

Top 10 Tips for Energy Saving in School

This factsheet gives the Top-Ten Energy Saving Tips for Schools. Tips are either no-cost or low-cost measures. By implementing these measures, you can save money. More information can be found on the Energy in Education website at www.energyineducation.ie.

Tip 1: Computers and Electronic Equipment

- At the end of every school day, turn off computers and screens and other electronic equipment such as photocopiers, smart boards and projectors.
- Turn off the screens between classes, at break time, and at lunch-time.

Use the Power-Saving options in your computer operating systems. For Microsoft Windows 10, search for "Power settings" (Windows operating systems vary slightly). If you wish, you can adjust individual settings shown below.

You will save about €80 per year for each PC switched off outside school hours, instead of leaving it on.

For a school where a lot of computers are left on, that adds up to a lot of money. Compare how much you could save with the amount of effort needed to fund-raise the same amount.

For further details see the 'IT Equipment' factsheet on the Energy in Education website.

Tip 2: Control blinds and lights

Lighting in classrooms can use a lot of electricity, which costs money. Classrooms can often be lit with daylight instead. Since the amount of daylight in a classroom is affected by whether or not the window blinds are open or closed, it is best to open the blinds when possible, and switch off the lights whenever there is enough daylight.

Power & sleep	
Screen	
On battery power, turn off after	5 minutes
When plugged in, turn off after	45 minutes
Sleep	
On battery power, PC goes to sleep after	15 minutes
When plugged in, PC goes to sleep after	2 hours

At the start of each class, get into the habit of adjusting the blinds and switching the lights to suit the lesson. Don't leave the blinds all or part way down, raise them if possible.



Avoid installing and using black out blinds, instead use open-weave blinds so that daylight can get in and glare can be controlled. To avoid glare on computer screens and other IT equipment, use equipment with a matte finish. Open weave blinds also help to improve ventilation.

Make sure the windows are cleaned at suitable intervals, and don't forget about cleaning skylights. Skylights are usually positioned to bring daylight into the back of the room or into corridors, and can provide free light.

For further details see the 'Lighting' and 'How to Save Energy and Have a Comfortable Classroom' factsheets on the Energy in Education website.

Tip 3: Switch off before holidays



Give some thought to what can be switched off before holidays, mid-term breaks and weekends, especially long weekends. (Each long weekend equals over 1% of the hours in a year). Printers, copiers, overhead projectors, computers, electrical water heaters, water boilers, and lots of other things can be switched off.

For further details see the 'Switch off for Holidays' factsheet on the Energy in Education website.

Tip 4: Time clocks

Equipment that uses electricity can sometimes be left on unnecessarily, because they don't have time clocks to switch them off automatically, and they are not turned off manually. Examples are hot water boilers, under sink water heaters, and vending machines selling non-perishable snacks.

Inexpensive, digital, plug-in 7-day time clocks can be purchased and set to switch off



energy consuming items outside school hours. Make sure you buy 7 day time clocks, not just 24 hour time clocks, so that equipment does not get switched on automatically at weekends.

Tip 5: Heating

If your classroom is too hot and the heating is on, don't open the window to get rid of the heat. Turn the thermostat down instead. If you don't have a thermostat in your classroom, just turn off a radiator. Remember to turn it back on at the end of the class, otherwise the radiator might be accidentally left on over night, and the room might be cold in the morning.

If you have night classes in your school, try to arrange for night classes to all be in one heating zone, and only switch on that zone's heating for that evening. The other zones should be off. The PE Hall can be controlled in the same way, and only heated when needed.

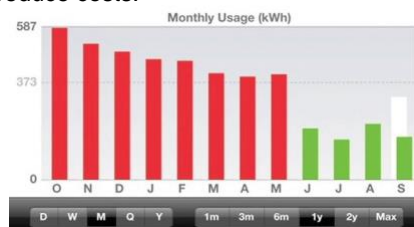


For further details see the 'Space Heating', 'Heat Loss from School Buildings' and 'How to Save Energy and Have a Comfortable Classroom' factsheets on the energy in education website.

Tip 6: Meter reading

Read your electricity, gas, oil and water meters often; at least monthly. For electricity and gas, give the meter reading to your energy provider so that the bills are more accurately reflecting your consumption.

Make a student project to keep records of the meter readings and draw graphs of consumption per month. Compare each month with the same month last year and compare the total for the year too. Start by reading the meters at the beginning and end of each school day for the first week, and weekly from then on. There are apps for smart phones which can help you keep track of energy meter readings. By measuring and monitoring your energy and water use, you are more likely to be able to reduce costs.



Factsheets to help you read your oil, gas, water and electricity meters are available on the Energy in Education website.

Tip 7: Lighting Upgrade

Make sure you are not still using tungsten light bulbs or CFL. Replace them with LED bulbs. LED bulbs reduce energy consumption by about 75% compared with tungsten bulbs, and they last much longer. They use less energy than CFL bulbs too.

Upgrade older fluorescent light fittings with modern LED fittings. You could upgrade one room at a time as funds become available, and use the tubes out of the old fittings as spares until you have the whole school done.

For further details see the 'Lighting' factsheet on the Energy in Education website.

Tip 8: Electricity tariff

Some schools, usually large schools, may be on an electricity tariff called a Maximum Demand Tariff. Part of the tariff is the "Maximum Import Capacity Charge" or "MIC Charge". You may be able to reduce this charge at no cost. Look at your electricity bill to see what tariff you are on.

Are you paying for MIC? If appropriate, phone your electricity company and ask them if you can save money by reducing your MIC. Money saved could be used to realise other Top-10 Tips. Do not do this if your school is due to get an extension in the foreseeable future, as you may need your Import Capacity then, and you will have to pay for it at that time.

Tip 9: Water conservation

Water costs money and energy, so saving it is a good idea.

- Install water displacement devices in WC cisterns.
- Turn off urinals during the holidays, or install automatic systems to turn off the urinals.
- Repair leaking taps
- Read your water meter before and after each holiday to see if water is running to waste.

For further details see the 'Water Conservation' factsheet on the Energy in Education website.

Tip 10: Insulation

If your school has cavity walls, get a quotation to have the cavities filled with insulation. Specialist contractors will tell you if your school is suitable. Top up the insulation in your attics to 300 mm deep. The payback period is often short, and it may be well worth doing.



For further details see the 'Heat Loss from School Buildings' factsheet on the Energy in Education website.