



# APPLIANCES, ELECTRONICS AND WAYS TO REDUCE YOUR PLUG LOADS

There is an overwhelming abundance of electronics available these days, and research shows<sup>1</sup> that many of us have more than 24 devices plugged in at any given time. All of these gadgets account for about 13% of a home's total energy use, which can represent more electricity consumption than one ENERGY STAR® refrigerator.

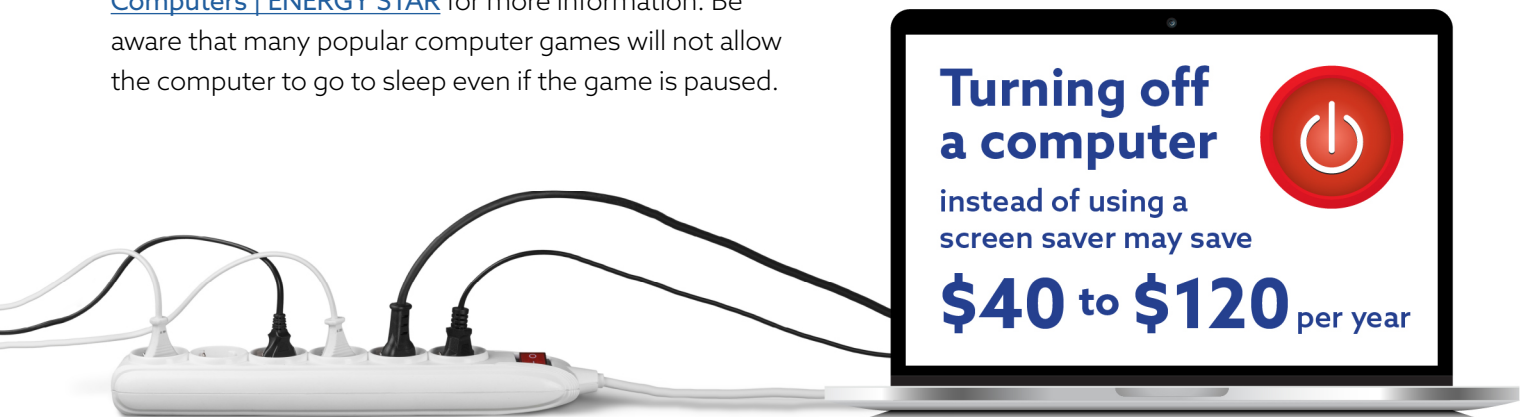
Fortunately, there are three key ways to cut down on electricity use from home electronics: turn items off, use ENERGY STAR products and minimize the number of electronics in your home.

## TURN IT OFF

Just like turning off a light when you leave a room, make it a habit to turn off the television, computer or power strips. The average U.S. household has three or more televisions, and many of us are guilty of leaving one on for background noise or for our pets. Turning off the television when it's not being watched may save \$60 to \$120 per year.

Likewise, turning off a computer instead of using a screen saver may save \$40 to \$120 per year. You can make it easy by setting your computer to enter a low-power sleep mode when it's inactive. See [Computers | ENERGY STAR](#) for more information. Be aware that many popular computer games will not allow the computer to go to sleep even if the game is paused.

If you walk around your home in the dark, you'll notice little lights shining on your television, coffee maker and other electronics. These lights indicate that electricity is being used while the electronics are in standby mode. Most electronics, including battery chargers, draw between 1 and 14 watts in standby mode. One watt for one year costs around \$1, which doesn't seem like a lot until you consider all of the devices doing it at the same time. Flipping the "off" switch on a power strip can make cutting power to these electronics a breeze.



<sup>1</sup> U.S. Energy Information Administration 2020 Residential Energy Consumption Survey HC 3.1.pdf (eia.gov)

## CHOOSE ENERGY STAR MODELS

ENERGY STAR certified electronics and appliances use drastically less energy than standard models when turned on and in standby mode.

**Refrigerators:** Open the door and look on the inside wall panels for the ENERGY STAR logo. Knowing the approximate age or model number of the refrigerator will give you enough information to use ENERGY STAR's online calculator to find the annual cost of operation. ENERGY STAR can save you up to \$20 per year.

**Dishwashers:** Open the door and look for the ENERGY STAR logo on the narrow top edge. If the dishwasher is from 1994 or prior, you could be paying \$40 extra per year to operate it. Using an ENERGY STAR dishwasher can save even more than some hand-washing techniques.

**Washing Machines:** Front-load and top-load washing machines without an agitator are often ENERGY STAR certified and can use 20% less energy and up to 30% less water than those manufactured before 1999.

**Induction Cooktops and Ranges:** These appliances use electromagnetic energy to cook/heat foods quicker, with less energy (up to 10% more efficient than electric and three times more efficient than gas) and in a safer manner than gas, radiant or coil.

**Televisions:** ENERGY STAR televisions use at least 25% less electricity.

**Computers:** ENERGY STAR computers use 25% to 40% less energy, depending on usage and settings.

**Digital Media Players:** ENERGY STAR digital media players, such as devices used to stream content, are on average 45% more efficient than non-certified models, and they use four times less energy than a traditional cable/satellite box.

**Audio/Video Equipment:** ENERGY STAR audio/video equipment can be up to 70% more efficient than conventional models, while certified Blu-ray players are up to 45% more efficient.

## MINIMIZE

Downsizing the number of electronics in your home can be a great way to reduce electricity consumption. For example, do you need that additional television or entertainment system? The amount of money you'd save on electricity by moving on from it may be enough to upgrade one of your other appliances. With a healthy attitude, making dramatic changes can be an exciting adventure.

Taking charge of your energy consumption by turning off or reducing electronics and choosing ENERGY STAR appliances and devices may produce measurable savings, making it good for our wallets and for the environment.

For more details about ENERGY STAR products, visit [www.energystar.gov/products](http://www.energystar.gov/products).



## OTHER WAYS TO SAVE

### Efficient Small Appliances in the Kitchen

Pressure cookers, which adjust the heat, pressure and cook time for you, are fast, use less water and produce less steam than stockpots – which can be welcome on humid days. Boiling a whole chicken might take 15 minutes in a pressure cooker but well over an hour in a stockpot. Many people are nervous to use a pressure cooker on their stove after hearing harrowing stories of explosions and injuries, but thankfully, new models have a multitude of safety features so you are less likely to have an epic tale if there is a mishap. In addition to pressure cooking, most electric multicookers also function as **rice makers, slow cookers, steamers, warmers, yogurt makers** and will sauté.



### Smart Devices

**Smart speakers** are speakers, but thanks to their voice control and brand-specific assistants (like Alexa or Siri), they can do a lot more, from telling you the weather and sports scores to providing appointment or grocery list reminders to answering trivia questions. You can even string together a bunch of tasks into a larger routine.



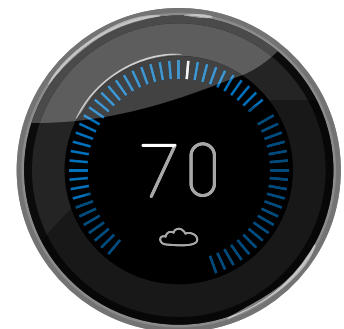
**Smart lighting** comes in a few forms. Basic smart bulbs, color-changing bulbs and smart light switches give you additional flexibility in your lighting options. For added security, many smart lights can be set up on a vacation mode to make it seem like someone's at home when you're out of town.



**Smart plugs** easily connect to a traditional outlet and can then be used to power a device. From there, you can use the plugs' dedicated app or sync them up to your smart speaker for voice control. These can also be set on a schedule or timer.

**Smart switches** have functionality similar to smart plugs but are hard-wired replacements to standard light switches. Installation may require a licensed electrician.

**Smart thermostats** like the Nest and Ecobee make it easier to adjust your home's temperature for different times of day, schedules or occupancy levels, and connecting them to your smart speaker adds another level of versatility.



## HIDDEN COSTS OF LITTLE LUXURIES

There are other places you can find energy savings once you start looking for them. Household extras are often decor or something that enhances the ambiance of our homes, like countertop water fountains, oil diffusers, miniature bathroom lamps or noise machines. A number of households also enjoy a minifridge, wine cooler, ice machine, beer keg dispenser or even a second full-size refrigerator.

	<b>Wattage*</b>	<b>Hours</b>	<b>Annual cost**</b>
Countertop water fountain	5	24 hours per day	\$5
Oil diffuser	12	4 hours per day	\$2
Miniature incandescent lamps	40	10 hours per day	\$18
Outdoor string lights (LED)	24	10 hours per day	\$11
Outdoor string lights (incandescent)	132	10 hours per day	\$58
Noise machine	18	10 hours per day	\$8

Our pets also manage to consume electricity. As noted earlier, we may leave on the television or music for our animals, and these costs can add up. Even reptiles, which need heat to stay alive, require a surprising amount of energy.

	<b>Wattage*</b>	<b>Hours</b>	<b>Annual cost**</b>
Dogs watching TV	150	10 hours, weekdays	\$45
Cats listening to music	8	12 hours per day	\$4
Bearded dragon heat lamps	100	12 hours per day	\$52
Aquarium	63	24 hours per day	\$66

\*Estimated; always confirm wattage because it varies from product to product

\*\*Assuming \$0.12 per kWh