

C2 ACTIVITY 2: TESTING PERSONAL ENERGY EFFICIENCY

Background

This activity introduces students to the concept of energy efficiency in the home and at school, and is good preparation for participation in [SEAI's One Good Idea project](#). The activity encourages students to develop an awareness of their personal energy efficiency profile. By calculating their own carbon footprint, for example, they may come to appreciate how their habits can impact on the environment. There are several online carbon calculator available. Why not try this one from [carbonfootprint.com](#). The self-awareness exercises **C2.2 WORKSHEET C: HOW GOOD IS YOUR ENERGY EFFICIENCY AT HOME?** and **C2.2 WORKSHEET D: HOW GOOD IS YOUR PERSONAL ENERGY EFFICIENCY AT SCHOOL?** provide opportunities for students to critically examine their energy use and identify behaviour changes that would improve their energy efficiency.

What to do:

Introduce the concepts of energy usage and energy saving as follows:

1. Start with a brainstorm about personal energy consumption and collect responses to the following questions:
 - ① *What does the phrase energy efficient mean?*
 - ① *What does it mean to be energy efficient?*
 - ① *Does efficiency refer to appliances or to the way they are used?*
 - ① *What is the connection between energy use and sustainability?*
 - ① *What is meant by a carbon footprint?*
 2. Introduce students to the concept of carbon footprints, making use of the [carbonfootprint.com](#) website and use their carbon calculator.
 3. Distribute the self-auditing sheets **C2.2 WORKSHEET C: HOW GOOD IS YOUR ENERGY EFFICIENCY AT HOME?** and **C2.2 WORKSHEET D: HOW GOOD IS YOUR PERSONAL ENERGY EFFICIENCY AT SCHOOL?** All the instructions are included on the sheets.
 4. Following the completion of these activity sheets, scores should be shared to inspire a discussion about the highest and lowest scores. An interesting exercise might be to draw up a graph of all the scores and comment on the resultant shape.
 5. Challenge the students to think of other ways they can save or waste energy in their daily routines. Having gathered some suggestions, let the students now measure their carbon footprints before and after they decide on energy saving strategies. The comparison may cause them to revisit their 'energy saving' ideas.
 6. In 1990, the Netherlands introduced a tax called the carbon tax. Since then many other countries have introduced this type of tax. In 2010 the Irish Government introduced this tax. In 2012, Australia introduced this tax, but it was repealed in 2014. Rather than explain what this carbon tax is, let the students research the topic. They should then present their arguments for and against carbon tax in the form of posters or a class debate.
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Resources:

- For introductory research into carbon tax:
 - ① [Click here](#) for a simple explanation on how carbon tax is applied here in Ireland.
 - ① [Click here](#) for another site explaining carbon tax as applied in Ireland.
 - ① [Click here](#) for an interesting article on how carbon tax is applied across the world. There are also links to other articles on the implications of carbon tax.
- You can rent a [Home Energy Saving Kit](#) from your local library to carry out an audit of your home.
- The [SEAI website](#) has a list of energy saving tips that could help your class with their audit.
- The [Energy in Education](#) website has a variety of support material for saving energy at school including fact-sheets and informative videos.

C2.2 WORKSHEET C: HOW GOOD IS YOUR ENERGY EFFICIENCY AT HOME?

Tick the box below which you think best describes your behaviour. Then add up your score and find out whether you are an energy saver or an energy waster.

SCORING METHOD:

Each 'always' = 3 points

Each 'sometimes' = 2 points

Each 'never' = 1 point

AND WHEN THEY ARE ADDED UP...

If your score is 15 – 21 you are an excellent energy saver!

If your score is 8 – 14 you are not too bad but could do better.

If your score is 0 – 7 you need to change your ways.

	ALWAYS	SOMETIMES	NEVER
When leaving a room which is not in use I switch off the lights.			
I boil the kettle with only the amount of water I need.			
I use a ring on the hob which best fits my pot/pan.			
I switch off the television, video, or computer instead of leaving it on standby when not in use.			
I only turn on the dishwasher when there's a full load.			
I cycle, walk or take the bus to the shops.			
I switch my radiator off when my bedroom's not in use.			
I unplug my mobile when it is fully charged.			
I leave my mobile unplugged overnight.			
I use only CFL bulbs in my bedroom.			

Your score The class average

C2.2 WORKSHEET D: HOW GOOD IS YOUR PERSONAL ENERGY EFFICIENCY AT SCHOOL?

Tick the box below which you think best describes your behaviour. Then add up your score and find out whether you are an energy saver or an energy waster.

SCORING METHOD:

Each 'always' = 3 points

Each 'sometimes' = 2 points

Each 'never' = 1 point

AND WHEN THEY ARE ADDED UP...

If your score is 15 – 21 you are an excellent energy saver!

If your score is 8 – 14 you are not too bad but could do better.

If your score is 0 – 7 you need to change your ways.

	ALWAYS	SOMETIMES	NEVER
When leaving a room which is not in use I switch off the lights.			
I use paper towels instead of a hand-dryer.			
I switch off PC screens when I'm not using them.			
I close doors when I'm leaving a room.			
I only turn on the dishwasher (in the laboratory/Home Economics room) when there's a full load.			
I cycle, walk or take the bus to school.			
When entering rooms I open blinds fully.			

Your score The class average