

PUBLIC EVENTS: FUEL CELL CAR DROP-IN

Arcola Energy Educational Services

Arcola Energy's science and technology workshops, run by expert practitioners, explore renewable energies hydrogen and fuel cells and the possibilities that they offer for a low-carbon future. Over 5000 people have participated to date. Workshops can be delivered in a range of formats including:

- Schools Hydrogen Challenge - See Other Brochures
- Schools Hydrogen Workshop - See Other Brochures
- Science Festival - See Other Brochures
- **Public Events - See Below**

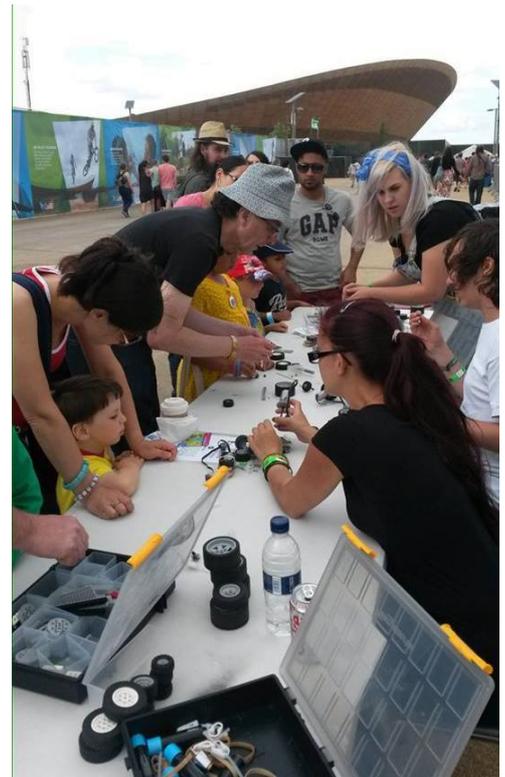
Science Event

Our Public Events format can fit a wide range of indoor and outdoor events from careers fairs to green festivals, family days or adult conferences.

Public Event format puts the technology of the future into the hands of young people – challenging them to design the most energy efficient hydrogen powered vehicle.

The workshop is designed to inspire the next generation of renewable energy engineers to get involved in developing cleaner and greener transport.

- Arcola Energy delivers hydrogen fuel cell car workshops at Public Events to the pupils giving them hands-on experience of hydrogen and fuel cells.
- Children are welcome at the Arcola Energy's stall where they will be provided with a kit to design their own hydrogen powered model car.
- The children then race their hydrogen powered model cars against other model cars.
- Each child will have the opportunity to test their design a number of times in order to improve their car to travel furthest distance possible.



On the first anniversary of the London 2012 Games; Arcola Energy delivered workshops to over 120 children in two days at the north of Queen Elizabeth Olympic Park as part of the Open East Festival.



What We Need

- A table per 3 participants
- Floor for testing; Tiles are best, carpeted floor can be used. A roll-out track can be provided by us

Workshop Design

Custom-designed Lego kits and 1.5W hydrogen fuel cells supplied by Arcola Energy are used in the workshops.

Workshops and education kits have been designed with extensive input from teachers, education authorities and education consultants to deliver specific curriculum requirements. Success in achieving this has been confirmed by teacher feedback.

Learning Outcomes

- Hydrogen fuel cells: exploring the role that hydrogen could play within a low carbon society
- Electrolysis as a method for generating hydrogen
- Iteration based scientific enquiry
- Building Stuff
- Mechanics e.g. cogs, gears etc
- Renewable energies vs. carbon-based fuels



Arcola Energy and Partners

Arcola Energy is the UK partner to Horizon Fuel Cell, supplier of the fuel cells at the heart of the kits. Arcola is supported in developing and delivering the challenge by some of the world's leading hydrogen businesses.

Arcola is expanding the challenge nationwide and creating challenge partnerships around the world, working with hydrogen champions in regions across the UK. Arcola Energy offers a wide range of opportunities for pupils to learn in a creative environment. Whether your school is looking for workshops, performances or bespoke projects, we have a team of expert practitioners able to deliver work in your school.

Other Fuel Cell Products

Introducing the HYDROGEN DEVELOPER KIT powered by Horizon's 1.5W, 12W or 30W fuel cells. These ranges of kits allow inventors, researchers, commercial product inventors and hobbyists to build fuel cell systems for whatever applications they require.

