

Saving energy at home and at school



Introduction

We all use energy at home and in school every day, we use electricity and other types of energy like oil and gas for heat, light, cookers, TVs, computers, projectors, photocopiers and lots of other things. Energy is essential to the comfort of our homes and schools and provides heat and electricity. However, there are lots of ways we can use energy more efficiently while still meeting our needs and being comfortable. Why not use your One Good Idea campaign to encourage people to make simple changes to save energy at home or at school?

Did you know?

- *In 2015 Irish homes used about 25% of all energy used in the country – that's slightly more than industry.*
- *About 70% of energy in a typical post primary school is used for heating and hot water*
- *Insulating attic spaces in a school building can reduce heat loss by 25%*

What are the benefits of being energy efficient at home?

The good news is that being energy efficient has immediate benefits:

- Your home and school will be more comfortable.
- You will be making a vital contribution to tackling climate change.
- It will save money on electricity and heating bills.
- It will help with getting a Green Flag for energy if your school is a Green-Schools

How can we be energy efficient at home?

Here are some of the main things you should consider when about saving energy at home:

- Lighting.
- Heating and hot water.
- Appliances; washing machines, dishwashers, cookers, tumble dryers.
- Electronic and home entertainment equipment; computers, TV, DVD, games consoles.
- Insulation.

There are different types of energy saving measures people can take, some cost money and some cost nothing. Here are some examples:

Zero-cost tips



- Turn the heating in living areas down to 20°C – this could save you 10% off your heating bill. The temperature in hallways and bedrooms should be cooler – ideally 15-18°C.
- Keep your curtains closed at night, even in empty rooms. Open the curtains and blinds in rooms facing south during the day to let in the heat of the sun.
- Switch off lights when leaving a room.
- Switch appliances off rather than leaving them on standby. e.g., TVs, PCs, DVDs, VCRs, printers, games consoles, satellite boxes/players/recorders and kitchen appliances. This can save up to 20% of your appliances' energy use.
- Make better use of the timers on your immersion or boiler so you can control when the heating comes on and goes off. This means you have heating and hot water when and where you want it.

Low-cost tips - These measures typically pay for themselves in energy savings in 1-2 years.

- Insulate your hot water cylinder with a lagging jacket.
- Replace failed light bulbs with CFL bulbs.

Medium-cost tips - These measures typically pay for themselves in energy savings in 3-4 years.

- Insulate your attic.
- Buy energy efficient appliances. Look for A on the Energy Label.
- Install an energy monitor in your home to help manage your energy use.

Long-term tips - Ideally considered when doing renovation/replacement work.

- Insulating your attic and walls could save you 30-40% on your home heating bill.
- Double-glazed windows.

How can we be energy efficient at school?

Here are the main things you should consider when thinking about saving energy at school:

- Heating.
- Lighting.
- Computers and office equipment, photocopiers, interactive white boards, projectors.

There are different types of energy saving measures schools can take, some cost money and some cost nothing. Here are some examples:

Heating

- Check that all windows are closed at the end of the school day.
- Draw curtains and lower blinds at the end of each day to help keep warmth in during winter months, particularly on north facing windows.
- Don't cover radiators or allow furniture to cover radiators.



- If you have a radiator in the draught lobby at the entrance to the school (like a porch with one door into the yard and another into the school) check that it is switched off.
- If your school attic has little or no insulation, have it topped up. 300 mm is recommended.
- Thermostats in classrooms should be set to 18 degrees.

Lighting

- Replace ordinary bulbs with CFL's.
- Switch off lights when there is enough daylight, especially the row of lights nearest the window. Label the switches so people know which switch controls which light.
- Only close blinds when there is a problem with glare e.g. from direct sunlight.
- Switch off lights when the room is empty or when there is good natural light in a room.

IT and office equipment

- Switch off the monitor when leaving a computer even for a short period.
- Choose computers and laptops with matt screens (not shiny). This reduces reflection and glare from windows and means you will be less likely to close blinds and turn on lights.
- Make use of the Power Management settings on a PC. It is a good idea to set computers up to go into Standby mode if not used, say, for an hour or two, but to go into Hibernate mode overnight and at weekends. Alternatively, make sure to switch computers off at the end of each day.
- Run an awareness campaign so that all computers, printers and office equipment are switched off at the end of the day, especially Fridays.
- Use Power Management settings on photocopiers to reduce power usage when the machine is not being used.
- Close the lid of the photocopier when it is not being used so it goes into power saving mode.
- There may be kettles, water boilers, dishwashers and other energy using equipment in the Staff Room or Home Economics room. Choose equipment with an A on the energy label, and use it efficiently; only boil the amount of water needed and make sure dishwashers are full before switched on.

Useful websites

- Download the [free app from Google Play](#) which helps you manage your energy at home.
- Why not tell people about SEAI Better Energy Home Grants
http://www.seai.ie/Grants/Better_energy_homes/



- The 'My Energy Pal' App from ESB helps you understand your energy usage so you can save money <https://www.electricireland.ie/ei/residential-energy-services/reduce-your-costs/appliance-calculators.jsp>
- See tips from the Environmental Protection Agency on Living Green <http://www.epa.ie/livegreen/energyefficiency/>
- For factsheets, videos and lots of other information on saving energy at school go to the resources section of the Energy in Education website http://www.energyineducation.ie/Energy_In_Education/

Videos

- Transition Year Students give the top ten tips for saving energy in school in this video <http://vimeo.com/51626564>
- Primary pupils give tips for making your classroom more efficient and comfortable <http://vimeo.com/51625599>

Teaching Resources

Use the [Energy in Action](#) resources to do the following activities with your class.

- C2 Activity 2: Testing Personal Energy Efficiency and Worksheets C and D
- C2 Activity 3: Energy Labels and Appliances and Worksheets E, F and G
- D1 Activity 5: The Good Home

