

Home Energy Checklist

Do it yourself energy savings measures.

Today
Check your hot water tank and turn down the temperature to save energy and avoid scalding your hands.
Fridges, dishwashers, washing machines, and clothes dryers often have energy saving settings. Start using them! If you have a new "smart" appliance, connect it to central management app in order to ensure the appliances are running non-peak hours, or while your solar system is generating energy.
Replace all light bulbs with LEDs. Old incandescent lights waste a lot of energy through heat loss. Compact fluorescent lamps (CFLs) and LEDs will fit in most fixtures. Go a step further and install "smart" LED lights that can be paired with other devices and apps in order to be controlled remotely, through voice command, or by motion sensors. Wifi-enabled smart lights can also alert you to different events, such as "the dishwasher is done" or turn on during an emergency when your "smart" carbon monoxide detector activates. Smart lights can also be used to create mood lighting for events, or to turn on/turn off during morning & bedtime routines.
Identify which appliances need replacement due to inefficiency or condition. Fridges are a huge energy sucker. Hidden and irregularly appliances such as beer fridges & wine coolers can also use more energy than you realize. Go a step further and unplug irregularly used electronics, that use "vampire energy" while plugged in.
Clean or replace furnace, air-conditioner, and heat-pump filters. Some mechanical systems have the option of upgrading your filters to high MERV rated filters, which limit the type and amount of contaminates, toxins and allergens that come into your home. This is especially important for those living near roadways or in smoky environments (think forest fire or backyard campfire smoke in the summer).

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If it's hot outside, open a lower level window, and an upper level window. This will use the pressure differencial between floors to create natural airflow through the house, passively cooling it. This will reduce the need to use your AC system. Additionally, manually opening/closing the blinds to keep the sun out will further energy savings. Alternatively, do the same in the wintertime on south-facing windows to let the warm sunshine in, passively heating your home.
Identify cold areas in your home. It might be near windows & doors, above the garage or cantilevers or in the basement. Note any drafts you feel as well.
Adjust your thermostat to save energy in the winter for heat and energy in the summer for cooling. Programmable and "smart" thermostats are easily available and can be programmed intuitively for your specific home, with your specific lifestyle. Connect it to your home management app as well!
This Week
Make a trip to your hardware store and buy a water-heater blanket, low-flow showerheads, faucet aerators, and LED lights. Don't forget your filters. You might need caulk and gaskets too.
Rope caulk very leaky windows.
Install gaskets around leaky wall sockets & light switches.
Assess your heating and cooling systems. Would updating them be justified? A third-party can identify if these systems are inefficient, such as an energy advisor. They're not there to sell you new equipment, so their opinion is not swayed by making a sale.
Purchase a power use monitor to learn how you use energy in your home and identify opportunities for saving. Some libraries have these for rent.
This Month
Take a look at your utility bills. Separate electricity and fuel bills. Target the biggest bill for energy conservation remedies. Additional fees such as distribution, transportation, and variable & fixed fees may not be able to be reduced.
Go up into your attic or crawlspace and look for insulation, and figure out how much you have. If it's a very cold day, take note if you have frost developing in the underside of your roof in your attic. If you see frost, this is an indication of heat loss and a potential for further damage. Contact a qualified contractor to address this as soon as possible.
If hot water pipes and ducts are not insulated when they run through unheated areas, you need to insulate them.

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Identify the largest air leaks in your house by listening for the ones that whistle on windy days, or where you can feel drafts. Seal them with gaskets, sealant and other methods. Utility cut-throughs for pipes, gaps around chimneys and potlights in insulated ceilings are the worst culprits, as well as unfinished spaces behind cupboards and closets. An energy auditor can be hired for low cost, who uses a blower door to find out where the worst leaks are. You might have as much air leakage in your house as an open window, once you add up all the leaks!
Schedule a home energy assessment by a certified Energy Advisor through Natural Resources Canada for a full energy evaluation. They will inspect your house thoroughly and identify areas where energy savings can be made.
This year
Insulate the cool areas of your home that you previously identified. This includes walls, ceiling, cantilevers, garage ceilings (if you have a bonus room above), and headers. Some areas are easy and can be done yourself, while other areas may require a contractor to complete the job.
Replace aging, inefficient appliances, even if they are still functional. There may be grants or rebates available in order to do so. Local energy advisors would be the best person to assist you in located funding.
Upgrade leaky and inefficient windows. Poor windows will accumulate frost on the interior during cold weather, or leak, or have seals broken. Again, ask your local energy advisor if grants are available to help fund replacement with high efficiency, triple pane, low-E, argon filled windows.
Air conditioning can be reduced by planting deciduous trees on the south side of your home to reduce passive solar heat gain. In the winter, these trees will shed their leaves allowing warm sun to come through for free heat.
Consider solar energy to offset your electricity consumption. Contact an Energy Advisor to see if funding is available!

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