

# **WORKING FROM HOME ENERGY CONSERVATION PLUG LOADS Toolkit**

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**THOMPSON  
RIVERS  
UNIVERSITY**

Sustainability  
Office

# Background



TRU uses approximately 14,000,000 kilowatt hours (kWh) of electricity per year; enough electricity to power almost 1,400 BC homes for a year. As we continue to work remotely, your home energy use will increase. Here are some helpful tips to keep your energy use as low as possible.

## The Toolkit

This toolkit contains energy conservation tips for

### 1. Plug Loads – Phantom loads

A “plug load” refers to **any electronic device or equipment that is plugged into a wall outlet**. In a university setting, plug loads include everything from lab equipment to computer monitors, and cell phone chargers. In total, 8 to 20 % of energy use in a university or office setting comes from plug loads. An average desktop computer will require 100 watts of electricity and when operating for 7 hours a day will cost approximately \$2-3 dollars per month (additional monitors and peripheral devices can significantly increase electrical consumption and cost). Keeping your computer on overnight can add up quickly – therefore shutting down your computer and your devices will help keep your energy costs to a minimum.

A “phantom load” is the amount of energy some devices consume while in ‘stand-by’ or ‘sleep’ mode. For example, some devices need power to keep an internal clock or touchpad active even while switched ‘off’ (but they’re not fully off). When these devices remain plugged into the wall, they draw roughly **5 %** of the energy consumed while in operation. Unplugging these devices when not in use saves energy... and it’s so easy to do!

“Smart” power bars can automatically turn off your peripheral devices when not in use. Feel free to contact us if you have questions. [jgudjonson@tru.ca](mailto:jgudjonson@tru.ca)

# 1. SMART BARS – HERE IS HOW THEY WORK

**‘Manual/Auto’ switch:** Keep on Auto to enable ‘Master’ and ‘Controlled by Master’ features to work.

**‘Master’ outlet:** for your computer

**‘Controlled by Master’ outlets:** for computer peripherals (like monitors). When the computer is turned off, it will automatically turn off all peripherals

**‘Always on Outlets’:** for things that you can control and turn on or off at will (like desk lamps, cell phone chargers, etc.)

**Note**—for devices with mini transformers (like label maker, chargers etc.) try to keep these unplugged until you need them – Otherwise the device will draw a ‘phantom’ electrical charge due to the transformer.

**Also** - Do NOT ‘daisy chain’ smart bars together (plug one into another); it is a fire-hazard, and the bars do not work properly.

Extension cords CAN be used, IF the gauge of the wire is equal to or greater to the wire gauge of the Smart Bar.

