Lesson plan | Green is GREAT

**Topic:** Sustainability and alternative energy sources

**Timing:** 60-80 minutes

**Objectives:**
- To discuss sustainability and alternative energy (like nuclear, wind and solar power)
- To practise reading for gist and detail
- To practise paraphrasing a written text orally and in writing

**Introduction**

This lesson is about sustainability and how the UK is planning to reduce its greenhouse gas emissions by 2050. The lesson involves checking what vocabulary students already know in this topic area, teaching typical collocations relating to reducing emissions and alternative energy sources. The lesson involves a jigsaw reading task, where students read texts on different energy sources and report on these to each other. Extension activities involve students using an online tool to predict the energy future of the UK (or their own country).

**Procedure**

**Warmer (5 minutes)**

Fold **Task 1** so that the text at the bottom cannot be seen and give this to the students. Ask students to identify words they know and those they don’t know in the word cloud. Encourage them to think of example sentences using some of the word.

**Note:** this word cloud was created from a text at [www.decc.gov.uk](http://www.decc.gov.uk) and created using [www.wordle.net](http://www.wordle.net)

**Vocabulary matching and gap fill (15 minutes)**

Ask students to look at the boxes below the word cloud. Tell them that combinations of these words produce common collocations associated with the topic of climate change and alternative energy. Ask students to match words from each box to make new phrases. Ask students to compare their answers

**Key:** (note that some words can be used more than once)

- major choices
- energy supply
- energy demand
- carbon emissions
- nuclear power
- greenhouse gas
- wind power
- reducing emissions

Next ask students to unfold the paper and look at the text. Ask them to fill in the gaps using some of the phrases from the vocabulary activity.

**Key:**

The UK is committed to reducing its **greenhouse gas** emissions by at least 80% by 2050, compared to 1990 levels. We need a transformation of the UK economy while ensuring...
secure, low carbon energy supplies to 2050. We face major choices about how to do this: should we rely more on cutting energy demand, or on increasing and decarbonising energy supply? How should we produce our electricity – should we build more wind farms, rely on nuclear power or build up other sectors?

Discussion ‘being green’ (10 minutes)

Give students Task 2 and ask them to look at the image. Elicit/pre-teach the idea of ‘being green’ (i.e. not damaging the environment, trying to live more sustainable lifestyles, etc.). Ask students to discuss what they think can be done to be ‘more green’.

Some possible answers:

- Recycle more
- Use public transport more
- Use more environmentally friendly energy sources
- Turn off light switches when not in use
- Don’t leave electric devices on ‘stand by’ (i.e. not fully turned off)

Jigsaw reading (30 minutes)

Cut up Task 3. Divide students into three groups and give each group a different text. Ensure that each student can see the text (e.g. one text between two or three students). Give each student a copy of Task 4 (worksheet 2) and ask them to work together to decide on the main points from their text. Ask students to write down the point in their own words and not to just copy from the texts. When the students have done this, regroup them so each group has a student that has read each text. It is important to take back the original texts, so that the students have to tell each other about what they read. In this way, the students work together to fill in their information tables.

Writing task (20 minutes)

Ask students to write a brief summary based on what they have read and told each other about alternative energy sources. Ask students to include their opinion about what they think is the best energy source to use.

Variation: You could ask the students to complete this task for homework, and ask them to research some more alternative energy sources, such as solar power, wave or tidal energy, geothermal power, biogas.

Extension tasks

Direct students to http://my2050.decc.gov.uk/. This website allows them to experiment with different energy and lifestyle choices to make a plan to reduce greenhouse gas emissions. It provides the user with a visual image of what life will be like at home, at work and generally, based on the choices they make.