

OUR VIRTUAL EXHIBITION

Welcome to the virtual exhibition for our proposals to utilise alternative cable installation techniques at landfall for the Seagreen 1A project. We have consent for trenchless installation and we are proposing to apply for alternative cable installation techniques to provide contingency should there be constraints at the landfall location.

Seagreen will be Scotland's largest and the world's deepest fixed bottom offshore wind farm when complete. The project will help Scotland reach our net-zero carbon future, with our Seagreen 1A proposals to connect 36 of the consented 150 turbines to the grid at Cockenzie.

To discuss the proposals and answer any questions that you may have, the Project Team will be available via the live chat function in the virtual exhibition on **Monday 13th June between 18:30 and 20:00 hrs**. A live link will appear on the Seagreen 1A project website during these times to access the chat session.

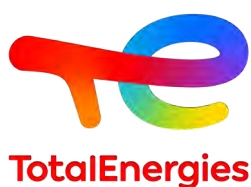
Alternatively, you can contact us directly at the email address and telephone number below.

Sharing Your Views

We would welcome your feedback on these proposals before we submit our applications for consent. If you have any questions or comments on the proposals you can:

- Complete our comments form on [Seagreen 1A project website](#)
- Email us at: Seagreen_1A@sse.com
- Call us on [07779650514](tel:07779650514)

We would request that any comments be submitted by **5pm on Monday 27th June 2022**.



About Us

The Seagreen Wind Farm and the Seagreen 1A project is a joint venture between SSE Renewables (49%) and TotalEnergies (51%), with SSE Renewables managing the project development. SSE Renewables is the leading developer, operator, and owner of offshore wind energy across the UK and Ireland, with a portfolio of around 4GW of onshore wind, offshore wind, and hydro. SSE Renewables has the largest offshore wind development pipeline in the UK and Ireland. Part of the FTSE-listed SSE plc, our strategy is to drive the transition to a net zero future through the world class development, construction and operation of renewable energy assets.

TotalEnergies is a major player in the UK energy industry, with a strong presence in the gas and renewables sectors. Its 100,000 employees are committed to better energy that is safer, more affordable, cleaner and accessible to as many people as possible. Active in more than 130 countries, TotalEnergies' ambition is to become the responsible energy major, which means providing energy that is affordable, reliable and cleaner.

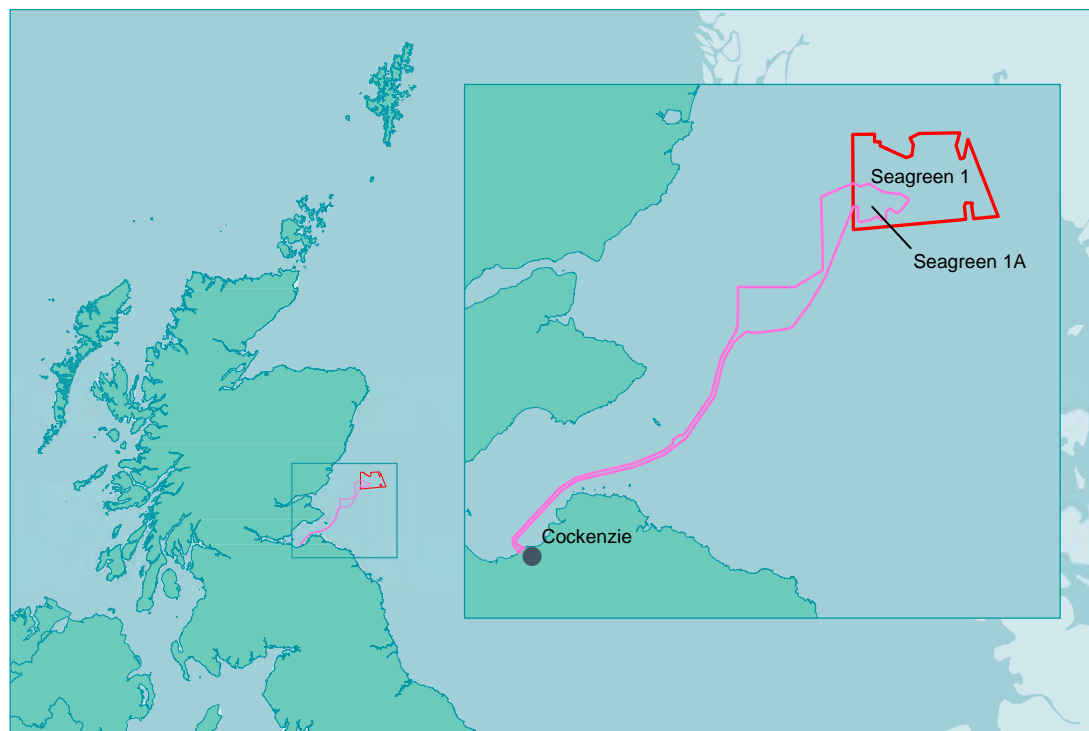


ABOUT THE SEAGREEN PROJECT

The Seagreen project is located approximately 27 km off the Angus coastline and 66 km off the East Lothian coastline.

The Seagreen Offshore Wind Farm was consented in October 2014. This consent covers 150 offshore wind turbines and the associated offshore infrastructure to export the energy generated by 114 of these turbines to landfall at Carnoustie in Angus. Separate planning permission was granted to connect these 114 turbines to the national electricity transmission network at Tealing in Angus. Construction of these turbines and the onshore infrastructure is currently underway.

To maximise energy generation and facilitate full export capacity from the Seagreen Offshore Wind Farm, consent was sought for an additional offshore and onshore export cable and the associated infrastructure to connect the remaining 36 of the consented 150 offshore wind turbines to the national electricity network at Cockenzie in East Lothian. This proposal is known as the Seagreen 1A project.



Planning permission in principle for the Seagreen 1A onshore export cable and associated infrastructure was granted by East Lothian Council in August 2021. A marine licence for the Seagreen 1A offshore cable was granted by Scottish Ministers in December 2021.

The Seagreen 1A project will contribute to:



Scottish Government targets to deliver **11GW** of offshore wind energy by 2030.

Scotland's ambitious climate change legislation, which sets a target of reducing greenhouse gas emissions by **75% by 2030** and **net zero by 2045**.

The Seagreen 1A project will enable:



Export of clean renewable energy from 36 of the consented 150 Seagreen Offshore Wind Farm turbines to the national electricity transmission network, enough to power approximately **834,000** homes annually. This would offset approximately **1.06 million tonnes** of carbon dioxide every year.

OVERVIEW OF THE SEAGREEN 1A PROJECT

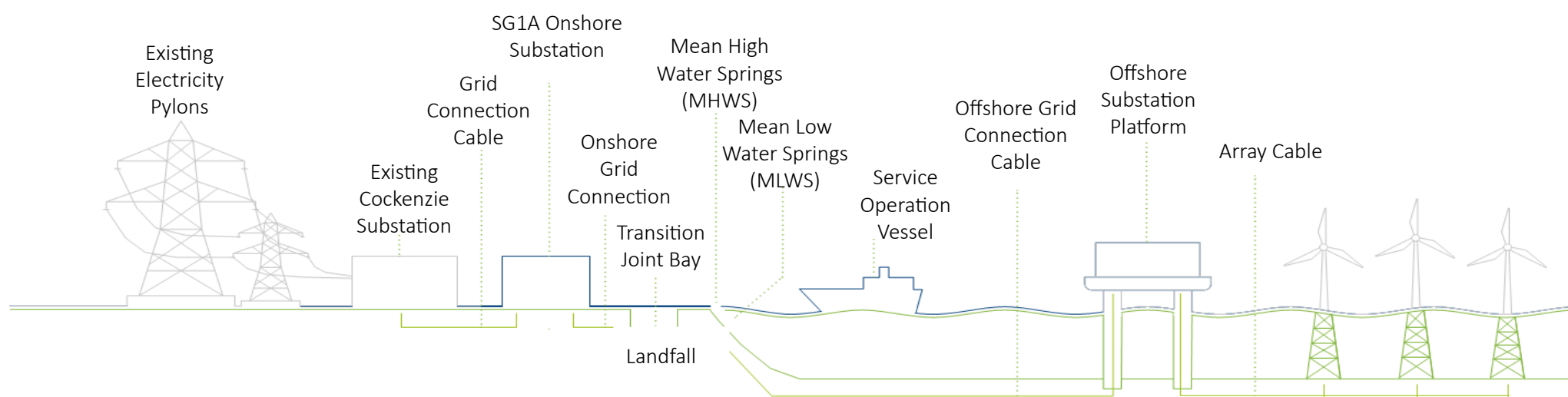
The consented Seagreen Offshore Wind Farm is located in the outer Firth of Forth and Firth of Tay, approximately 66 km from the East Lothian coastline at its closest point. 114 of the 150 consented offshore wind turbines have a grid connection into Tealing in Angus, and construction of this grid connection started in 2020. The first wind turbine was installed last year, with the wind farm expected to enter commercial operation in 2023.

The remaining 36 offshore wind turbines (the Seagreen 1A Offshore Wind Farm) have a grid connection into Cockenzie in East Lothian. The offshore infrastructure required to connect to the grid will comprise one offshore export cable of approximately 108 km in length from the Seagreen 1A Offshore Wind Farm to landfall at Cockenzie.

The onshore infrastructure will include an onshore export cable to connect to the offshore export cable at landfall, and a new onshore substation which will be located adjacent to the existing Cockenzie Electricity Substation. Planning permission in principle for the onshore export cable and onshore substation was granted by East Lothian Council in August 2021.



Seagreen Offshore Wind Farm Turbine Installation



PROPOSED ALTERNATIVE LANDFALL CABLE INSTALLATION TECHNIQUES

Approval is to be sought for the option to utilise alternative landfall cable installation techniques to install the offshore export cable for the Seagreen 1A project. As the landfall cable installation works would take place in both the intertidal and subtidal zones two separate applications are required in the form of a marine licence from Scottish Ministers and a planning application through East Lothian Council.

Landfall for the offshore export cable will be at Prestonpans Beach, from where it will run across the Beach Car Park to an underground transition joint bay to be located on the amenity grassland to the north of the B1348 Edinburgh Road. The offshore export cable will then be connected to an onshore export cable which will run underground to the new onshore substation to be built adjacent to the existing Cockenzie Electricity Substation.

The Consented Landfall Cable Installation Technique

The current consents grant permission for the installation of the export cable at landfall using a trenchless installation technique such as Horizontal Directional Drilling (HDD).

The Proposed Alternative Cable Installation Techniques

The alternative cable installation techniques for which it is proposed to seek permission are described in the following sections. These alternative techniques are being sought to provide contingency should there be constraints at landfall that prevent the use of a trenchless installation technique.



Seagreen 1 Landfall Cable Installation Works at Carnoustie

PROPOSED ALTERNATIVE LANDFALL CABLE INSTALLATION TECHNIQUES

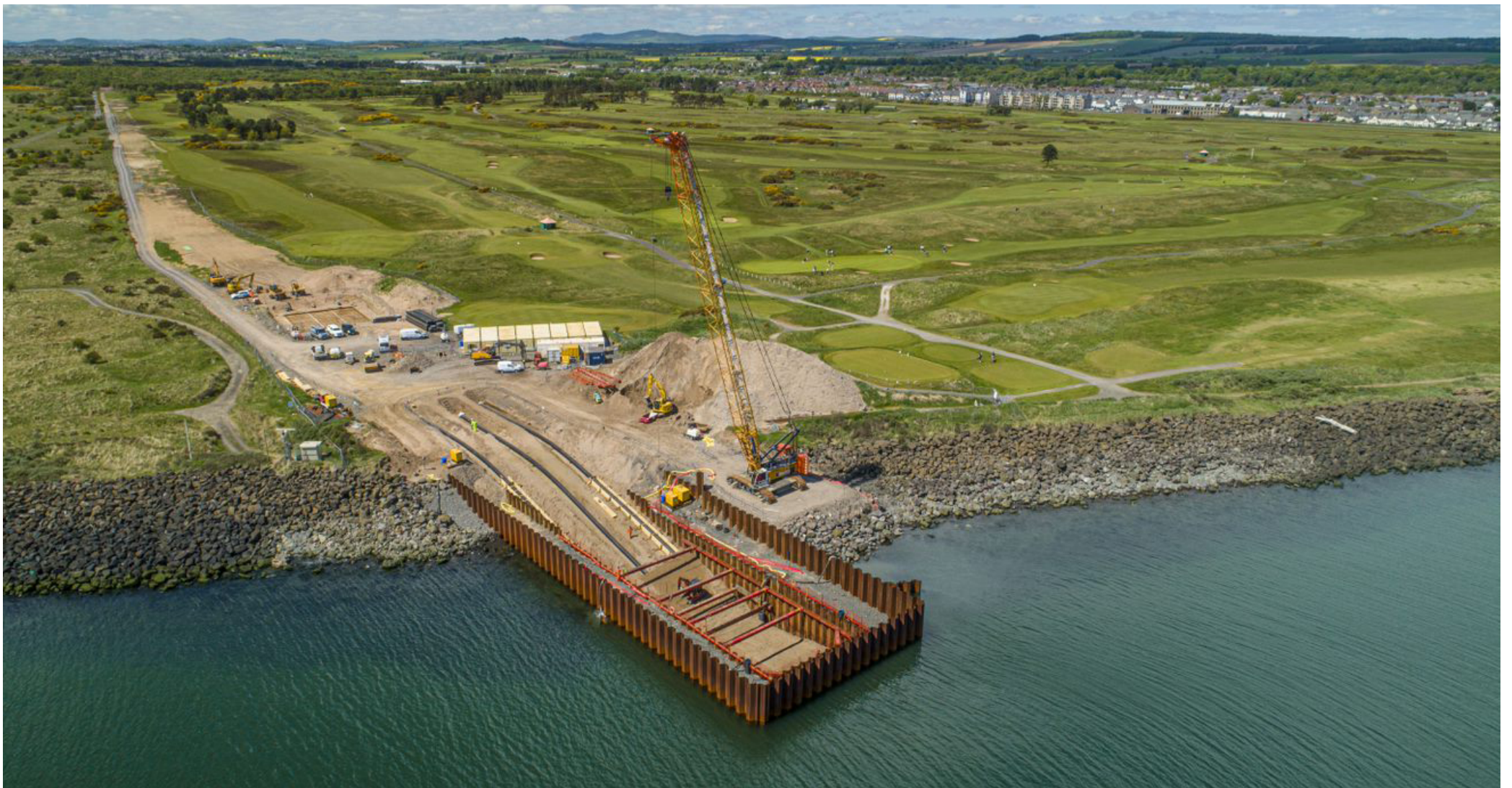
Open Cut Trenching

This technique would involve excavating a single trench across the beach and intertidal area. Following excavation, a duct will be installed and the trench backfilled. The duct will be installed at sufficient depth to ensure that it does not become exposed over its operational life by coastal erosion. At a later date a cable will then be pulled through the installed duct from a vessel and jointed to the onshore cable.

To maintain a safe dry working area when the duct is being installed in the intertidal zone, a temporary cofferdam may be required. The cofferdam is a steel u-shaped structure which would surround the working area at landfall and would be created by installing individual sheet piles using vibro-piling. It is anticipated that the cofferdam could be up to 50m long x 12m wide.

Open Cut Trenching and Direct Installation of Cable and Subsequent Post Lay Burial

This technique would involve using open cut trenching across the beach, and then burying the export cable across the intertidal and subtidal zones out to approximately 700m below Mean High Water Springs (MHWS) either directly as it is laid or immediately after it has been laid by water jetting or ploughing. At sea, additional cable protection such as rock dumping, cast iron shells and concrete flexible mattresses may be required.



Cofferdam at Seagreen 1 Landfall Cable Installation Works, Carnoustie.

PROPOSED ALTERNATIVE LANDFALL CABLE INSTALLATION TECHNIQUES

Both installation techniques will involve the removal of a section of the rip rap sea defence, with the material removed to be temporarily stored on site. Once the installation works are completed, the rock material would then be reused to reinstate the rip rap.

A temporary construction compound will be required for storage, equipment and facilities associated with the cable installation works at landfall and the transition joint bay construction. It is anticipated that this temporary landfall works area compound will be located at Prestonpans Beach car park, with access to be taken to it directly from B1348 Edinburgh Road.

As the export cable and transition joint bay will be underground and the land fully reinstated upon completion of the work, the proposals will not result in the permanent loss of any open space.

A draft layout of the proposed landfall works required to facilitate these alternative installation methods is shown on the figure below.





Offshore Wind Farm, Wales

ENVIRONMENTAL ASSESSMENT

Screening requests have been issued to both Marine Scotland and East Lothian Council, with East Lothian Council's screening opinion confirming that the proposed alternative landfall cable installation techniques are unlikely to give rise to significant environmental effects and do not therefore constitute 'EIA development'. A screening opinion has not yet been issued by Marine Scotland, but it is anticipated that Marine Scotland will also consider that the proposals are unlikely to have significant environmental effects.

Notwithstanding that no significant environmental effects are predicted, it is proposed to submit an Environmental Appraisal report in support of each application. The purpose of these assessments will be to inform the design of the project from an environmental perspective and to set out standard industry and additional mitigation measures that will be employed to minimise the project's effect on the environment. The proposed scope of the Offshore and the Onshore Environmental Appraisal reports will consider:



Arctic Tern

Offshore Environmental Appraisal Scope

- Nature Conservation Designations;
- Physical Environment and Water Environment;
- Benthic Ecology and Intertidal Ecology;
- Natural Fish and Shellfish Resource;
- Marine Mammals;
- Ornithology;
- Archaeology & Cultural Heritage; and
- Other Marine Users and Activities.

Onshore Environmental Appraisal Scope

- Ecology and Nature Conservation;
- Ornithology;
- Noise and Vibration;
- Cultural Heritage and Archaeology; and
- Access, Traffic and Transport.

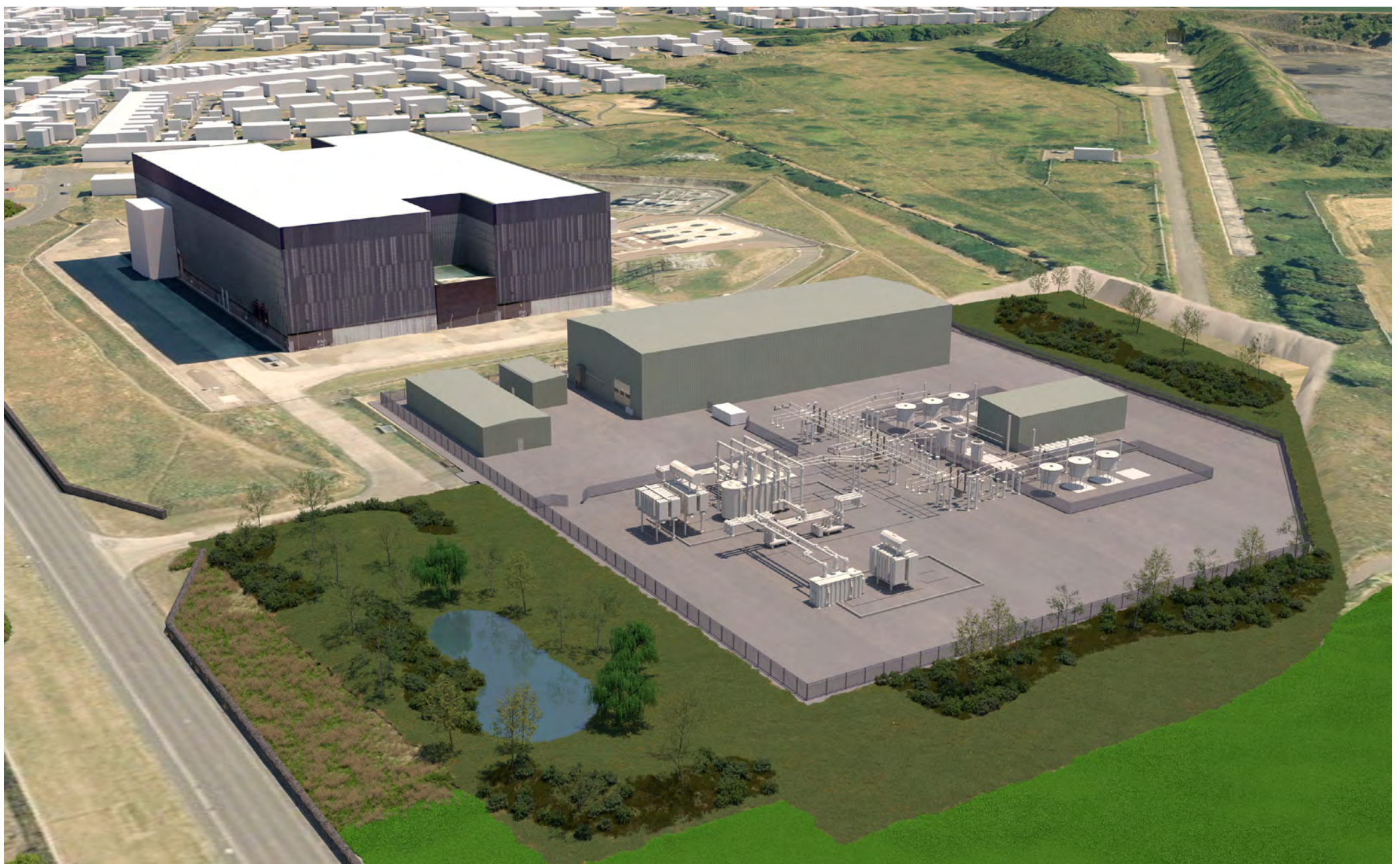
ONSHORE SUBSTATION AND ONSHORE EXPORT CABLE UPDATES

Onshore Substation and Onshore Export Cable

The planning permission in principle consent for the Seagreen 1A onshore transmission works was granted subject to conditions. These conditions require the specific details of the different elements of the proposed development to be submitted to East Lothian Council for approval through further applications known as approval of matters specified in conditions (AMSC) applications. These details include the layout, design and external appearance of the onshore substation to be built next to the existing Cockenzie Electricity Substation, and the final route of the onshore export cable along with the location of the associated underground transition joint bay.

An application for the AMSC for the substation is expected to be submitted to East Lothian Council in June 2022. A draft design for the onshore substation is shown below to give you an idea on how it is anticipated that the substation will look. An AMSC application for the proposed route of the onshore export cable and associated infrastructure is expected to be submitted to East Lothian Council in July 2022.

Once the applications have been submitted there will be an opportunity to make formal representation on the proposals to East Lothian Council.



Draft Design for the Seagreen 1A Onshore Substation

SEAGREEN 1A PROGRESS TO DATE AND NEXT STEPS

Project Timeline

Oct
'19

- Application to National Grid for a grid connection for the Seagreen 1A project.

Feb
'20

- National Grid make a grid connection offer at Cockenzie in East Lothian.

June
'20

- We accept the connection offer from National Grid with a connection date of October 2023.

Jan
'21

- Public consultation events on Seagreen 1A onshore and offshore plans

Aug
'21

- Planning permission in principle granted by East Lothian Council for the onshore transmission works to connect the Seagreen 1A project into the National Grid at Cockenzie.

Dec
'21

- Marine Licence granted by Scottish Ministers for the offshore export cable.

June
'22

- Public consultation including virtual public exhibition and live Q&A event undertaken to obtain feedback on the alternative cable landfall installation technique proposals.
- Application submission for matters specified application for the substation. Opportunity to make formal representations on the application to East Lothian Council.

July
'22

- Anticipated submission date for planning applications for alternative cable landfall installation and matters specified applications for the onshore cable route. Opportunity to make formal representations on the applications to East Lothian Council.

Oct
'22

- Anticipated determination date for matters specified applications for the onshore substation.

Nov
'22

- Anticipated determination date for alternative cable landfall installation and matters specified applications for the onshore export cable.

Q2
'23

- Anticipated start of construction works.

COMMUNITY

Seagreen is a £3 billion capital investment and presents an enormous opportunity for the local, Scottish and UK supply chains. The Seagreen 1A project to connect 36 of the consented 150 turbines to the grid at Cockenzie will maximise the renewable energy generation of the offshore wind farm and in turn realise the associated socio-economic and local community benefits this will bring.

Supply Chain

As responsible developers, our aim is to maximise local supply chain opportunities. This will allow the project to utilise as many local, Scottish and UK based suppliers where reasonably possible during all stages from development through construction and into operation.

SSE Renewables is a member of Midlothian & East Lothian Chamber of Commerce. We are committed to holding Meet the Developer events for local businesses to learn about the construction opportunities connected to the project.

For further information on how your business can become involved with the Seagreen 1A Wind Farm project, please visit the [Supply Chain](#) pages of the Seagreen 1A project website and register your interest.

Community Benefit

For us it is important to create a lasting legacy where we look to develop, build and operate our projects. We are committed to having community benefit from the project, which would be focused on the Cockenzie & Port Seton Community Council area and Prestonpans Community Council area.

To date the Project team have been delighted to contribute towards local community events and projects:

- We are delighted to be sponsors of the Cockenzie & Port Seton Children's Gala Day 2022 and Prestonpans Children's Gala Day 2022
- Shirt sponsor of the Cockenzie Stars U15 Girls Football team.
- Supporter of the 3 Harbours Arts Festival.
- Christmas Lights sponsorship and commitment to support in 2022.
- A supporter of the 360 Centre proposals for a climate change and education centre in Cockenzie, providing funding support towards the feasibility study.

We want to be an active partner in the community for the long term. We would like to thank the local community and consultees for their time and input into the project to date.



Draft Design: Seagreen 1A Substation Viewpoint 1 (Preston Links Mound)

YOUR FEEDBACK

Commenting on the proposal

Thank you for taking the time to review the information in this exhibition. It is important to provide any comments that you may have at this stage regarding our proposed alternative installation techniques at landfall so that they can be considered before we submit our applications for consideration of consent.

Please get in touch with us to discuss any questions you may have on the plans. A live link will appear on the Seagreen 1A project website on **Monday 13th June between 18:30 and 20:00 hrs** to access the interactive chat session.

Feedback on the proposals at this stage should be provided in writing by:

- Completing our feedback form on the Seagreen 1A project website: www.Seagreen1A.com
- Emailing us at: Seagreen1A@sse.com

We request that any comments are submitted by **5pm on Monday 27th June 2022**. We will then review the comments received together with the results of the environmental assessments to be undertaken to inform the final design of the project. Details of how your comments may have influenced the final design will be explained in the application submissions.

Please note that any comments made on the proposals at this stage are not representations to the planning authority. If a planning application is subsequently submitted to East Lothian Council, normal neighbour notification and publicity will be undertaken at that time and you will have an opportunity then to make formal representations to the Council.



Offshore Wind Farm, Wales