TechFest were kindly awarded a grant from the JustTransition Fund to create our EnergyXplorer Toolkit. This toolkit has allowed us to keep on delivering some of our most popular workshops which are based around renewable energy. The funding also allows us to continue to develop new and exciting activities as our energy mix changes with time.

This toolkit consists of a range of equipment to help people understand how energy is produced, from the core principles of electrical generation with magents and wires, to large scale wind turbines.

Total Amount Granted: £11,367.56

From February 2024 to June 2024, the kit bought with this grant money has been used at 10 different events, where the number of people across all of these events has reached a total of 6200. The breakdown of these numbers and the age groups for the events are on the following page.















2024 List of events (Up to March) where kit has been used:

Event	Month	No. of People
Maths into the Energy Mix (x3 events)	February - March	92 from S3
Kingsford Primary at CNOOC	February	25 from P6
Caithness Science Festival: Electromagnetism	March	319 from P3-7
Caithness Science Festival: Energy Explorers	March	334 from Nursery - P3
Maths Masterclass at CNOOC	April	40 from S2
STEM on the Farm (multiple schools)	April-June	165 from P6
Early Years Primary Programme (multiple schools, 51 classes)	May	1530 from P1-7
Activity Weekend (public event)	June	3695 from public













Kit in Action:







The equipment used at multiple events and providing a learning opportunity for all ages.













Kit in Action for the early years primary programme and activity weekend May-June 2024:







The equipment used at our primary schools festival and activity weekend.





Kit in Action:

Electromagnetism and circuits equipment









The dynamo, bar magnets, and snap circuits being used to demonstrate how a magnetic field can be used to generate electricity, and how electricity is used in circuits.

Age range: All years (with varying complexity depending on age)







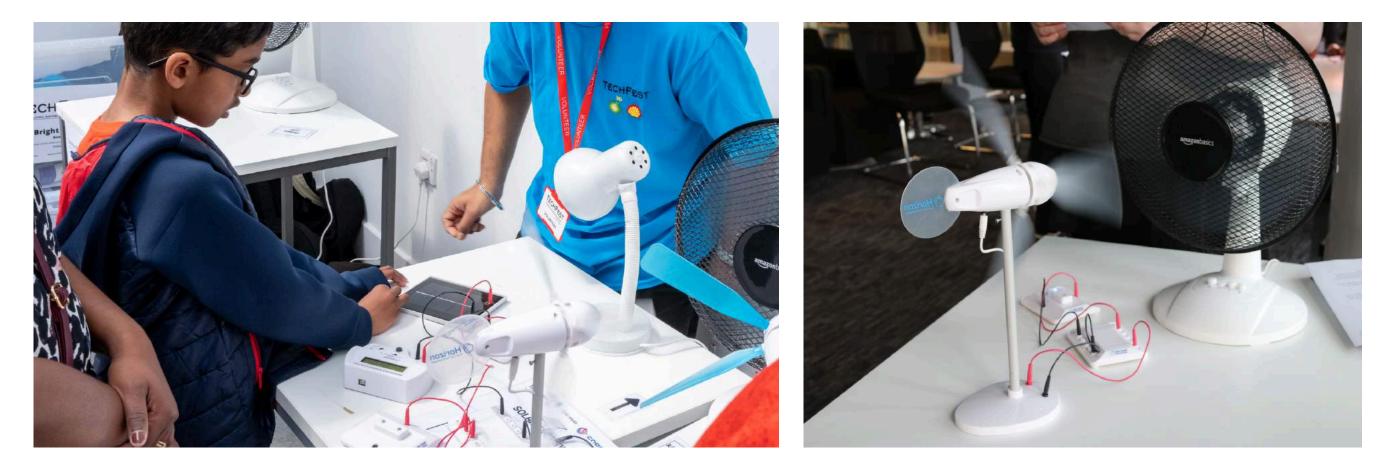


NESCAN





Kit in Action: Renewable Energy Kits







The Horizon Renewable Energy kits being used to show the process of energy transformation from solar and wind, into electrical energy.

"I found the renewable energy workshop very engaging as each task was enjoyable espically the circuits and the renewable energy sources" - St Machar S3 Pupil This kit is a highlight of events, with an average score of 4.5 out of 5 in our feedback.

Age range: All years (with varying complexity depending on age)







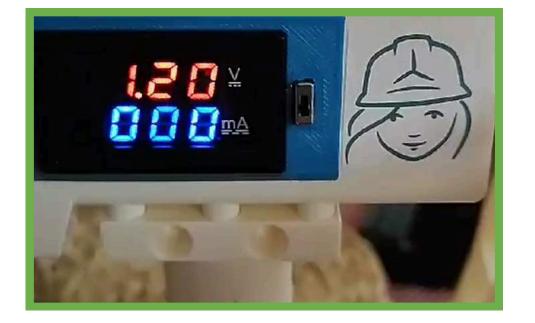






Coming up...

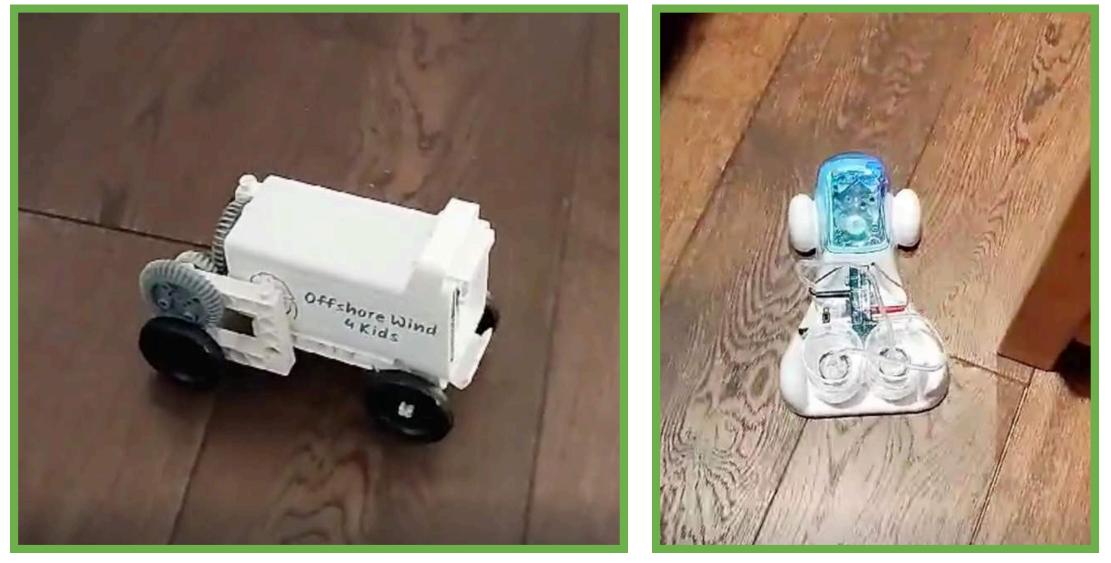




Different styles of onshore wind

turbines and measuring the voltages they can produce!

The future of vehicles by demonstrating how Hydrogen can be a fuel for cars!





Check out our YouTube page to see videos of <u>TechFest's EnergyXplorer Toolkit in Action!</u>











