



# **B2: HEATING PROJECT – SAVING ENERGY**

### Overview

This section teaches students how they can save energy at home. By monitoring their energy use over time, students see for themselves the difference that small changes can make towards saving energy. The activity should take place over at least one billing period. This means it usually takes about two months or more.

## **Suggested approaches:**

- Click here to view sample data sheets, but encourage students to create their own, rather than printing the templates.
- Begin by asking students to research energy saving using the resources provided below. Once the students
  have familiarised themselves with the resources, the teacher should facilitate a class discussion where students try to
  identify energy saving changes they could make at home. Students can share ideas and try to identify which changes
  would be the most effective and practical for them.
- Ask students to adopt energy saving practices and monitor their subsequent home energy costs to see if the practices make a difference to their energy bills.
- The <u>SEAI website</u> has a wealth of information in the form of Top Tips found by clicking on the various items on the website.

### **Resources:**

- The SEAI Publications page has a number of homeowner publications on saving energy which are free to download.
- To learn about the financial implications of energy consumption at home, students could check out bonkers.ie.



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# **B2 ACTIVITY 1: HEATING PROJECT – SAVING ENERGY AT SCHOOL**

# **Background**

Recent legislation means that educational leaders are now required to pay close attention to energy usage and energy awareness in the very infrastructure of not only the school buildings, but the school ethos as well.

The 2010 Energy Performance of Buildings Directive was recast as one of the core moves for achieving the overall Europe 2020 Strategy. Binding targets have now been set for the energy efficiency of public buildings, including school buildings, to be transposed into national law and implemented via national regulations at defined dates. The National Energy Efficiency Action Plans (NEEAP) have set the public sector a target of 33% energy efficiency savings by 2020. All bodies must put energy efficiency programmes in place and report their energy efficiency actions to the European Commission annually.

<u>Energy in Education</u> is a partnership initiative of <u>SEAI</u> and the <u>Department of Education and Skills</u> set up to help this sector to attain its goals. While much of the responsibility for energy efficiency falls on management, parents, students and school staff also play an important role in making these changes happen.

### **Suggested approaches:**

- Before any of these activities are undertaken, they must be discussed with management to ensure that they are
  appropriate.
- <u>Click here</u> to explore a wealth of information about SEAI energy efficiency training for schools. Teachers who have
  availed of this training have found it a very helpful foundation for starting energy education projects with their
  classes.

### What to do:

- 1. One way for students to get involved in reducing energy waste is to monitor how energy is used at school. Brainstorm with the class to identify inefficient use of energy at school, and challenge the students to come up with ideas for increasing energy savings.
- 2. Divide the class into groups, and assign each group of students a room in the school. Ask them to make a list of the energy-consuming appliances in their assigned room. Over a fixed period (i.e. one week) they must check how often an appliance is left on standby. By checking the rating on the appliance, students can estimate how much it costs to keep the appliance on standby.
- Some of the investigations in the strands could be used as lead-ins to monitoring usage. For example C2 ACTIVITY 2:
   TESTING PERSONAL SAVING could be used as a template to survey the school and maybe initiate a One Good Idea solution as described in C2 ACTIVITY 5: ONE GOOD IDEA.
- 4. Another area students could monitor is water usage in the school. A3 ACTIVITY 2: VISUALISING: WHY SUSTAINABILITY? HOW MUCH FRESHWATER IS THERE? provides a visually effective exercise to help students to understand why we should be mindful of our water consumption.

### **Resources:**

The <u>Energy in Education</u> site contains a wealth of background information, fact-sheets, and videos that can be very
useful to teachers and students alike.