



My World of Work LIVE!

LEGO® renewables

Overview

Using LEGO® renewables, participants will explore different forms of renewable energy. They will experience what it's like to work as an engineer in the renewable energy industry by discovering how different factors affect the energy generated.

STEM links: Engineering – renewable energy production and capture, electric car design considerations.

Objectives

To design an electric vehicle and charging station; test how much electricity can be generated using different methods; learn about opportunities available in the renewable energy industry; compare the pros and cons of different forms of energy production.

Suitable for

Age 10+

Activities

- Introduction to fossil fuels and renewables
- Design a solar or wind powered car charging station
- Construct a LEGO car
- Test your design - which car is best?
- Innovations of the future - projects and careers in energy

Pre/post-activity

- Pre-activity – at the time of booking, teachers are encouraged to visit My World of Work and use the [Strengths tool](#) with pupils
- Post-activity – teachers are encouraged to explore the related job profiles and industries on My World of Work with pupils and to use the resources in the [partner area](#)

Experiences and outcomes

My World of Work links

Job profiles – [Energy engineer](#), [Automotive engineer](#), [Design engineer](#), [Environmental consultant](#)

Modern Apprenticeships – [Engineering](#), [Wind Turbine Operation and Maintenance](#)

Industries – [Engineering](#), [Energy](#)

SCN 2-04b Through exploring non renewable energy sources, I can describe how they are used in Scotland today and express an informed view on the implications for their future use.

SCN 3-04b By investigating renewable energy sources and taking part in practical activities to harness them, I can discuss their benefits and potential problems.

SCN 4-04a By contributing to an investigation on different ways of meeting society's energy needs, I can express an informed view on the risks and benefits of different energy sources, including those produced from plants.

SCN 4-04b Through investigation, I can explain the formation and use of fossil fuels and contribute to discussions on the responsible use and conservation of finite resources.

Career Management Skills

Supports the development of the career management skills young people need to plan and pursue, life, learning and work opportunities.

Career Education Standard

Second level I can discuss the relevance of skills to the wider world and make connections between skills and the world of work.

BGE I can demonstrate and apply the skills I have learnt across the curriculum in relation to the world of work.

Skills Investment Plans

[Engineering](#), [Energy](#)