





# Energy

## Fuels and energy resources



24 Year 8 students

### Objectives

-  Increase student's science capital through engagement with employers
-  Students learn how renewable energy resources are being developed and used in the region
-  Students understand local and regional contributions to achieving Net Zero
-  Students apply mathematical concepts to calculate total power output of a solar park and how many homes it can power

### Learning activity

#### Energy topic learning in school lessons

Students develop knowledge of fuels and energy resources including renewables in their science lessons

#### Visit to Gateshead Energy Company

Students meet key employees and are immersed in a renewable energy site seeing heat pump and solar panel technology in action




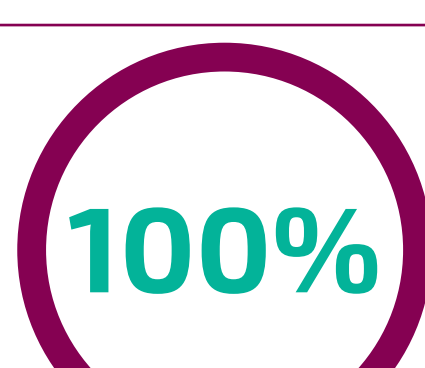
#### Gateshead Energy Company challenge launched with students

Learning from science lessons and maths skills are applied by students to calculate the output of the solar park and how many appliances and homes it can power

#### Visit to Northern Gas Networks Hydrogen Homes

Students learn about hydrogen as a clean energy source and see it's application at the Hydrogen Homes. Students explore careers and pathways within the energy sector with key employees

### Outcomes

-  100% of students feel they know how curriculum learning from science lessons links to careers (compared to 84% pre-pilot)
-  100% of students enjoyed meeting people in renewable energy related jobs
-  100% of students felt the encounters helped them to understand the importance of science in the world of work
-  100% of students felt they learnt about new roles in STEM

### Feedback

"Being able to positively engage with students who will potentially be working in the industry is such an incredible opportunity. The students that visited our site were really engaged and committed to learning more about sustainable energy."

Northern Gas Networks

"Our visit to both the Gateshead Energy Centre and the Hydrogen Homes with Northern Gas Networks were great! It really fit well with our curriculum and the students enjoyed it!"

Highfield Middle School

"I appreciate the time spent by Gateshead Energy Centre and Northern Gas Networks to prepare the session for us. I found both visits interesting and learnt cool information about hydrogen as a fuel and heat pumps as renewable sources of energy."

Student