

## ENERGY AUDIT TOOL

### OBJECTIVE:

To reduce Lower Mainland Health Authority electricity use, and to foster a workplace culture where everyone turns off lights, computer monitors and other electronic equipment when not in use.

### BACKGROUND INFORMATION:

The Lower Mainland Health Authorities use approximately 280,000,000 kWh of electricity per year in its owned facilities. This is enough electricity to power about 28,000 homes for a year. BC currently does not have enough generating capacity to meet peak demand and BC Hydro must buy power from neighbouring provinces/states. This power is often not the clean hydro we have in BC. To increase our generating capacity BC Hydro would need to build expensive new power plants or new hydroelectric dams that could significantly impact the environment. Another solution is to work to reduce our energy needs.

Your computer must be left on after-hours; however you can turn off the monitor. A computer monitor uses about 26 watts of power when on or in screen saver mode, about five to ten watts in sleep mode and almost none when off. Essentially sleep mode and turning the monitor off are not the same thing. While electronics and appliances do use less power in standby than when they are on, they are still drawing power, in some cases 10-15 watts. Several studies have found that between 5-10% of total electricity usage is from appliances and electronics in standby/sleep mode.

One monitor using a few watts may not seem like much, but you have to multiply that by the over the thousands of monitors and countless other electronic equipment each Health Authority has. Monitors consume about 25% of the total energy required to run a computer. Also, screen savers do not save energy - complex screen savers can actually increase energy use. Turning your monitor off will not affect the programs you are working on.

In general common office equipment uses ¼ of its normal electric consumption while on stand-by or asleep, however even when turned off many electric devices still draw power as long as they are plugged in.

Lighting accounts for approximately 25 percent of our total electricity use.

### STEPS:

Plan to complete the energy audit at three different times, during the work day, at lunch and after work. It can be completed on the same day or different days.

#### Step 1

Look around your work area and perform a visual survey. Count the number of lights, computers and other electric equipment left on. (Don't forget things such as coffeemakers, fans, space heaters, microwaves, phone chargers, desk lamps, kitchen equipment, medical equipment, etc.)

#### Step 2

Complete the Energy Audit form (*on Green+Leaders site under "tools" <http://www.phsa.ca/AboutPHSA/Environmental-Sustainability/Green-Plus-Leaders/default.htm>*) this will help to provide a baseline for the energy usage in your work area.

#### Step 3

After the **Turn It Off** campaign (*see the **Turn it Off Tool on the Green+Leaders website** <http://www.phsa.ca/AboutPHSA/Environmental-Sustainability/Green-Plus-Leaders/default.htm>*) has been running for a few weeks, complete a follow up audit using the Energy Audit form (*attached*)

### EVALUATION

Compare your findings of the number of lights and equipment left on from the initial baseline and follow-up audit after the campaign has been running for a few weeks. Determine any improvement in **Turning It Off** behaviour. Send audit results to Meredith Hunt, Green+Leaders Program Coordinator, [mhunt2@phsa.ca](mailto:mhunt2@phsa.ca).