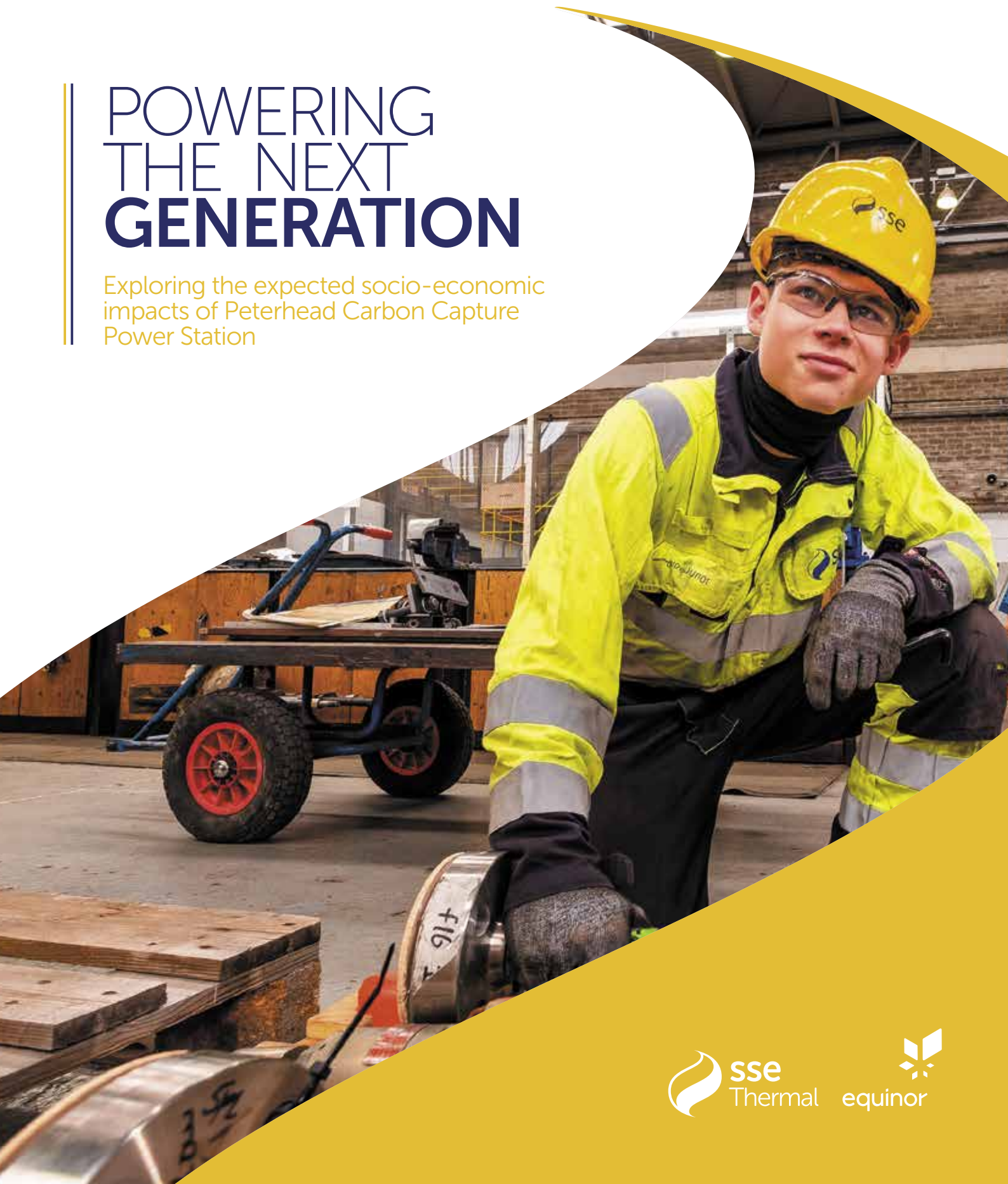


PETERHEAD CARBON CAPTURE POWER STATION

A collaboration between SSE Thermal and Equinor

POWERING THE NEXT GENERATION

Exploring the expected socio-economic impacts of Peterhead Carbon Capture Power Station



About this report

SSE Thermal and Equinor are progressing plans to develop the world-leading Peterhead Carbon Capture Power Station in Aberdeenshire, Scotland. The power station could become one of the UK's first to be equipped with carbon capture technology, removing around 1.5 million tonnes of CO₂ emissions every year.

Peterhead Carbon Capture would replace older, carbon-intensive generation on the electricity system, backing up renewable energy with flexible, low-carbon power.

This report looks at some of the expected socio-economic benefits that would be generated by the investment in the project, with economic contribution analysis undertaken by BiGGAR Economics.

About SSE Thermal

SSE Thermal, part of the FTSE-listed SSE plc, has a vision to become the leading provider of flexible thermal energy in a net zero world and has set independently verified, science-based targets for carbon reduction aligned to the Paris Agreement.

As part of its commitment to a net zero future, the business has a core focus on decarbonising its operations through carbon capture and storage (CCS) and hydrogen technology. In addition to the Peterhead Carbon Capture project, SSE Thermal is progressing plans with Equinor for CCS and hydrogen projects at its Keadby and Albrough sites as part of the East Coast Cluster partnership.

About Equinor

Equinor has been operating in the UK for over 35 years and is the country's leading energy provider, supplying natural gas, oil and electricity. Headquartered in Norway, the company aims to reach net zero emissions globally by 2050. In the UK, Equinor operates one offshore oil field and three offshore wind farms including Hywind Scotland, the world's first floating wind farm whose operations and maintenance base is located in Peterhead. Equinor is also a leader in CCS and hydrogen, developing the H2H Saltend hydrogen production plant at the heart of the East Coast Cluster.







FOREWORD

We're delighted that SSE Thermal and Equinor are working together to decarbonise power generation at Peterhead. Through cutting-edge carbon capture technology, we can decarbonise this vital flexible power generation, as well as heavy industry and other hard-to-reach-sectors of the economy, which will be crucial in Scotland transitioning to a net zero future.

The COP26 conference in Glasgow last year presented a clear opportunity for us to demonstrate leadership on CCS, including how we will maximise the benefits of a green recovery in industrial regions, while ensuring a just transition for workers and communities.

The development of this world-leading plant at Peterhead is another important step in the energy partnership between SSE and Equinor. This power station is a milestone for Scotland's ambitions to create a decarbonised industrial cluster. Projects such as these are critical for efforts to reach net zero, contributing to the UK's goals to become a world leader in low carbon technologies, and also helping ensure a just transition for industrial communities.

We're excited to be part of the transition to a net zero economy and are delighted to get an early insight into the investment, opportunities and skilled roles

that this project could bring to Aberdeenshire, Scotland and the rest of the UK.

We hope you find this report valuable in demonstrating the expected socio-economic benefits of the project. As we work to bring Peterhead Carbon Capture Power Station to life in the years ahead, we look forward to engaging with our communities and other stakeholders to maximise the benefits of this world-leading power generation project.



John Johnson
**Director of
Development
SSE Thermal**



Grete Tveit
**Senior Vice
President for
Low Carbon
Solutions
Equinor**

BRIDGING THE GAP TO NET ZERO

Delivering flexible, low-carbon power generation will be vital in backing up renewables and ensuring security of supply through the net zero transition.

About Peterhead Carbon Capture

As Scotland's only major flexible thermal power station, Peterhead Power Station provides critical flexibility to the electricity system, supporting increased penetration from renewable generation while maintaining security of supply.

As part of its commitment to a net zero future, SSE Thermal is progressing plans to decarbonise its power generation at the site, working with Equinor to develop one of the UK's first power stations equipped with carbon capture technology. This will ensure the site can continue to provide essential flexible power generation while supporting the UK's transition to net zero carbon emissions.

The station, which will have a generating capacity of up to 910MW, will utilise class leading technology and infrastructure to deploy carbon capture technology, enabling a reduction of emissions to air of up to 90% in comparison to traditional gas-fired power stations.

Peterhead Carbon Capture could be operational by the end of the 2020s, capturing around 1.5 million tonnes of carbon annually by 2030. If planning permission is granted for the development, construction could commence during 2023, taking three years to complete followed by commissioning of the station.

What is Carbon Capture and Storage?

CCS is a technology that can capture at least 90% of the carbon dioxide emissions produced from the use of fossil fuels in electricity generation and industrial processes, preventing the carbon dioxide from entering the atmosphere. The CCS chain consists of three parts; capturing the carbon dioxide, transporting the carbon dioxide, and securely storing the carbon

dioxide emissions underground, in depleted oil and gas fields or deep saline aquifer formations.

Peterhead Carbon Capture would connect into the shared CCS infrastructure being developed by the Acorn Project and the wider Scottish Cluster. This would see its emissions transported through shared pipelines and safely stored under the North Sea.



DECARBONISING THE NORTH-EAST OF SCOTLAND

SSE Thermal and Equinor are working with partners in the Acorn Project, and the wider Scottish Cluster, to kick-start decarbonisation in the north-east of Scotland

This critical infrastructure will support and accelerate Scotland's transition to a net zero economy, while safeguarding vital Scottish industries...

About the Acorn Project

It is proposed that the project will be a key customer to the Acorn Carbon Capture and Storage (CCS) Project. The Acorn Project is led by Storegga with their partners Harbour Energy and Shell, with funding from governments and the European Union.

The Acorn CO₂ Storage Site, where the Acorn Project intends to start safely storing CO₂ from the mid-2020s, is located about 100km offshore in rock formations deep below the North Sea. The Acorn Project will make use of existing gas pipelines and infrastructure

to transport CO₂ directly to the Acorn CO₂ storage site.

The gas pipelines to this storage site come onshore at the St Fergus gas terminal, just along the coast from Peterhead and this site alone offers around 150 million tonnes of CO₂ storage and has ready-made access from repurposed gas pipelines.

This critical infrastructure will support and accelerate Scotland's transition to a net zero economy, while safeguarding vital Scottish industries and contributing to a just transition for workers and communities.



PETERHEAD CARBON CAPTURE POWER STATION: CONTRIBUTING TO THE LOCAL, REGIONAL AND NATIONAL ECONOMIES

To understand the scale of the economic contribution that the proposed Peterhead Carbon Capture Power Station could make, SSE Thermal and Equinor commissioned BiGGAR Economics to calculate the economic impact of the project

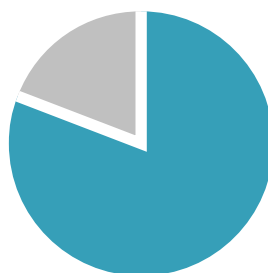
Investing in Peterhead Carbon Capture

BiGGAR Economics analysed the contribution that the Peterhead Carbon Capture Power Station could make across three areas of study:

- Local, defined as Aberdeen City and Shire
- Regional, defined as Scotland;
- National, defined as the UK.

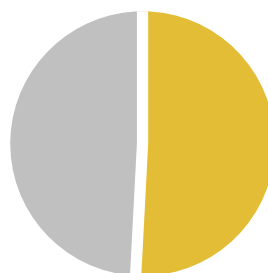
In summary, the report concluded that SSE Thermal will spend £2.2 billion during the development, construction and the first 25 years of the operational lifetime of the Peterhead Carbon Capture Power Station Technology. This analysis found that majority of expenditure (around £1.6 billion, 72%) will occur within the UK.

Supply chain growth will increase the economic impact of the



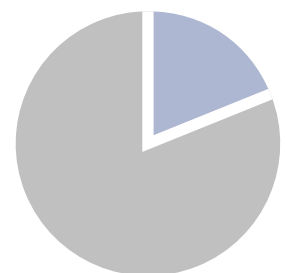
UK content 72%

Peterhead Carbon Capture Power Station and every 1% additional capital expenditure that is spent



Scottish content 51%

with UK companies will support an additional 140 years of employment.



Local content 42%

Adding economic value

The investment in the Peterhead Carbon Capture project will create onward economic impact. This impact was calculated by BiGGAR Economics in terms of Gross Value Added (GVA) to the economy, which is a measure of economic activity that includes wages and profits, and employment, measured in terms of years of employment and jobs supported.

During the development and construction phase it is estimated that Peterhead Carbon Capture has the potential to generate:

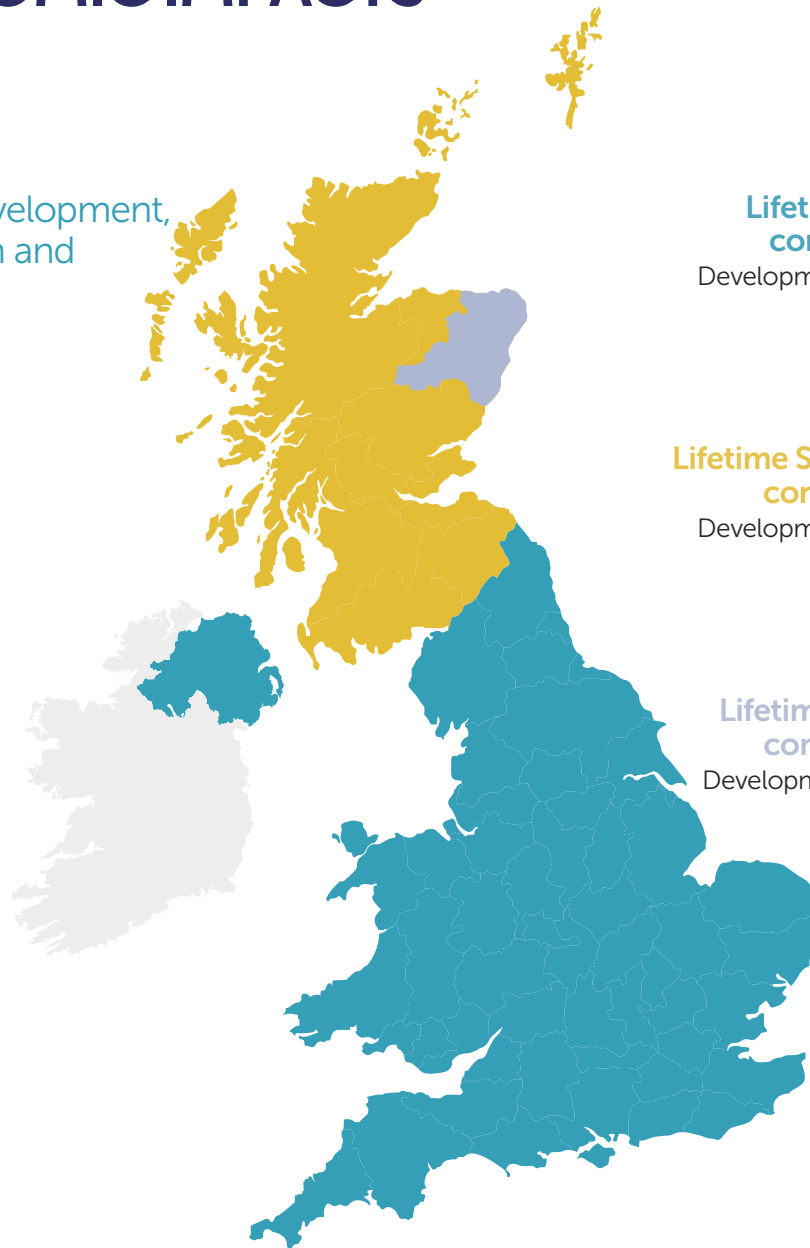
- £60 million GVA and 980 years of employment in the local area;
- £190 million GVA and 3,070 years of employment in Scotland; and
- £470 million GVA and 7,850 years of employment in the UK.

This economic activity includes those directly employed by SSE Thermal, their contractors, the wider supply chain and the spending of wages by workers in the wider economy.

There will also be long-term economic impacts during the first 25 years of operation of the power station.

EXPECTED ECONOMIC IMPACTS

Through development, construction and operation



Lifetime UK economic contribution: £1.2bn
 Development and Construction **£470m**
 Operation **£730m**

Lifetime Scottish economic contribution: £660m
 Development and Construction **£190m**
 Operation **£470m**

Lifetime local economic contribution: £430m
 Development and construction **£60m**
 Operation **£370m**

UK ■
 Scotland ■
 Aberdeen City and Shire ■

It is estimated that an average year of the first 25 years of operation has the potential to generate:

- £25 million GVA and 240 jobs in the local area
- £35 million GVA and 290 jobs in Scotland; and
- £50 million GVA and 560 jobs in the UK

The potential total economic contribution of the Peterhead Carbon Capture project over its development, construction and first 25 years of operation is estimated by BIGGAR Economics to be:

- £430 million GVA in the local area;
- £660m GVA in the Scotland; and
- £1.2 billion GVA in the UK.

Note:
 Totals may not sum due to rounding. Total contribution over the first 25 years of operation has been discounted to net present value. Local contribution is included in total regional contribution and regional contribution is included in total UK contribution.

SECURING A JUST TRANSITION

Ensuring no one is left behind

SSE plc was the first company to publish a “Just Transition” plan, which will help to protect workers and communities as the UK moves towards net zero. This outlines how SSE will approach the social implications of delivering net zero; from jobs and training, to working with communities and ensuring no one is left behind.








Retraining and redeployment will be the first options available to employees affected by business change. SSE has successful and growing businesses which will play an important part in delivering a net zero world in both the UK

and Ireland. People working in higher-carbon activities often have valuable skills that are transferable to the low-carbon ones. SSE has a long-standing commitment to avoid compulsory redundancy

if possible. If redundancy is unavoidable, SSE will work with its employees and trade union partners to ensure it is able to offer a package of terms which support onward transition.

SSE'S 20 PRINCIPLES FOR A JUST TRANSITION

TRANSITIONING INTO A NET-ZERO WORLD			TRANSITIONING OUT OF A HIGH-CARBON WORLD	
 <p>SSE'S PRINCIPLES FOR GOOD, GREEN JOBS (PAGE 9)</p>	 <p>SSE'S PRINCIPLES FOR CONSUMER FAIRNESS (PAGE 12)</p>	 <p>SSE'S PRINCIPLES FOR BUILDING AND OPERATING NEW ASSETS (PAGE 13)</p>	 <p>SSE'S PRINCIPLES FOR PEOPLE IN HIGH-CARBON JOBS (PAGE 15)</p>	 <p>SSE'S PRINCIPLES FOR SUPPORTING COMMUNITIES (PAGE 18)</p>
<ol style="list-style-type: none"> 1 Guarantee fair and decent work 2 Attract and grow talent 3 Value employee voice 4 Boost inclusion and diversity 	<ol style="list-style-type: none"> 5 Co-create with stakeholders 6 Factor-in-whole-system costs and benefits 7 Make transparent, evidence-based decisions 8 Advocate for fairness 	<ol style="list-style-type: none"> 9 Support competitive domestic supply chains 10 Set social safeguards 11 Share value with communities 12 Implement responsible developer standards 	<ol style="list-style-type: none"> 13 Re-purpose thermal generators for a net-zero world 14 Establish and maintain trust 15 Provide forward notice to change 16 Prioritise retraining and development 	<ol style="list-style-type: none"> 17 Deliver robust stakeholder consultation 18 Form partnerships across sectors 19 Promote further industrial development 20 Respect and record cultural heritage

MAXIMISING LOCAL OPPORTUNITIES

Working with the community

SSE Thermal and Equinor are keen to be good neighbours and always work to be a part of the local community in which they operate. As part of the planning process for the project, a full, robust and comprehensive consultation is taking place, in which local stakeholders have the opportunity to give their comments and feedback on the proposals.

SSE Thermal and Equinor engaged with local community councils at an early stage in the development of the project and ensure a key point of contact is readily available for any questions or concerns.

Ahead of any construction works starting, a Community Liaison Group will be established, which key members of the local community will be invited to be a part of. This group meets regularly and allows an open flow of community between the local community and site teams in order to share information, questions and concerns.

Supply chain

Ahead of main construction works starting, SSE Thermal always hold a Meet the Buyer event for each of its projects. This is an event, held at a local venue, where local business and suppliers can meet with and pitch their goods and services to key members of the procurement teams.



SSE Thermal recruits eight new apprentices at Peterhead

Ten young apprentices have been employed by SSE Thermal to launch their careers at Peterhead – a record intake for the north-east power station as it looks to a low-carbon future.

All ten apprentices started further education in September 2021, with the majority based at North East Scotland College's Fraserburgh campus. They will continue to blend formal education with



practical work-based learning across a four-year Modern Apprenticeship programme.

All apprentices will be fully supported by the station's senior management team and each will have a designated mentor.

The two apprentices who joined in January are both from Peterhead, with 18-year-old Chloe Corbett working as an Electrical Apprentice and Jude Junor, 17, working as a Mechanical Apprentice.

work.

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