



## ENERGY CAMPAIGN

### Turn it Off- Electrical Devices (Reduce Phantom Load)

**Phantom load** or **standby power** is the electric power used by equipment when it is turned off. Any electrical device or technology that has a clock, a remote control, a visible light when not in use, or is programmable, is drawing a phantom load (using a small amount of power in order to be ready to come back on quickly). Although the amounts of power for each device may be small, the energy consumption from all the electrical devices in your school or home that have a phantom load adds up to a lot of wasted electricity.

#### Pre- Campaign Audit:

Use the chart below to record information about a variety of electrical devices. Check the phantom load or standby power use by one of the following methods:

- **Energy Meter:** If you have an energy meter (also known as a watt meter, a power meter, or a circuit monitor), check the phantom loads of various devices in your school. Plug the meter into the wall, then plug the electrical device or technology into the meter. The read out will show the phantom or standby electricity being used, even when the device isn't in use. Record this information in the phantom load column below by recording the number of **Watts**. Check many kinds of technology found in your school including computers, fax machines, battery chargers, Smart Boards, DVD players, coffee makers, microwave ovens, etc. **Be sure to get permission to unplug office equipment like photocopiers before you do it, as they may have a program that could be lost or take a long time to reboot.**
- **No Energy Meter:** If the technology has a clock, a remote control, a visible light (usually green or red) when not in use, or is programmable, it is drawing some amount of electricity. Look to see if the device has an energy star logo on it- if so, it will be drawing a smaller amount of electricity. If not, it may be drawing a larger amount of electricity than necessary. Record this information in the phantom load column below by putting **yes** or **no**.



<b>Technology/ Electrical Device</b>					
<b>Phantom Load</b> (Watts or yes/no)					
<b>When is the technology shut down?</b> Examples: end of day, weekends and holidays					
<b>Are power saving features (sleep settings) activated?</b> Yes/No Example: after 10 minutes					
<b>Who is responsible for turning off equipment?</b>					
<b>Are power bars used to turn off power to technology that isn't in use? Yes/No</b>					
<b>Is new equipment Energy Star qualified?</b> Yes/No					

With this information you can decide if a campaign to reduce the use of phantom power would be valuable at your school. **NOTE:** Even if the decision is made to keep some electrical devices on to maintain programs, (e.g. photocopier) you can focus on other devices that could be shut down when not in use.



### Monitoring

Use this chart to monitor if power to electrical devices is being cut off when not in use.

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Location and type of technology/electrical device	Is it unplugged or is there a power bar ?	Is it being used?	When was it last used?

### Post Campaign Audit

Ask a number of office and teaching staff the following questions:

1. Were they aware of the Turn it Off- Electrical Devices campaign?

Number of **yes** answers \_\_\_\_\_ Number of **no** answers \_\_\_\_\_

2. What types of reminders would help you to remember to turn off electrical devices when not in use?

Using the monitoring chart above, return to the same rooms that you checked for the pre-campaign audit and check the devices again. Make sure you return at approximately the same time of day that you did the pre-campaign audit.

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#### Ideas for Campaign

1. Meet with computer and office staff to find out what would make it easier for electrical devices to be shut off or unplugged when not in use. Listen to their concerns about things like convenience and updates and take that into account when preparing your campaign. Investigate solutions.
2. Prepare posters that explain how and when to unplug technology, or other electrical devices. Place them above or near the devices so that students and staff will see them.
3. Communicate your information to students and staff by creating announcements, class presentations or a short video.
4. During the campaign use sticky notes or other prompts near the devices to remind and reward people for shutting down the equipment when not in use.



## Curriculum Connections

**Grade 5 Social Studies: Outcome RW5.1** Explain the importance of sustainable management of the environment to Canada's future.

**Grade 6 Physical Science: Outcome EL6.1** Assess personal, societal, economic and environmental impacts of electricity use in Saskatchewan and propose actions to reduce those impacts.

**Grade 7 Social Studies: Outcome RW7.3** Assess the ecological stewardship of economies of Canada and the circumpolar and Pacific Rim Countries.

**Grade 8 Health Education: Outcome USC8.6** Examine and assess the concept of sustainability from many perspectives, and develop an understanding of its implications for the well-being of self, others, and the environment.

**Grade 9 Physical Science: Outcome CE9.4** Critique impacts of past, current, and possible future methods of small and large scale electrical energy production and distribution in Saskatchewan.