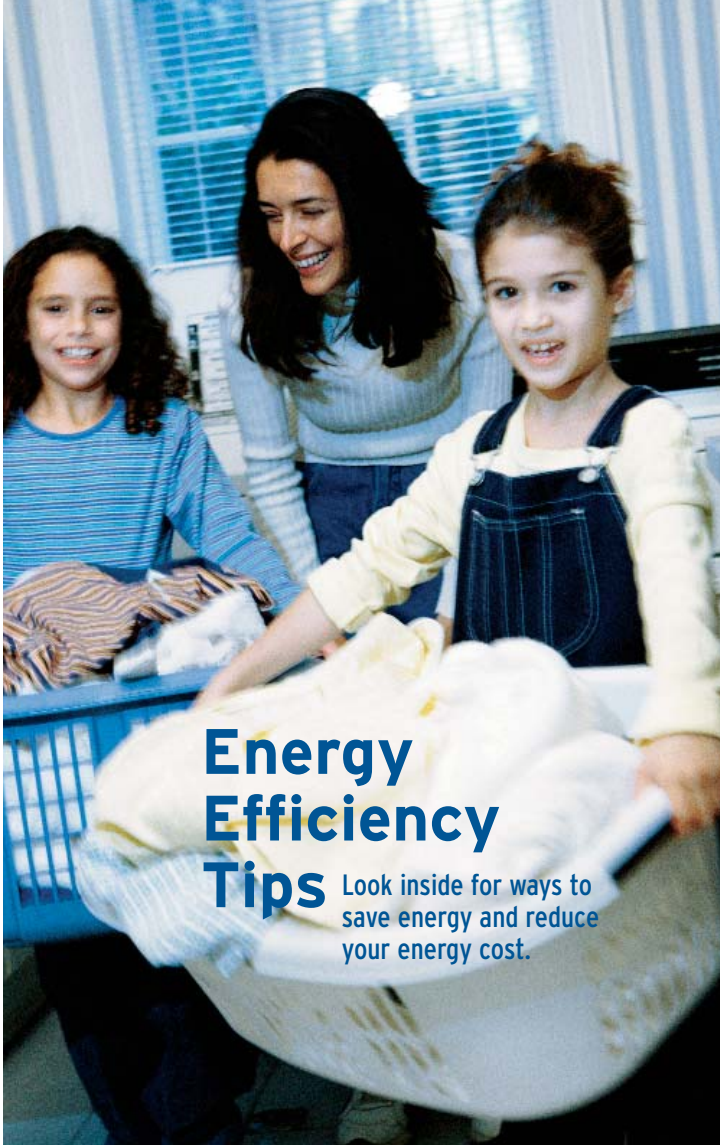


Energy Efficiency Tips

Look inside for ways to save energy and reduce your energy cost.

This information has been prepared by Toronto Hydro-Electric System Limited to help you save energy and reduce costs on your electrical bill.

www.torontohydro.com

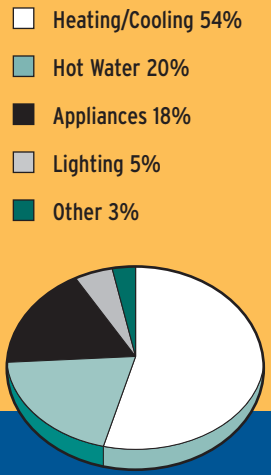
toronto hydro electric system

Do you see the black hole?

If you add up all the cracks, gaps and openings in your house, you could end up with a hole that measures 2.3 square feet! *

This is the average size of the energy loss area in most Toronto homes.

Even a well-insulated house, if not properly sealed, will lose 30% or more of its heat through cracks and crevices in the building's outer walls, roof and floors. Comprehensive draft proofing can save you up to 10% on your heating bills. *Source: City of Toronto.*



Did you know?

In a typical home, about 54% of energy costs are tied up in heating and cooling and 20% in hot water. You'll find the maximum amount of savings in heating and cooling, and hot water. *Source: Hydro Quebec.*

Energy Efficiency Tips

in this booklet will help you save energy and costs on your electricity bill. Saving energy also reduces SMOG causing emissions – and that's good for our environment.

Table of Contents

* The black hole concept was produced in partnership with Green$aver and Toronto Hydro Corporation.

Some energy efficiency tips won't cost a cent to put into action – others will. Look at the legend below. It will help you develop your energy conservation budget. Remember – the more you invest – the greater your return in energy savings.

Legend

FREE Free

$10 under $10

$25 under $25

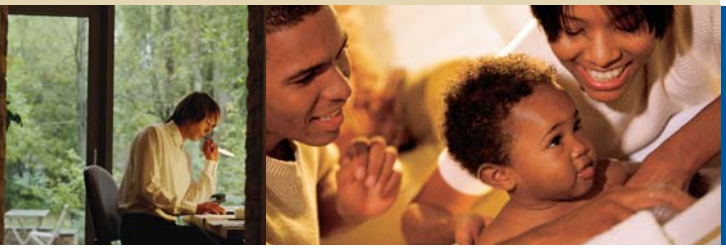
$50 under $50

$100 under $100

$150 under $150

$1000 under $1000

cost can vary based on the size of the projects.



Heating

FREE Keep all your exterior doors tightly shut and try to avoid frequent in-and-out traffic. Padded door runners help reduce drafts under doorways.

FREE During the winter months, as much as 3% of the energy your furnace uses can be saved by lowering your thermostat by 1 degree. For the average electrically heated detached house built before 1990, that could be a savings of approximately $73.39* per year. It all adds up! *Source: Office of Energy Efficiency - Natural Resources Canada.*

FREE During the heating season, keep the draperies and shades on your south-facing windows open during the day to allow the sunlight to enter and heat your home. Keep them closed at night to reduce the chill you may feel from cold windows.

$10 Cleaning your furnace filter every two months can increase it's efficiency by up to 50%. *Source: Greenest City.*

If your furnace is more than 20 years old, it may be cost-effective to replace it. Replacing a low-efficiency furnace with a high-efficiency unit can, by itself, reduce your home energy use by 20%. The average 10-year-old furnace wastes as much as 45% of the heat it produces. Newer natural gas furnaces are up to 98% more efficient. *Source: City of Toronto.*

Recommended thermostat settings for a comfortable environment during the winter months are:

- 21°C (70°F) when you are home relaxing
- 18°C (64.5°F) when you are sleeping, and
- 15°C (59°F) when you are away from your home for an extended period of time.

* Heating energy costs are based on an average electrically heated detached house, built before 1990 in the Toronto area.

$25 25% of a home's heat is lost through windows. Wrapping your windows with plastic is a low-cost option to replacement that can reduce this loss by 50%. *Source: City of Toronto.*

New double-paned glass windows and doors may cost more to install, but can reduce heating costs by 34%. You could save $831.73* per year.

$50 Test your home for air tightness. On a windy day, hold a lit incense stick next to your windows, doors, baseboards, electrical boxes and outlets, plumbing fixtures, ceiling fixtures, attic hatches and other locations where there is a possible air path to the outside. If the smoke stream travels horizontally, you have located an air leak that may need caulking, sealing, or weather stripping. Comprehensive draft proofing can save you up to 20% on your heating bill or $489.26* per year. *Source: Office of Energy Efficiency - Natural Resources Canada.*

Upgrade your insulation in walls, basements and attics. Insulating your basement walls and attic can reduce your energy bill by 30%. *Source: Office of Energy Efficiency - Natural Resources Canada*.

$100 Install a programmable thermostat. It will automatically turn the heat down after you go to bed at night and up before you wake. You can also program it to turn the heat down when you leave home for work or school in the morning and back up just before you return. They can reduce your heating and cooling bills up to 10% a year. If you are using electric heat and a 2.5 ton air conditioner – that's a savings of about $294.63* per year. *Source: Greenest City.*

$150 Have a professional home energy evaluator do a thorough home energy audit. Green$aver is an environmental organization that specializes in residential energy audits. You can contact them at 416-203-3106 or at www.greensaver.org for further details.

heating

Other areas of air loss to consider sealing:

- Any holes or gaps where the electrical lines, plumbing, gas lines or oil fill pipes go through the external walls.
- Cracks in the wall, ceiling, foundation wall and slab.
- Where a wood frame wall joins a masonry wall, stone foundation or chimney.
- Fireplace dampers and fireplace bricks.
- Behind bathtubs and under sinks.
- Around floor drains.
- Leaky ducts or poorly fitted hot air registers or cold air intakes.

Safety note

If you plan to caulk around items that are a source of heat (chimney, light fixtures, fan motors, etc.), be sure to use a heat-resistant caulking compound. Silicone or polysulphide sealants usually work well. Special high-temperature silicones are available for flue pipes.

* Heating energy costs are based on an average electrically heated detached house, built before 1990 in the Toronto area.

Cooling

FREE Ensure outside doors are closed to keep cool air inside the house. If the space will be unoccupied for more than 24 hours, the air conditioner should be shut off.

FREE As a rule of thumb, your thermostat should be set to 25.5°C (78°F) or higher if comfort permits. You save between 3 - 5% in energy costs for every degree you raise it. *Source: Office of Energy Efficiency - Natural Resources Canada*.

FREE Keep window coverings closed during the day to prevent heat gain from the sun and save up to 5% in cooling costs. *Source: California Energy Commission*.

FREE Avoid using heat-producing appliances, like ovens and dishwashers, during the hottest part of the day. Use your microwave oven or barbecue instead of your stove or have a cold meal.

FREE If you are using a central air conditioner, make sure you are cooling only the rooms that you are using. Close the vents or doors in rooms not being used.

FREE Try to install your air conditioner in a shaded area. An air conditioner that is exposed to direct sunlight will consume 5% more energy than one that is shaded.

$25 Periodically check that the filter in your air conditioner is clean. Replace filters every one or two months to further reduce your cooling costs by 1 – 2%. *Source: California Energy Commission*.

$100 Use a programmable thermostat for central air conditioners. This will allow you to set the timer so your home will be cool when you arrive, and while you sleep. They cost less than $100 and can reduce your cooling bills up to 10% a year. If you are using a 2.5 ton air conditioner – that's a savings of about $50.07 per year. *Source: Greenest City*.

$100 Install a ceiling fan to circulate air and avoid using the air conditioner. A 60 Watt fan costs less than $1 to operate monthly, while an air conditioner can cost between $26 and $178 a month. *Source: Office of Energy Efficiency - Natural Resources Canada*.

Cooling

Hot Water Heating

FREE Take a quick shower. It's cheaper than a bath. A five-minute shower with an efficient showerhead will use about 50% less hot water than one bath.

FREE Wash laundry in cold water whenever possible. Always use cold water to rinse clothes. You can save up to 4% in hot water energy costs. *Source: California Energy Commission.*

FREE Turn your electric water heater off when you're away for an extended period.

$10 Fix leaking hot water taps. Leaking taps cause the hot water tank to continuously heat cold water entering the tank.

Did you know?

A leaking faucet at one drop per second (2 millilitres per minute) uses 1037 litres of water per year.

Appliances

Range/Oven

FREE Turn off the oven a few minutes before cooking is complete; the heat already in the oven will finish the job.

FREE Avoid overcooking your meal or opening the oven door too often; both practices waste energy. Every time you open the oven door as much as 20% of the heat escapes and the oven has to work harder to replace it.

FREE Use the self-cleaning cycle only for major cleaning jobs. Start self-cleaning right after cooking, while the oven is still hot.

FREE Use the convection oven setting whenever possible; circulating heated air around the food will reduce baking times up to 30%.

FREE When baking in glass or ceramics, lower the heat by 14°C (25°F) because they transfer heat better than some metals. *Source: Hydro One.*

Did you know?

Every time you open the oven door, the temperature drops 5 to 10°C (9° to 18°F).

Freezer

FREE Avoid placing the freezer near a heat source, such as a radiator, heating vent, washer, dryer or furnace. Your freezer will have to work harder than necessary. Consider placing your freezer in a cool, dark spot to boost its energy efficiency.

FREE Let hot food cool down before putting it in the freezer.

$1000 Consider purchasing a new energy efficient freezer. It may cost more to purchase, but will save you money and energy over its lifetime. A freezer purchased today is about 52% more efficient than one purchased before 1994. *Source: Blue Ridge Electric.* Look for the lowest EnerGuide rating and the Energy Star label. Consider these guidelines when looking for an energy-efficient freezer.

- Determine the size of freezer you need. A good rule of thumb is a maximum of 130 L (4.5 cu. ft.) of capacity per person. Anything larger wastes energy and money.
- Keep in mind that if you have the space, chest freezers (with the lid on top) are 10 - 25% more energy efficient than upright models (which resemble a refrigerator) for two reasons. First, they tend to do a better job of keeping the cold air inside the freezer when the door is open. Second, most chest freezers are "manual defrost," eliminating the energy used by the automatic defrost feature.

Did you know?

The household refrigerator uses 11% of the home's total energy consumption.

That old refrigerator in the basement may be costing you an extra $100 - $150 a year to run. Consider disposing of it and save.

Refrigerator

FREE Avoid forcing your refrigerator to work harder than necessary by locating it near a heat source, such as a radiator, heating vent, kitchen range or dishwasher.

FREE Thaw frozen food inside the refrigerator. This will help the interior cool and eliminate energy used for thawing in an oven or microwave.

FREE Let food cool, at least partially, before putting it in the refrigerator. This way, the refrigerator won't have to work as hard to keep the food cold.

$1000 You can reduce refrigerator energy use up to 40% by replacing a 1993 or older unit with a new, energy-efficient model. When buying a refrigerator it is important to select the right size for your needs. A model that is too big wastes both money and energy. The following recommended sizes refer to the combined capacity of the refrigerator and freezer:

- For three or four people, consider a unit of 14 to 17 cubic feet in size.
- For each additional person in the household, add 2 cubic feet.

Look for the Energy Star label and the lowest EnerGuide rating. Consider these guidelines when looking for an energy-efficient refrigerator:

- An "Energy Saver" switch controlling heating coils in the cabinet. The switch prevents condensation in humid weather, but you should turn it off when the air is dry.
- Separate temperature controls for the refrigerator and freezer compartments.

Dishwasher

FREE Avoid running small loads in your dishwasher. You can save 1% on your energy costs by loading your dishwasher to capacity before running the cycle. *Source: California Energy Commission.*

FREE If your dishwasher has the option, choose air drying rather than heat drying. If not, stop the machine before the drying cycle starts and open the door to let dishes air dry. By doing so, you can reduce the dishwasher's energy use by 10%.

FREE Short ("Econo") cycles use less water and energy than heavy-duty cycles. Do not use a more powerful energy cycle than you need.

$1000 Consider purchasing a new energy-efficient dishwasher. Dishwashers today are 90% more efficient than units purchased in the early 1970's. It may cost more to purchase, but will save you money and energy over its lifetime.

Clothes Washer

FREE Wash laundry in cold water whenever possible. Rinsing your clothes in hot or warm water won't make your laundry any cleaner. Select your washing machine's cold water rinse and save 4% in energy costs. *Source: California Energy Commission.*

$1000 An energy-efficient clothes washer may cost more to purchase, but will save you money and energy over its lifetime. Newer energy-efficient models can save 27 – 42% in both energy and water use. *Source: City of Seattle.*

Look for a clothes washer with the Energy Star label and a low EnerGuide rating. Watch for these features.

- A water-level control or a small-load basket – both allow you to use less water for small loads.
- A variety of temperature controls that allow you to choose hot, warm or cold water.

$1000 Although they are more expensive, consider buying a front-loading or tumble-action clothes washer. They use less energy than top-loading washers. Here's why:

- They use 40% less water than top-loading machines.
- They extract more water during the spin cycle, which reduces drying time and saves energy.

Did you know?
A normal dishwasher uses 41 litres of water per cycle. Five minutes of rinsing dishes under a faucet uses up to 95 litres of water.

appliances

Clothes Dryer

FREE Use an outdoor clothesline to dry your laundry and save 5% in energy costs. Your clothes will last longer and smell great! *Source: California Energy Commission.*

FREE Shake out the wet clothes before placing them in the dryer.

FREE Drying two or more loads in a row makes the most of the heat already generated by your dryer.

FREE Avoid over drying – use your dryer's moisture sensor or timer and remove loads promptly. This saves energy and prevents wrinkles.

FREE "Perma-press" drying cycles offer a "cool-down" feature that finishes the job and prevents heat-set wrinkles by using residual heat from the dryer.

FREE Clean the filter in the dryer before every load to ensure maximum operating efficiency. A clogged filter can increase the energy use by up to 30%.

FREE Ensure your dryer's outside vent is tightly closed to prevent outside air from leaking in and running up your heating or air conditioning costs.

Did you know?

The average household does 37 loads of laundry per month, using 6,817 litres of water.

Lighting

FREE Keep fixtures and bulbs clean. Dirt can absorb as much as 50% of the light.

FREE Always turn off the lights when leaving a room, even if it's only for a few minutes. It's just a myth that it takes more energy to turn a light on than to leave it on.

FREE Try to put floor or table lamps in a corner. This allows light to reflect from the walls, making the room brighter without turning on more lights.

$10 Change from incandescent to fluorescent lighting. Compact fluorescent lights use up to 75% less energy than comparable standard light bulbs and can last up to 10 times longer. You can save approximately $35 in energy costs over the life of a compact fluorescent light and avoid the cost of replacing standard bulbs. *Source: City of Toronto.*

$10 Try using lower-Wattage bulbs – your lights may be brighter than you need.

Did you know?

If you replace 25% of your lights in high-use areas with fluorescents, you can reduce your lighting energy costs by about 50%. *Source: U.S. Department of Energy.*

$25 Switch from traditional Christmas lights to the new LED lights and reduce the energy cost by 80 – 90%. *Source: NOMA.*

$25 You can reduce lighting consumption by up to 30% by installing motion sensors for outdoor lights and timers for indoor lights. *Source: Greenest City.*

Use task lighting, which focuses light where it's needed. You'll save energy by using a reading lamp instead of lighting up your whole room.

Did you know?

One 40-Watt fluorescent tube produces the same amount of light as three 60-Watt incandescent bulbs!

lighting

Home Office/Electronics

FREE Shut down the home office computer when not in use. A continuously running computer and monitor uses between $75 and $120 worth of electricity each year. *Source: Climatechange.ca.*

FREE When you go for a coffee break or leave the office for a short time – consider turning off the monitor. That alone will save 60% of the total energy used by the computer.

FREE Unplug electronic devices and re-chargers when not in use and save an extra 2% in energy costs. All electronics with a digital clock, including microwaves, continue to use electricity even when switched 'off'. Use a power bar to ensure 'off' is really 'off'. *Source: California Energy Commission.*

Pools

FREE Set your pool heater thermostat back 3°C/6°F and save 20% in energy costs. *Source: City of Toronto.*

Use a solar blanket to cover your swimming pool for each night of the summer season when the outside air temperature is cooler than the pool water and save another 20% in energy costs. *Source: City of Toronto.*