



What Schools Can Do!

In some smaller communities, the building that sucks up the most energy in the whole town is the school! Energy is needed to heat the building, light up rooms, and heat water.

This energy usually comes from burning diesel or other fossil fuels that put greenhouse gases (GHGs) into our atmosphere. These GHGs are the cause of climate change.

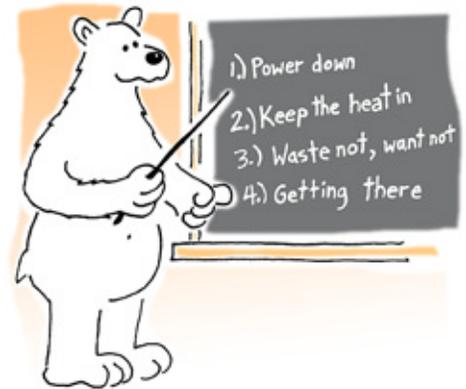
This backgrounder is about what your school can do to reduce its energy use both inside and out!

Power Down!

Schools spend a lot of money each year on electricity. Can you think of the different ways this electricity is used?

Lights are one of the most obvious uses of electricity – and also the biggest. Other uses include things like computers, photocopiers or even fans that circulate the air in the school.

Turning off lights and equipment is one simple way to start reducing your school's use of electricity.



Some ideas for saving electricity in your school:

What students can do:

- Make posters or light switch covers that encourage people to turn off the lights when no one is in the room or when there is enough daylight to light things up naturally!
- Turn off computers during lunch, after school and on the holidays.

What the school can do:

- Turn off all the lights when no one is there and turn them on just before people arrive!
- Buy energy efficient computers and printers.
- Turn off photocopiers and other equipment when it they are not being used.



Keep the Heat In!

Schools are big buildings with a lot of space to heat. Heat is usually created by burning some kind of fossil fuel (oil, gas or diesel) that produces GHGs. So saving heat is a way to reduce your school's GHG emissions.

Some ideas for saving heat in your school:

What students can do:

- Check out the windows and outside doors in your school to see where cold air might be coming in. One easy way to find this incoming air is to tape a square of toilet paper to a pencil and hold it up to windows and doors. You will be able to tell where the drafts are as the toilet paper will blow in the wind! Get your school to use weather stripping and caulking to stop these drafts!
- Keep the windows and doors closed when the heats on! If it's too hot in the winter, don't open the window – ask school staff to turn down the heat!
- Do you have curtains in your classroom? Make sure they are closed at night in the winter to help keep the heat in! No curtains!? Start a project to make some or to get some donated.
- Start a "heat down" campaign to get the temperature reduced in your school.
- Don't waste hot water. If you see a dripping tap, tell the maintenance staff.

Energy conservation efforts in 161 schools in Alberta reduced GHG emissions by more than 5,576 tonnes. It also saved the schools \$457,399 in heating and electricity costs in one year!



What the school can do:

- Upgrade the school's insulation during any renovations or retrofits.
- Install timers that turn the heat down at night and other times when no one is in the school.
- Insulate hot water pipes and hot water tanks to keep the heat in.



What to do with the savings!?

Before starting any energy conservation efforts, find out how much your school has been spending on heat and electricity in the last few years. Then you will be able to tell if your actions to reduce energy use are making a difference.

If your class successfully helps to reduce the use of electricity and heat in your school, maybe you should see if some of the money you save could be put towards new sports or computer equipment! The savings could also be used to pay for more energy conservation projects or to buy energy efficient equipment like solar panels or renewable energy heating systems. This would make the school even more energy efficient! Then you will save even more money for other projects!

Waste Not, Want Not!

Why would it save energy if we used fewer paper plates, glass bottles or school supplies? It's because all of these things take energy to produce and to transport into your community. The energy that is used usually creates GHGs.

So *reducing* how much we use is a great way to save energy. But we can't always do without some of these things. So the next best thing we can do is *reuse* what we can. And if some things just aren't reusable, we should try to *recycle* them.





Some ideas for reducing the waste in your school:

What students can do:

- If there is paper in your school that is only being used on one side, put it together in bunches and staple it! Voila! New notepads everyone can use!
- Organize a “Garbage Free Lunch” day and encourage everyone to pack their lunches in reusable containers.
- When you buy your own school supplies, buy products that are made out of recycled products (if available).
- Find out what can be recycled in your community. Then make sure your school has convenient places where people can put all of these recyclable items. Then organize a way for these to get to the recycling depot.



What the school can do:

- Buy recycled paper products.
- Reduce how much paper is being used. For example, teachers can use overhead projectors to share information instead of making a copy for every student.
- Save paper that has only been used on one-side. Use it for copying draft documents or to give to students for notepads.
- Set up a composting area in the school grounds to recycle food scraps and other organic materials.



Getting To and From School

Don't forget to look at how energy is being used *outside* of the school. We know that driving cars and trucks pumps a lot of GHGs into the atmosphere – so the less people drive to school, the better.

Some ideas for lowering the impacts of cars at your school:

What students can do:

- Start a bicycle club. Get someone to teach everyone how to tune-up and maintain their bike. There are also some great tips available on how to safely ride your bike in the winter – research and share!
- Start an anti-idling campaign at your school. If parents come to pick up students, get them to turn off the car while they wait! (see *Backgrounder 14 for more on idling cars*)
- Encourage teachers and students who drive to school to try walking, riding bikes or carpooling (sharing a ride with others instead of driving alone)!
- Organize a “car-free” or “bike to school” day at your school.



What schools can do:

- If people who drive to school plug in their car block heaters in the school parking lot, they use the school's electricity. The school can cycle the power on and off to the parking lot plug outlets to save electricity. This won't hurt the cars or cause them to get too cold. Even in really cold weather, a car doesn't need to be plugged in for more than two hours (especially if it was driven earlier that day!)
- Charge a small fee for parking in the school lot. Use the money to help fund other energy saving projects!



Every year, the average car in North America takes 2,000 trips that are less than three kilometres long.

However, a car's emission control system usually doesn't start to work efficiently until the car is driven about five kilometres. This is how long it takes to get the engine warm enough. So if you have a short trip to make, consider biking, walking or bussing instead!

Ready, Set, Go!

This backgrounder lists many ways you and your school can reduce how many GHGs your school puts into the environment. You can probably come up with a few more, right?

Which actions do you think would have the most impact on your school's energy use? What would it take to get an action underway? Are you ready to jump in and go to it? Just remember, we all have to start somewhere if we are going to reduce our GHG emissions.

For more ideas on what you can do at home read Backgrounder 14. If you want to see what governments and businesses are doing, check out Backgrounder 17.



Key Points

- ★ In small communities, schools are sometimes the biggest building. These large buildings use a lot of heat and electricity, most of it created by burning a fossil fuel (oil, gas, or diesel). This produces a lot of GHGs.
- ★ There are many things that students and the school can do to reduce its GHG emissions. They can help reduce the amount of electricity and heat that is used. They can also use fewer products, and recycle what they use.
- ★ People who drive to school also produce GHGs. People can be asked to stop idling cars on school property and to walk, cycle or carpool instead of taking their own cars.



Want to Know More?

Here are some websites filled with ideas for actions your school can take to combat climate change:

- **Anti-Idling Toolkit:** http://oee.nrcan.gc.ca/idling/tool_kit/tool_kit.cfm – Background on why not to idle, and a program to help you conduct an anti-idling campaign in your school or community.
- **Destination Conservation:** <http://www.dcplanet.org/home.html> – Click on ‘DC Adventure’ to see how your school can get funding to get green, and click on ‘Climate Change Challenge’ for a trivia game on climate change.
- **Go for Green:** http://www.goforgreen.ca/walktoschool/home_e.html – Ideas for a ‘Walk to School’ day and week.
- **Government of Canada Climate Change:** <http://climatechange.gc.ca/english/workroom/students/projects.shtml> – Ideas for school projects.
- **Green Street:** <http://www.green-street.ca> – Provides funding for classes to access various environmental projects and programs.
- **Plantwatch Canada:** www.devonian.ualberta.ca/pwatch – A plant-watching project for classes.
- **Climate Change Solutions:** <http://www.climatechangesolutions.com/> – Provides solutions for schools.