





Energy

Renewable and non-renewable energy sources



180 Year 9 students

Objectives

-  Increase student's science capital through engagement with employers
-  Students become aware of and inspired by career opportunities and the range of pathways available to them within the energy sector
-  Enhance current curriculum research project by working with a local company to provide an authentic context and challenge
-  Students apply practical and mathematical skills required at GCSE level to problem solve

Learning activity

Energy topic learning in school lessons

Students develop knowledge of renewable and non-renewable energy resources to generate electricity. Students consider environmental impact and the reliability of different energy resources

In school interactive session with Equinor

Showcasing the work of a global, sector leading company, demonstrating the increasing scale of wind power leading to many opportunities and careers in the region. Equinor set students a brief to develop the technical specification for a new wind farm at Dogger Bank

Company Challenge

Students apply learning from science lessons, mathematical skills and their findings from their practical investigation to develop the technical specification for Equinor

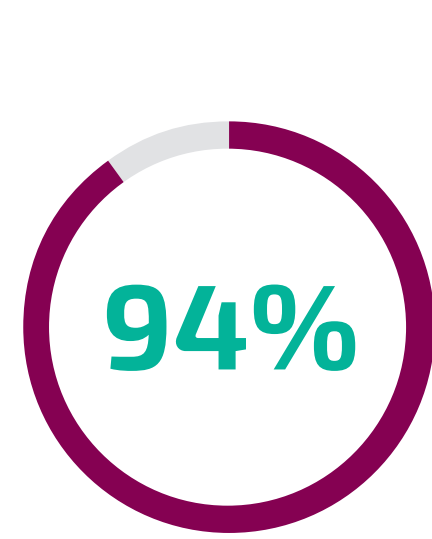
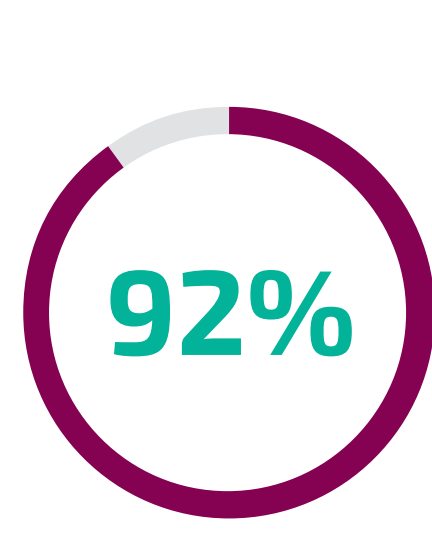

Showcase to employees

Students meet a range of employees in various roles at Equinor and present their work and receive feedback

Visit to Equinor and ORE Catapult

Opportunity to explore innovative workplaces in the renewable energy sector and see real world applications of their investigation and learning

Outcomes

-  94% of students enjoyed meeting Equinor and 90% enjoyed the linked practical classroom activity investigating the wind turbines
-  92% of students felt they can link their learning in science (energy) to the work of Equinor
-  89% of students felt they learnt about new roles in STEM

Feedback

"The physics pilot has been a great opportunity for us to engage with a local school around STEM education, while focusing on renewable energy. The collaboration with teachers and students will help us to develop our future school activities and provides a platform to work with other schools in the region. We are committed to promoting the benefits of offshore wind, the energy transition and a green future and connecting that to the curriculum is the best way to encourage future talent into the sector."

Equinor

"Being involved in the pilot with the North East LEP has given our students the opportunity to gain a deeper understanding of careers and businesses on their doorstep. This has brought the curriculum to life and has answered the most common question posed by students: 'What is the point in learning this?'"

Marden High School

"Working with Tom taught me a lot about different areas of STEM and how all places and things are important." "I think we should do more practical lessons and learn about different jobs linked to science." "I feel after the session with Tom, I understand and have more knowledge about wind turbines and jobs that link with energy."

Student