable. Work on the remaining phase, the Gremista section of underground cable, is due to



The first 132kV poles erected

begin later this month with enabling works and access tracks being created to support the underground cable installation.

### Overhead line

Starting south of Sandwater, NorPower commenced installing the new 132kV wooden poles in late August utilising helicopter operations as one of the main methods of installation. The overhead line section of the Kergord-Gremista link project stretches across 12km and will link in to two sections of underground cable at each end which will complete the full connection. Logistical works for the second phase of the overhead line have recently started, with materials being delivered to site from local storage areas via helicopter in recent weeks. Using helicopters in this way has been a key decision in the project as it minimises the impact on the local environment and avoids the need for temporary access tracks in sensitive areas of peat.

Speaking about the mobilisation, Morgan Sindall's Project Director, Tim Corrigan was keen to acknowledge the efforts of the team: "The first few months of the project have been a fast-paced effort from everyone to have our temporary cabins installed, move the team in and commence works on site. We could not have done this without the dedication and professionalism of the whole team. New professional relationships are being made and we've been extremely lucky to welcome some key new talent to the team."



Helicopter operations near Sandwater

# Health and Safety

Whether it's due to our teams changing out as they go on holiday, or people's minds drifting elsewhere, Summer is a time that we traditionally see challenges in our safety performance. By acknowledging these challenges and proactively implementing measures to address them, we can create a safer working environment for all our employees.

Thankfully on the Shetland HVDC Project we've maintained a positive performance due to the hard work and dedicated of everyone involved.



Red throated diver (Loomi)  
photo courtesy of Andrew Whitelee, NKT ECoW

As we bid farewell to a (rather surprisingly) sunny Shetland Summer and head into Autumn, it's more important than ever to pause, reset and reflect when it comes to our Safety, Health & Wellbeing.

No one wants to be hurt while they're at work or at home and that's why at SSE we stand by our Safety Family values, that we:

- take care of ourselves, each other and our environment
- take pride in our work and environment
- plan, scan and adapt
- see it, sort it, report it

As an employee or member of the community, we encourage everyone to take some time to pause, reset and reflect on our Safety, Health and Wellbeing; think about our Safety Family values, do the right thing and help make sure everyone goes home safe.

# Environment update

With the overhead line installation from Sandwater to Veensgarth well underway, we spoke with NorPower's Environmental Clerk of Works, Yvonne Brown, to gain an insight into what habitats live in this area and the mitigation measures that are in place to protect them.

"This route passes through some special habitats and includes some of the breeding grounds of the Red throated diver, a goose sized bird with a characteristic red patch on its throat that gives it its British name.

The position of Shetland in the Atlantic Ocean and the number of lochs the islands hold make it an ideal place for this most enigmatic and beautiful bird, named locally as "Lumi" or "Loomi" to the locals, or even "rain goose". Indeed, the island holds around one third of the British population of this legally protected species.

The diver pairs arrive on their remote breeding lochs and lochans year after year in early summer, and have done so for centuries, with some lochs named after them as far back as the 18th century. SSEN in the case of these birds not only has a legal responsibility to protect them during the works, but a responsibility to protect part of the natural and cultural heritage of the islands.

The haunting call from these birds can be heard for miles on a calm morning, just before they splash their

way into the air and circle above the loch to gain height then they fly around 60 miles per hour like an arrow out to sea to feed. When the female is on the nest, the male leaves first then returns to swap with the female, lumbering in a less than dignified manner on to the eggs due to its very short legs, swapping again once the female return from feeding. Throughout the summer these birds can be easily disturbed from their daily rituals, so planning is required to protect them during any works nearby.

Through a combination of local knowledge and careful study by Yvonne, the NorPower Ltd environment team, a Species-specific Protection Plan was compiled and implemented to protect the Red-throated divers; the breeding lochs were identified and monitored whilst any works that had the potential to disturb the works were carefully planned and carried out, or postponed as appropriate."

Due to the efforts of SSEN, NorPower Ltd, Yvonne and others, the divers along the route of the works were protected from the works and new members of the Shetland loomi clan took to the skies to spend the winter as their parents do, out at sea. We hope they are back next year when these efforts will once more be undertaken with due care and diligence.





Whalsay school visit

## Community Engagement: Inspiring Young Minds: Unveiling the future of Shetland's electricity!

In May SSEN Transmission worked in collaboration with DYW Shetland to arrange the first educational visit to the Shetland HVDC Converter Station for the students in secondary two at Whalsay School.

The day started off with engineers visiting the Whalsay school to meet the class and deliver a presentation on electricity and how the HVDC Converter Station will play a crucial role in reshaping the way Shetland sources its energy.

The students and teachers were then escorted to the Converter Station at Kergord where they were greeted by a HVDC engineer, who showed the group around the station and shared insights into the intricate workings of the HVDC system. As they walked through the station the engineers explained the energy flow from beginning at the Viking Windfarm all the way through to powering homes and communities.

The visit provided a unique opportunity for local young people to witness firsthand, the cutting-edge technology shaping the future of energy transmission and distribution for Shetland, and not only broadened their horizons but also, hopefully, inspired some to consider future careers in the field of sustainable energy.

"Whalsay School would like to thank SSE for the opportunity to visit their site at Kergord. The pupils really enjoyed the opportunity to see the scale of the project and hear the explanations given by staff about how the project fitted in with the Viking Project as a whole. The visit was organised by our DYW co-ordinator, Emily van Tonder, and was part of a 3-day programme of workplace engagements with several local employers." – Garry Spence, Whalsay Head Teacher.

## Around £30 million local expenditure



The Shetland HVDC Link project is now reaching the £30 million mark for direct local expenditure. From vehicle hire to local contractors and everything else in between, Shetland's supply chain has played a vital role during the construction phase of the project. With still 10 months to go before operational and the start of the Shetland Renewable Connections project this number will continue to grow on a daily basis.

Speaking with local supplier, Ellis Nicolson from EMN Plant Hire he said, "Being involved in the project has had

a positive impact on our business as we've been able to invest in new machinery, create more employment opportunities, including offering apprenticeships and gained an overall growth for our business".

This is just one of the many local suppliers we have had involved during the construction phase of the project and we will continue to work with the local supply chain where possible.

## Tingwall Primary School

Our overhead line contractor, NorPower kindly made a donation to the Tingwall Primary School earlier this year to help support the build of their polytunnel for the pupils. The polytunnel will be used by the school to educate pupils on how to grow and produce their own fruit and vegetables, whilst the other side of the tunnel will be used for an outdoor learning space.

“ We're pleased to be able to support the school with their polytunnel project; time outdoors and growing plants, fruit and vegetables are so important for people, wildlife, nature and economies and we're happy to see it being re-introduced to schools. We hope that current and future pupils (and staff) enjoy their learning and, hopefully, find inspiration to use it in their future lives and careers. ”

– NorPower



## Spotlight on: Shetland Climate Event

We were delighted to participate in the Shetland Climate Festival this year, which was a two-day event hosted by the Shetland Islands Council, held at the Clickimin Bowls hall in Lerwick.

During the course of the two days our Community Liaison Manager, Thea Groat was joined by our Sustainability Analyst, Abigail Hughes and Project Manager, Jared Deeney. The team were able to present to the public SSEN Transmission's role in delivering the network for the new infrastructure in Shetland and the wider strategic role we play in supporting the delivery of the UK and Scotland's net zero targets.

Abigail provides an insight to the successful weekend, "It was great to be back in Shetland and engage with exhibitors, the council teams and the public regarding how SSENT is contributing to net zero by building a network that makes a real difference to society, the environment and economy. Collaboration is vital, and this event provided a platform for meaningful conversations with stakeholders".



### Miss Sprinkles visits Kergord!

Hitachi Energy and SSENT worked collaboratively to arrange a visit from Miss Sprinkles to the Converter Station at Kergord in celebration of Hitachi reaching a key milestone. It just so happened to be on one of the hottest days of the year and it's safe to say, everyone on site that day was very relieved to see the ice-cream van appearing over the hill! We would like to say a big thank you again to Miss Sprinkles for making the trip out.

## Community Benefit Fund

SSEN Transmission has recently set out plans for its first ever Community Benefit Fund, which will see the company working with communities across the north of Scotland to channel funds into vital local projects.

The Community Benefit Fund will initially see over £10million of funding available for communities from net zero transmission infrastructure projects across the north of Scotland which have been approved by Ofgem, have an investment value of £100m or more and for which construction has already commenced or will commence between now and 2026. This Fund will form a core part of our social and economic support in the communities and regions we operate in.

The aim of the Community Benefit Fund is to recognise the vital role local communities play in hosting the transmission network by providing a source of funds

for community-led initiatives that have the potential to change lives and create a sustainable and positive legacy.

SSEN Transmission has recently completed a development consultation (3rd July – 13th Aug) for the Community Benefit Fund. The consultation information will be collated and fed back to Stakeholders in October.

Stakeholder information sessions on the next steps for the fund will be provided for Shetland Stakeholders and interested parties following the consultation report publication. Interested parties should contact [community.benefit@sse.com](mailto:community.benefit@sse.com) to be included in information distribution.



To read more on the new fund, please scan the QR code.

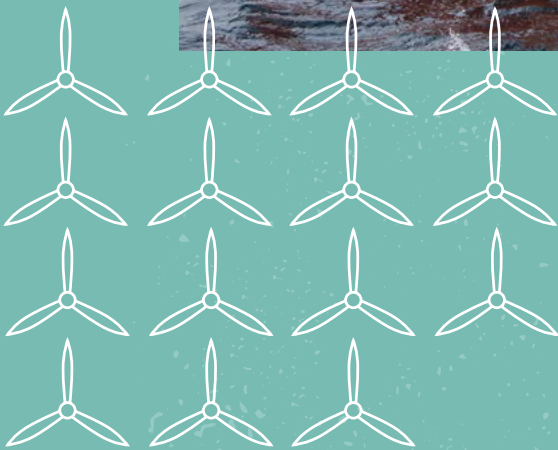


Thea Groat, Community Liaison Manager and Jared Deeney, Project Manager.





Tall Ships Swan



To find out more about the projects and to register for updates please visit:  
[www.ssen-transmission.co.uk/projects/Shetland/](http://www.ssen-transmission.co.uk/projects/Shetland/)  
[www.vikingenergy.co.uk/](http://www.vikingenergy.co.uk/)

