

## **Energy Conservation Initiative: *Lights off!***

### ***Objective:***

The light bulb -- it hangs non-descriptively in each and every home and is always conveniently there for our domestic usage. You are always reminded to turn off the lights in a room when nobody is using it. It saves kilowatt hours, money and the environment in the long run. In these terms, switching off make sense.

Now, imagine your school where there are hundreds of light fixtures dangling from the ceiling in each and every classroom, hallway, washroom and office. The reality is that the majority are turned on from early in the morning, before the school day even begins, to late in the afternoon, when the janitor locks up for the night. Even during the lunch hour, you may find some empty classrooms lit up as bright as day because some absentminded student or teacher forgot to shut off the lights when he or she left the room. These worst case scenarios could spell annual wastages of not kilowatt hours, but megawatt hours! Therefore, a Lights Off program is an imperative conservation goal for any SWITCH team. Find creative ways to encourage your peers to turn off the lights!

### ***The How-to:***

**The #1 method: Turn off your lights when they are not in use.**

It's simple and easy! All this requires is a conscientious mind.

Did you know?

From 1997 to 2005, Ontario's electricity demand increased by an average of 1.65% per year. Under this current scenario, energy consumption is forecasted to grow to 169 TWh by 2014!

Source: The Independent Electricity System Operator.

External website:

2003 Survey of Household Energy Use: <http://oee.nrcan.gc.ca/Publications/statistics/sheu-summary/lighting.cfm?attr=0>

## **Adopting CFLs**

Compact Fluorescent lights (CFLs) are a modern technological marvel. In comparison to a traditional incandescent light bulb, a CFL has longer rated life and use only a quarter of the power for the same quality luminescence or better.

If your school has not made the switch from incandescent to compact fluorescent, consider it a major front in your environmental campaign. Convince your school administrators. Though their market price is customarily more expensive, the monetary and environmental return will be paid many times over.

Risk assessment: CFLs contain trace amounts of mercury, which is hazardous to both people and wildlife in large quantities. Once a CFL bulb has burned out, do not throw in the trash! In a landfill, the mercury content can escape and contribute to air and water degradation. Instead,

For more information, visit these websites:

How do fluorescent lamps work? <http://home.howstuffworks.com/fluorescent-lamp.htm>

Ban the bulb! <http://banthebulb.org/>

Switch and save. <http://oee.nrcan.gc.ca/energystar/english/consumers/questions-answers.cfm?attr=4>

Zero waste [http://www.zerowaste.org/cfl/IMAGES\\_A/CFL\\_Project\\_Charter.pdf](http://www.zerowaste.org/cfl/IMAGES_A/CFL_Project_Charter.pdf)

## **Let in some sunlight for a change!**

Classrooms have windows for a reason! Whenever possible, turn off a light and open a curtain or blind for some natural sunlight.

Risk assessment: Be wary that UV-B radiation is harmful to human health and has been linked to illnesses such as cancer. Moreover, the direct glare of sunlight may cause a discomfort for some students and may be lead to eye damage (if students are dull enough to stare directly at the sun!). This Lights Off strategy is best used on a partially cloudy day, when sunlight is not so strong, but strong enough for adequate classroom lighting.

External links:

The dangers of Ozone <http://www.nas.nasa.gov/About/Education/Ozone/radiation.html>

## **Use a musical reminder!**

This strategy is fun and has proven quite successful in schools before: use the appeal of song to encourage your peers to switch off the lights! A short 10 second clip played on the PA on a regular basis will brighten up their day in the figurative sense!

Nelly Furtado's "Turn off the light" is a highly recommended selection. Timing is everything. You do not want to play the song too often; it may irritate some listeners. Rather, strategically play the clip just at the start of lunch, or right after school, every other day, just to get people thinking of turning off the light.

## **"Lights off" stickers.**

The TDSB Eco-Schools program distributes free, eye-catching stickers for application onto light switches. They are meant to remind occupants to switch off the classroom lights when he or she leaves the room.

External sites:

Contact TDSB Eco-School:

[http://www.tdsb.on.ca/\\_site/ViewItem.asp?siteid=207&menuid=1666&pageid=1262](http://www.tdsb.on.ca/_site/ViewItem.asp?siteid=207&menuid=1666&pageid=1262)