



# Clean Energy

## Lesson Ideas

These curriculum-linked, clean energy-themed lesson ideas and activity sheets offer a range of learning experiences for primary and middle years students.

### Broad Learning Outcomes

Using this curriculum material will assist students in achieving the following broad learning outcomes:

- Students will define clean energy and explain its role in reducing greenhouse gas emissions.
- Students will discover ways to be more energy efficient.
- Students will learn about the various forms of clean energy and how each is used.

### English

- Students to complete the '**TWLH Chart**' to brainstorm what they think they know, want to know, have learnt about clean energy and how they learnt it.
- Students to design a brochure that shares messages about why it is a good idea to switch to clean energy.
- Students to write a narrative about what the world might be like in 50 or 100 years time if we do not adopt renewable energy solutions.

### History

- Students to use the '**Clean Energy - Not a New Idea!**' activity sheet to create a timeline of clean energy use throughout the ages.
- Students to investigate how hydropower has been used throughout the ages. Write an information report about their findings.

### Mathematics

- Students to survey friends, classmates and family members about ways in which they try to be energy efficient. Graph the results.

### Science/Technology

- In groups, students to research a renewable energy source. Students to prepare a short presentation about the energy source, including where the energy source comes from, how it is formed, how it is used in everyday life and its advantages and disadvantages.
- Students to prepare a PowerPoint presentation, including photos, about ways in which they can (or have) conserved energy, either in their homes or at school.
- Students to use the '**Venn Diagram**' to compare two types of clean energy, or to compare the features of a clean energy source and a fossil fuel, such as coal.
- Students to complete the '**What is the Greenhouse Effect?**' activity to see an example of how the greenhouse effect and the Earth's atmosphere function.
- Students to design a 'clean energy city', taking into consideration their energy needs and what clean energy source/s they will use. Students to present their ideas and designs on a poster.



## Clean Energy

### The Arts

- Students to write, rehearse and perform a commercial to convince a specific audience to switch to clean energy.
- Students to create a collage about energy efficiency, using recycled materials only.

### Health and Physical Education

- Students to investigate the effect of pollutants in the atmosphere on the health and wellbeing of humans and animals. Find out and discuss how using clean energy might help reduce or even prevent some of these health issues.

### LOTE/Languages

- Students to research how other countries promote, celebrate or create awareness of renewable energy, clean energy or climate change (*e.g. do other countries celebrate 'Earth Hour'?*).