

# CLIMATE CHANGE



## LESSON PLAN

### YEAR LEVEL:

Upper Primary Grades 5/6

### LESSON DESCRIPTION:

This lesson encourages students to examine current school energy use and focuses attention on energy saving measures that could be implemented. Students are also encouraged to raise awareness of energy saving practices and behaviours throughout the school community.

### STUDENT LEARNING OUTCOMES:

Students may:

- Develop an understanding of energy conservation behaviours.
- Adopt personal behaviour changes in their use of energy.
- Identify and promote energy conservation education activities.
- Develop research and presentation skills.

### CURRICULUM LINKS:

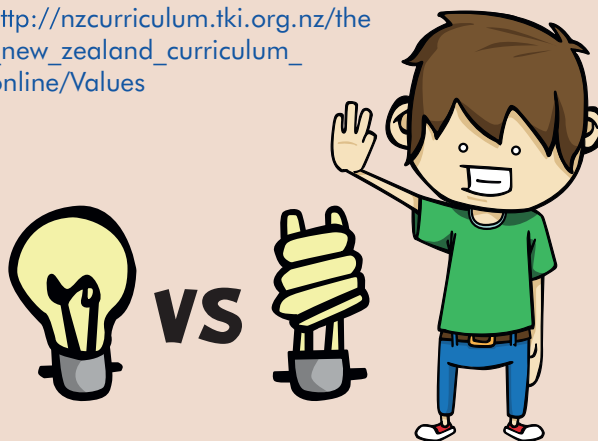
#### AUSTRALIA:

*National Statements of Learning for Civics and Citizenship:* [www.civicsandcitizenship.edu.au/cce/national\\_statements\\_of\\_learning,8990.html](http://www.civicsandcitizenship.edu.au/cce/national_statements_of_learning,8990.html)

*National Environment Education Statement for Australian Schools – Educating for a Sustainable Future:* [www.environment.gov.au/education/aussi/index.html](http://www.environment.gov.au/education/aussi/index.html)

#### NEW ZEALAND:

[http://nzcurriculum.tki.org.nz/the\\_new\\_zealand\\_curriculum\\_online/Values](http://nzcurriculum.tki.org.nz/the_new_zealand_curriculum_online/Values)



## LEARNING ACTIVITIES

### LEARNING ACTIVITY 1:

Introduce the topic of energy conservation with reference to school practices.

### LEARNING ACTIVITY 2:

Ask students to develop an audit tool that recognises areas where the school is doing a great job in saving energy and identifying areas where perhaps the school could do better.

### LEARNING ACTIVITY 3:

Brainstorm the contents of the audit sheet with the students.

**Some items and areas to include:**

- Are computers switched off at night or put on standby?

- Are school lights switched off when rooms are empty?
- Do teachers have high-energy use heaters in their offices?
- Would the school benefit from solar panels?
- Do all areas of the school including the canteen, halls, toilets etc. use compact fluorescent light bulbs (CFL) to save energy?
- In the library are printers/photocopiers set to sleep mode when not in use?
- Can the office fax machine have its margins adjusted to fit more on a page?
- Is the staff room fridge energy efficient?

For suggestions in developing and conducting school audits visit:

- **NSW Sustainable Schools – School Energy Snapshot Survey:**

[www.sustainableschools.nsw.edu.au/Default.aspx?tabid=244](http://www.sustainableschools.nsw.edu.au/Default.aspx?tabid=244)

➤ **Victorian Government – resource Smart website:** [www.resourcesmart.vic.gov.au/for\\_educators/energy\\_2516.html](http://www.resourcesmart.vic.gov.au/for_educators/energy_2516.html)

➤ **The Energy Efficiency and Conservation Authority (EECA)** encourages, supports, and promotes energy efficiency, energy conservation, and the use of renewable sources of energy in New Zealand. [www.eeca.govt.nz/central-and-local-government/schools](http://www.eeca.govt.nz/central-and-local-government/schools)

The audit could be conducted as a whole class project with student teams responsible for different areas of the school.

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## LEARNING ACTIVITIES CONT...

### LEARNING ACTIVITY 4:

Ask the students to collate and discuss energy audit results.

Ask students to work in teams to prepare a report that evaluates current energy efficiency practices and to suggest changes for conserving energy.

The report could be forwarded to:

- other classes
- the student representative council
- the school administration
- the school council
- or delivered at a school assembly

## EXTENSION IDEAS



Students can brainstorm ways to promote changes to school energy use patterns. This could include the establishment of student action teams responsible for increasing awareness of energy use. Students could create or download reminder stickers for light switches, establish class energy monitors, write articles and publish school energy targets in the school newsletter or on the school website.

## SUGGESTED ASSESSMENT



Students can be asked to develop and maintain a behaviour change template. This template could identify specific individual behavioural changes that will lead to energy conservation over a period of weeks. Student maintenance of records and progress towards targeted goals could be assessed.

## RESOURCES/ WEBSITE LINKS

### AUSTRALIA:

*Department of the Environment, Water, Heritage and the Arts:* Resources to support the implementation of AuSSI in your school. [www.environment.gov.au/education/aussi/index.html](http://www.environment.gov.au/education/aussi/index.html)

*The green building council of Australia. How do we green our schools:* <http://www.gbca.org.au/resources/greening-your-school/>

Curriculum resources are designed to support primary and secondary teachers in [http://www.energy-toolbox.vic.gov.au/energy\\_toolbox/schools\\_information.html](http://www.energy-toolbox.vic.gov.au/energy_toolbox/schools_information.html)

To compare your school energy use with baseline data from other schools visit [http://sustainability.ceres.org.au/files/sff\\_energy.htm](http://sustainability.ceres.org.au/files/sff_energy.htm)

Energy history, current facts and games [www.eia.doe.gov/kids/](http://www.eia.doe.gov/kids/)  
[www.saveenergy.vic.gov.au/](http://www.saveenergy.vic.gov.au/)

Visy: [www.visy.com.au](http://www.visy.com.au)

### NEW ZEALAND:

*Energy education:* [www.mercury.co.nz/education/education\\_whatisenergy\\_historyofelectricity.asp](http://www.mercury.co.nz/education/education_whatisenergy_historyofelectricity.asp)

*Energy Efficient and Conservation Authority:* [www.eeca.govt.nz/search/eeca/schools](http://www.eeca.govt.nz/search/eeca/schools)

Visy: [www.visy.co.nz](http://www.visy.co.nz)

