

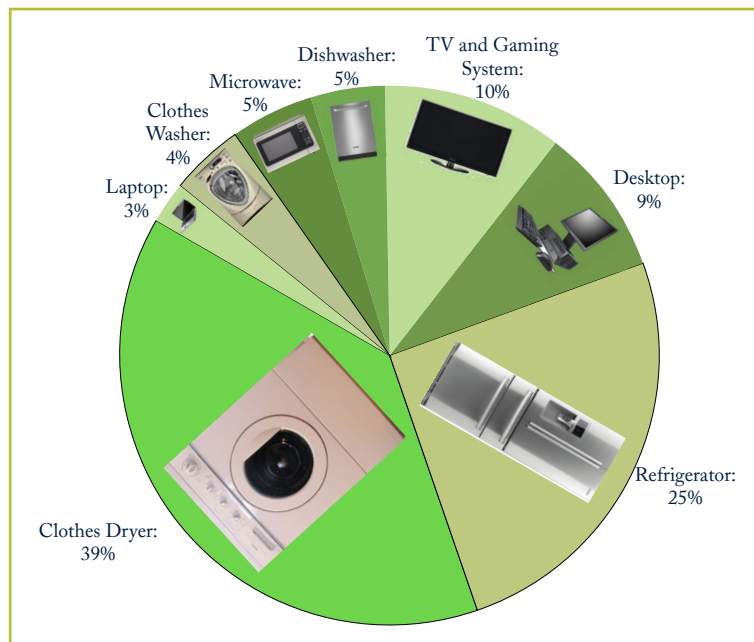
## WHAT IS ENERGY STAR?

ENERGY STAR® is a voluntary program from the United States Environmental Protection Agency that helps businesses and individuals save money and protect our climate through superior and innovative energy efficiency, while contributing to important health and environmental benefits. The ENERGY STAR label can be applied to certified products, new homes, and commercial buildings, including industrial plants.

## WHY IT'S IMPORTANT:

Depending on your usage, up to **65%** of the energy in your home could be attributed to your appliances and electronics.

Broken Down by Appliance:



**QUICK TIP: CLOTHES WASHERS CONSUME ENERGY FOR BOTH MECHANICAL ACTIVITIES AND WATER HEATING ENERGY. THE MAJORITY OF THAT ENERGY USED IS FOR WATER HEATING – WASHING YOUR CLOTHES IN COLD WATER CAN SAVE ENERGY AND MONEY.**

## ENERGY STAR APPLIANCES ARE THIRD-PARTY CERTIFIED AND TESTED ON A VARIETY OF FACTORS.

Products can earn the ENERGY STAR label by meeting a certain set of energy efficiency requirements that the EPA established based on these key guiding principles:

- Product categories must contribute significant energy savings nationwide.
- Certified products must deliver the features and performance demanded by consumers, in addition to increased energy efficiency.
- If the certified product costs more than a conventional, less-efficient counterpart, purchasers will recover their investment in increased energy efficiency through utility bill savings, within a reasonable period of time.

*Nearly 70% of U.S. electricity is generated by burning coal and natural gas, which releases greenhouse gases and other air pollutants into the atmosphere, contributing to climate change and air quality problems.*

## BUYING GUIDE

### “BE A STAR, BUY ENERGY STAR!”

ENERGY STAR products for the home range from larger appliances like refrigerators, washers, dryers, and furnaces, to smaller electronics like tablets, televisions, and even light bulbs and fixtures.

### REFRIGERATORS

ENERGY STAR-certified refrigerators are about 9-10% more energy efficient than models that meet the federal minimum energy efficiency standard.

There are multiple tools to help you figure out which ENERGY STAR appliance is right for you, and how to maximize your savings.

You can find the refrigerator calculator at [energystar.gov](http://energystar.gov) here: [bit.ly/EnergyStarFridgeCalculator](http://bit.ly/EnergyStarFridgeCalculator)

### DISHWASHER

- **Trim your utility bills** — Do you have a dishwasher made before 1994? If so, you’re paying an extra \$35 a year on your utility bill compared to owning a new ENERGY STAR-certified model. Replace one of these old dishwashers with an ENERGY STAR model, and save enough money to pay for dishwasher detergent all year.
- **Save loads of water** — A dishwasher built before 1994 wastes more than 10 gallons of water per cycle. A new, ENERGY STAR-certified dishwasher will save, on average, 1,600 gallons of water over its lifetime.
- **Save the environment** — ENERGY STAR-certified dishwashers use less energy than conventional models, which helps reduce air pollution and combat global climate change. By reducing water consumption, ENERGY STAR-certified dishwashers also help protect our lakes, streams, and oceans.

### FURNACES

Different gas furnace efficiency requirements and labels are used for different regions of the country.

- Certified gas furnaces in the northern half of the U.S. will be labeled with the standard ENERGY STAR logo. These furnaces will be up to 16% more energy efficient than baseline models and can save an average of \$94 in energy costs per year.
- Certified oil furnaces are up to 4% more energy efficient than baseline models and can save an average of \$66 in energy costs per year.

Find and compare different ENERGY STAR-certified furnaces here: [bit.ly/EnergyStarCertifiedFurnaces](http://bit.ly/EnergyStarCertifiedFurnaces)

**QUICK FACT: BY UPGRADING YOUR FURNACE IN YOUR GAS-HEATED HOME, YOU CAN EARN UP TO \$500 IN REBATES FROM THE EFFICIENCY WORKS PROGRAM.**

Find more info here: [bit.ly/EWR rebates](http://bit.ly/EWR rebates)

## WASHERS

Clothes washers that have earned the ENERGY STAR rating use approximately 35% less water and 35% less energy than standard models.

- **On average**, a new ENERGY STAR-certified clothes washer uses 280 kWh of electricity and can save you \$40 a year on your utility bills compared to a standard model.
- **Use less water** — A full-sized ENERGY STAR-certified clothes washer uses 13 gallons of water per load, compared to the 23 gallons used by a standard machine. That's a savings of more than 3,000 gallons of water per year!
- **Is your washer over 10 years old?** It's estimated that there are 76 million top-loading washers, 25 million of which are at least 10 years old, still in use across the country. Washers built before 2003 are significantly less efficient than newer models. Together, these inefficient washers cost consumers \$2.9 billion each year in energy and water.

**Shop and compare ENERGY STAR-certified residential clothes washers here:**  
[bit.ly/EnergyStarWashers](http://bit.ly/EnergyStarWashers)

*If you have a standard clothes washer that is over 10 years old, it's costing you, on average, \$180 a year.*

**QUICK FACT: IF EVERY CLOTHES WASHER PURCHASED IN THE U.S. WAS ENERGY STAR-CERTIFIED, WE COULD SAVE MORE THAN \$4 BILLION EACH YEAR AND PREVENT MORE THAN 19 BILLION POUNDS OF ANNUAL GREENHOUSE GAS EMISSIONS. THAT'S EQUAL TO THE EMISSIONS FROM 1.8 MILLION VEHICLES.**

## DRYERS

Get the most efficiency from your ENERGY STAR-certified dryer by considering the following:

- **Sensor drying.** ENERGY STAR dryer models incorporate advanced moisture sensors to help you reduce your dryer's energy use and ensure that your dryer automatically shuts off when clothes are dry.
- **Low heat setting.** Longer drying cycles on a low heat setting use less energy. When you purchase an ENERGY STAR-certified clothes dryer, look in the informational materials shipped with the product for which cycle was tested for certification and how the dryer's other cycles or settings may use more or less energy.
- **Consider gas.** 80% of dryers in the U.S. are electric. If you have the option, consider using a gas dryer to save money and reduce your environmental impact.
- **Savings by the pair.** An ENERGY STAR-certified washer/dryer pair will save even more energy and money while doing your laundry. Clothes washers that have earned the ENERGY STAR certification incorporate advanced technology and functionality to get significantly more water out of your clothes in its final spin cycle than a conventional model. This makes it easier for clothing to dry in an ENERGY STAR-certified dryer and uses less heat. Less heat means more energy savings and reduced wear and tear on your clothes caused by over-drying.

**Compare and buy clothes dryers here:** [bit.ly/EnergyStarDryers](http://bit.ly/EnergyStarDryers)

## WATER HEATER

### ENERGY STAR-Certified Water Heaters — Which Type is Right for You?

Five water heating technologies are eligible for ENERGY STAR qualification. See which ones fit you and your home best.



High-Efficiency  
Gas Storage



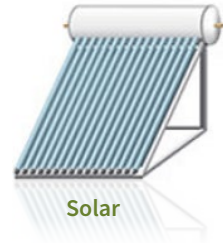
Whole-Home  
Gas Tankless



Gas Condensing



Heat Pump



Solar

### NATURAL GAS OPTIONS

#### Consider a High-Efficiency Gas Storage unit if you:

- Currently have a gas storage water heater that needs to be replaced.
- Don't want to make a major change and are satisfied with the style of water heater you have now.
- Are willing to invest upfront to reduce water heating bills by about 7%.
- Want routine installation and maintenance.

#### Consider a Whole-Home Gas Tankless unit if you:

- Want to replace your existing gas water heater before it fails.
- Are building a new home or conducting a major remodeling project.
- Often run out of hot water.
- Have limited space and need a water heater that doesn't take up much room.
- Want a water heater with a longer lifetime.
- Are willing to pay more upfront to reduce water heating bills by about 30%.
- Are willing to take on additional maintenance tasks or schedule a regular maintenance check every few years.

#### Consider a Gas Condensing unit if you:

- Want to replace your existing gas water heater before it fails, but don't need to do it right now.
- Are building a new home or conducting a major remodeling project.
- Often run out of hot water.
- Are willing to pay more upfront to reduce water heating bills by about 30%.
- Have space to accommodate a condensate drain and special venting.

### ELECTRIC OPTIONS

#### Consider a Heat Pump if you:

- Want to replace your existing electric water heater before it fails, but don't need to do it right now.
- Are building a new home or conducting a major remodeling project.
- Are willing to pay more upfront to reduce water heating bills by about 50%.
- Have space to accommodate a condensate drain.

### SOLAR OPTIONS

#### Consider Solar if you:

- Have dependable access to sunshine on your roof or immediately outside your home.
- Like the idea of using a renewable energy source to heat your water.
- Are willing to take on additional maintenance tasks or schedule a regular maintenance check every year.
- Are willing to install or use an existing auxiliary electric or gas storage water heater to provide back-up on cloudy or rainy days.

[bit.ly/EnergyStarWaterHeaters](http://bit.ly/EnergyStarWaterHeaters)

## THE POWER OF ENTERTAINMENT

ENERGY STAR isn't just limited to your boring appliances. You can also purchase certified televisions, home theater systems, tablets, and more.



### TELEVISIONS

The ENERGY STAR Most Efficient 2015 designation recognizes the most efficient products among those that qualify for the ENERGY STAR program. Find TVs under 35" that are energy efficient here: [bit.ly/EnergyStarTVs](http://bit.ly/EnergyStarTVs)



### HOME THEATER SYSTEMS

#### What is a Home Theater System?

The typical home-theater setup includes a TV set with cable or satellite hookup, a DVD/CD player, a receiver, gaming device, and two to eight speakers.



### AV RECEIVERS

The receiver, or AV receiver, is the hub of the typical AV system. Several types of receivers are available in the marketplace. First is a basic stereo receiver, which may include an AM/FM tuner, 2-channel audio amplifier, external speaker terminals, and connections for external CD and MP3 player connections. Second is a more full-featured home theater receiver, which combines all of the features of a stereo receiver with the capability to process surround sound, connect to the Internet, and switch and distribute a variety of audio and video signals throughout your home.

**Surround Sound** – Created by multiple speakers linked by a receiver, surround sound that envelops the listener by creating ambience and providing directionality to off-screen sound effects.

**Speakers** – Basic speakers fall into a number of different categories, but each is designed to carry a specific range of frequencies. Knowing the frequencies a speaker carries helps you pick the ideal type for your entertainment needs. You can compare different setups here: [bit.ly/EnergyStarAudioVideo](http://bit.ly/EnergyStarAudioVideo)

**Subwoofers** – Designed specifically for bass output and are powered, meaning they have their own electrical supply. In addition to providing some major depth to home movie sound, they can also increase your home theater's energy consumption from 172 watts to a whopping 244 watts. Even when in standby mode, these bad boys still pull almost the same amount of power as when they're running, so save energy and save money by plugging them into a smart strip.

### PLANNING YOUR HOME AV INSTALLATION IS AN IMPORTANT FIRST STEP IN CHOOSING A RECEIVER THAT WILL SUPPORT YOUR NEEDS.

- Do you only want to connect audio components like a CD player, or are you considering a home theater with connections for your television, Blu-ray or DVD player, and cable/satellite set-top box?
- Will you be installing surround sound speakers?
- Do you want to connect to the internet through your receiver?

Answering these questions will help you determine what to look for in a home electronics purchase.

*Because it's all about that bass.*

## TABLETS

Compared to desktop or notebook computers, slates and tablets are the most energy efficient choice for simple tasks such as browsing the internet or streaming content. In fact, tablets and slates use significantly less energy than any other device you might use to stream videos. According to the Consumer Electronics Association, close to 70% of consumers watch streamed or downloaded content. However, even as streaming has become more commonplace, most people are still unaware that how they choose to stream affects their energy use.

*Slates and tablets are now eligible to earn the ENERGY STAR label.*

**QUICK FACT: VAMPIRE LOADS ADD UP TO ABOUT \$200 IN YEARLY ENERGY COSTS FOR AN AVERAGE HOME. THAT'S WASTED ENERGY THAT COULD HAVE POWERED 11 MILLION HOMES.**

## OTHER WAYS TO SAVE ENERGY WITH YOUR ELECTRONICS

### Efficient Computer Use:

For energy savings and convenience, consider the following guidelines:

- Turn off the monitor if you aren't going to use your computer for more than 20 minutes.
- Turn off both the CPU and monitor if you're not going to use your computer for more than 2 hours.

**QUICK FACT: SCREENSAVERS ARE NOT ENERGY SAVERS. USING A SCREEN SAVER MAY IN FACT USE MORE ENERGY THAN NOT USING ONE, AND THE POWER-DOWN FEATURE MAY NOT WORK IF YOU HAVE A SCREEN SAVER ACTIVATED. IN FACT, MODERN LCD COLOR MONITORS DO NOT NEED SCREENSAVERS AT ALL.**

### Additional Sources:

[bit.ly/FCGovHomeEfficiency](http://bit.ly/FCGovHomeEfficiency)  
[bit.ly/EWForHome](http://bit.ly/EWForHome)  
[bit.ly/FortZEDInsulation](http://bit.ly/FortZEDInsulation)

### DIY Pages:

[bit.ly/EnergyGovHomeEnergyTips](http://bit.ly/EnergyGovHomeEnergyTips)  
[bit.ly/EnergyGovHomeEnergyAudits](http://bit.ly/EnergyGovHomeEnergyAudits)

## WHEN STREAMING VIDEO, AN ENERGY STAR-CERTIFIED TABLET USES:

- 10 times less power to stream than a game console.
- 7 times less power than a television.
- 6 times less power than a desktop computer and monitor.

Shop ENERGY STAR tablets for the whole family here:

[bit.ly/EnergyStarTablets](http://bit.ly/EnergyStarTablets)

## SLEEP MODE AND POWER MANAGEMENT FEATURES

Many computers available today come with a sleep mode or power management feature. ENERGY STAR estimates that using these features will save you up to \$30 each year on your electricity bill. Make sure you have the power-down feature set up on your computer through your operating system software. This has to be done by you; the power management features usually are not enabled when a computer is first purchased.

**Learn how to enable your energy-saving features on your computer here:** [bit.ly/EnergyStarPowerMgmt](http://bit.ly/EnergyStarPowerMgmt)

ENERGY STAR monitors consume 2 watts or less in sleep mode. Follow the instructions for your particular model to ensure power management features are enabled so your monitor will automatically go into sleep mode following a period of inactivity. You can save even more by manually turning off your monitor when you're not using it; ENERGY STAR-qualified monitors consume 1 watt or less when off.



**QUICK FACT: DID YOU KNOW THAT ON AVERAGE 48% OF YOUR HOME ENERGY BILL CAN BE ATTRIBUTED TO YOUR HEATING AND COOLING?**

## HEATING AND COOLING

A good way to manage your heating and cooling energy use is with a programmable thermostat.

There are four different types of programs found in programmable thermostats as follows:

**24-Hour Program** - This is the simplest type of program as it repeats itself every day. Wake, leave, return, and sleep times and temperatures remain constant from one day to the next.

**5 + 2 Program** - The week is broken into two periods with one program schedule for Monday through Friday and a second for the weekend.

**5 + 1 + 1 Program** - Similar to the 5 + 2 program but allows Saturday and Sunday to have separate schedules.

**7-Day Program** - A separate program is provided for every day of the week. Sometimes these programs are set up as a 5+2 or 5+1+1 program to speed programming and then provide the ability to edit each day individually. Another approach is to set up one day and use a “quick copy” feature to assist with programming.

The Fort Collins Utilities Peak Partners program offers a free of charge, 7-day programmable thermostat that can be controlled via the internet on any computer or smartphone.

[bit.ly/ThermostatFAQs](http://bit.ly/ThermostatFAQs)

## RECOMMENDED TEMPERATURES:

SETTING	TIME	SETPOINT TEMPERATURE (HEAT)	SETPOINT TEMPERATURE (COOL)
Wake	6:00 a.m.	<70°F	>75°F
Day	8:00 a.m.	Set at least 8°F lower	Set at least 7°F higher
Evening	6:00 p.m.	<70°F	>75°F
Sleep	10:00 p.m.	Set at least 8°F lower	Set at least 4°F higher

## HOW TO USE BLINDS AND SHADES TO SAVE ENERGY:

**Curtains and drapes.** On summer days, keep your curtains closed, especially on windows that get direct sunlight. The ability of curtains and drapes to reduce heat gain depends on fabric type (closed or open weave) and color. Studies show that medium-colored draperies with white-plastic backings can reduce heat gain by 33 percent. Hang the curtains as close to the window as possible. For maximum effect, install a cornice at the top of the draperies, seal the draperies at the sides and overlap them in the middle using Velcro or tape.

**Shades.** When properly installed, window shades are one of the simplest and most effective ways to save energy, but they need to be drawn all day to work. Mount them as close to the glass as possible within the window frame, creating a sealed space. Reversible shades that are white on one side and dark on the other can be switched with the seasons with the white side

reflecting the sun in the summer and the dark side absorbing it in the winter. Quilted roller shades and Roman shades with several layers of fiber batting act as both insulation and an air barrier, and are more effective than other soft window treatments.

**Blinds.** Because of the horizontal slats, it’s difficult to control heat loss through interior window blinds, although they do offer some flexibility. Unlike shades, you can adjust the slats to control light and ventilation. When completely closed, highly reflective blinds can reduce heat gain by around 45 percent, says the DOE. They can also be adjusted to block and reflect direct sunlight onto a light-colored ceiling, which diffuses the light without much heat or glare.

## AVAILABLE REBATES AND PROGRAMS

Our rebate opportunities and programs can vary. For the most updated information, visit us online at [bit.ly/FCRebates](http://bit.ly/FCRebates) for the most up to date information.



## GETTING A HOME ENERGY EFFICIENCY AUDIT

An energy audit helps you determine where your house is losing energy and money, then provides recommendations to make your home more efficient and comfortable. Home energy audits are provided as part of the Efficiency Works™ Home program from Fort Collins Utilities (FCU) and Platte River Power Authority (PRPA).

During a professional energy audit, an energy auditor analyzes your energy bills, completes both visual and health & safety inspections, and uses special equipment – such as a blower door and an infrared camera – to detect sources of energy loss. Based on the data collected, an energy audit will provide you with a comprehensive home energy report that shows which energy efficiency upgrades are best for your home and your potential energy savings.

## FREQUENTLY ASKED QUESTIONS:

### How do I schedule an audit?

Visit us online at [bit.ly/FCEnergyAudit](http://bit.ly/FCEnergyAudit) or call us at 877-981-1888.

### How much does an audit cost?

\$60.00 for Fort Collins Utility electric customers.

### How long will it take?

About 3-4 hours.

### Who does my energy audit?

CLEAResult, a private contractor for Efficiency Works Home.

### Do I need to be there?

Yes, to provide access. Auditors from CLEAResult, Fort Collins Utilities' audit contractor, have all passed background checks to ensure customer safety. After access is provided and paperwork signed, you can decide whether to stay or leave.

### What kind of home do I need to occupy?

A single-family detached home or an attached townhouse that is more than one year old (new and multi-family homes are not eligible).

### Do I have to own my home in order to have an audit done?

No, rental properties that meet the above criteria are eligible with owner permission.

### Do I need to prepare anything?

Auditors will need access to all attic accesses, basement and crawlspace areas, mechanical rooms, and garages.

### What happens following the audit?

A customized report with a prioritized list of upgrades to increase the efficiency and comfort of your home will be emailed to you. Connect with your energy advisor to determine which projects you would like to pursue and to pick a participating contractor. Rebate information can be found here: [bit.ly/EWRebates](http://bit.ly/EWRebates)

## IN ORDER TO GET A HOME ENERGY AUDIT FROM EFFICIENCY WORKS, YOU MUST:

- Be a residential electric customer of Fort Collins Utilities.
- Occupy a single-family detached home or an attached townhouse that is more than one year old (new and multi-family homes are not eligible).

**To schedule your home energy audit, call us at 877-981-1888  
or visit us online at [bit.ly/FCEnergyAudit](http://bit.ly/FCEnergyAudit)**



## AUDIT CHECKLIST

### Before an audit:

Energy audits can help determine areas of discomfort and causes of inefficiency or high electric usage.

- Schedule your audit by calling 877-981-1888 to talk to an energy advisor. Or, go online to: [bit.ly/FCGovAudit](http://bit.ly/FCGovAudit) or [bit.ly/EWHomeAudit](http://bit.ly/EWHomeAudit) to fill out the online form.
- Be prepared to give your auditor access to all areas of your home including closets, attic accesses, crawlspaces, mechanical rooms, and garages.

### During an audit, your energy advisor will do the following:

- 1. Blower door test to determine leakage rates** – To help determine a home's air tightness, your energy advisor fits the blower door into the frame of an exterior door and the fan pulls air out of the house, lowering the air pressure inside. You'll need to make sure all exterior doors and windows are closed, and all interior doors are open. It could take up to one hour.
- 2. Infrared image scan** – Energy auditors use thermography (infrared scanning) to detect thermal defects and air leakage in building envelopes. A thermographic inspection is either an interior or exterior survey. The energy auditor decides which method gives the best results under certain weather conditions. The resulting images help the auditor determine whether insulation is needed. They also serve as a quality control tool, to ensure that insulation has been installed correctly.
- 3. Whole-house visual inspection** – Your energy advisor will go through your home and determine if there are any major areas that need sealing or insulating.
- 4. Free installation of energy and water saving products** – Including CFLs, LEDs, faucet aerators, low flow shower heads, and more!

### REASONS FOR ESTABLISHING THE PROPER BUILDING TIGHTNESS:

- Reducing energy consumption due to air leakage
- Avoiding moisture condensation problems
- Avoiding uncomfortable drafts caused by cold air leaking in from the outdoors
- Determining how much mechanical ventilation might be needed to provide acceptable indoor air quality.

## QUICK FACT: YOU CAN SAVE UP TO 30% ON YOUR ENERGY BILL BY MAKING UPGRADES FOLLOWING A HOME ENERGY AUDIT. (Source: energy.gov)

### After an audit:

- Make sure you receive a list of participating contractors from your energy advisor. A list of participating contractors can be found here: [bit.ly/EWProviders](http://bit.ly/EWProviders)
- Check with your energy advisor for available rebates from Efficiency Works™ Home and Fort Collins Utilities. Rebates are only available for work performed by participating contractors and include insulation and air sealing, HVAC, and windows projects.
- Do-it-yourself projects are not eligible for rebates, but you can try weatherstripping on your own with our handy tutorial on [lose-a-watt.com](http://lose-a-watt.com).

**Visit us online at [bit.ly/FCEnergyAudit](http://bit.ly/FCEnergyAudit) or call us at 877-981-1888 to schedule your home energy audit.**

## WEATHERSTRIPPING

If you have a blower door test conducted during your audit, or if you determine on your own that there are a number of leaks to seal, then weatherstripping might be your next step. You may find that your doors and windows are old or broken and might benefit from being replaced. For more information regarding rebates and financing for installing energy efficient windows and doors in Fort Collins, check out [lose-a-watt.com](http://lose-a-watt.com).

## HOW TO DETECT AIR LEAKS:

### VISUAL INSPECTION

On the outside of your house, inspect all areas where two different building materials meet, including:

- All exterior corners.
- Outdoor water faucets.
- Where siding and chimneys meet.
- Areas where the foundation and the bottom of exterior brick or siding meet.

Inside your home, inspect for any cracks and gaps that could cause air leaks. Check to see if the caulking and weatherstripping are applied properly, and are in good condition. Check the exterior caulking around doors and windows, and see whether exterior storm doors and primary doors seal tightly.

Inspect windows and doors for air leaks and see if you can rattle them, since movement means possible air leaks. If you can see daylight it means there's a leak, but the good news is you can usually seal these leaks by caulking or weatherstripping. Check the storm windows to see if they fit and are not broken.

Consider replacing your old windows and doors with newer, high-performance ones. If new windows are too costly, you can install low-cost plastic sheets over the windows.

**QUICK TIP: CLOSE A DOOR OR WINDOW ON A DOLLAR BILL. IF YOU CAN REMOVE THE DOLLAR BILL EASILY OR WITHOUT DRAGGING IT, YOU'RE LOSING ENERGY THROUGH THAT GAP.**

## THE USUAL SUSPECTS

### Likely places that need to be weatherstripped and insulated:

- Electrical outlets and light switch plates
- Door and window frames
- Electrical and gas service entrances
- Baseboards
- Attic hatches or entrances
- Window-mounted air conditioners
- Where dryer vents pass through walls
- Vents and fans to the outside
- Ducts
- Recessed lights

## MATERIALS TO WEATHERSTRIP WITH:

### BEGINNER/BASIC INSTALLATION

**Tension seal:** self-stick plastic or metal that creates a seal inside the track of a double hung window.

**Closed cell foam tape:** keeps the wind out, and great for blocking corners and irregular cracks.

**Rolled or reinforced vinyl strip gaskets.**

### INTERMEDIATE

**Bulb threshold** for under doors, available in different heights.

**Door sweeps** on bottom of door.

**Tubular rubber and vinyl** around doors and windows to create seals.

### DIFFICULT/PROFESSIONAL ONLY

**Interlocking metal channels** around door perimeters for exceptional weather seal.

**Fin seal:** pile weatherstrip with plastic Mylar fin centered in pile for aluminum sliding windows and sliding glass doors, very durable.

**Frost-brake threshold** on door bottom, seals beneath doors.

## WHEN TO USE CAULK:

Caulk is a flexible material used to seal air leaks through cracks, gaps, or joints less than ¼"-inch wide between non-moving building components and materials. For example, if you find a gap in your siding that lets cold air into the laundry room, caulk is a good solution, whereas you'd want to use closed cell foam tape to seal the gap between your door and door frame.

### Types of caulk:

#### CAULK COMPOSITE

**Silicone:** household and construction

**Polyurethane expandable spray foam**

**Water-based foam sealant**

**Latex**

#### RECOMMENDED USES

Sealing joints in plumbing and gutters, especially dissimilar materials like wood and metal. Great for exteriors.

Good for larger cracks as it expands when curing, not good in areas with moving parts.

Easy to clean up, goes well in small cracks around windows.

Sealing joints and cracks in tile, plaster, glass, and plastic.

*Not recommended: Butyl rubber, as it is toxic and difficult to clean up. Oil or resin-based caulk does well on exteriors, but has a limited temperature range and tends to harden and fall out.*

## YOUR WEATHERSTRIPPING SHOPPING LIST

- Open cell foam tape for door frames and windows
- Caulking gun with automatic release
- Caulk cartridges
- Door sweep for front door (comes in a retractable variety to reduce wear on carpet)
- Incense stick or smudge stick (to detect air leaks)
- Penlight or flashlight
- Additional weatherstripping supplies as needed

**QUICK FACT: CAULKING CAN BE VERY DIFFICULT OR VERY EASY DEPENDING ON WHICH KIND OF CAULKING GUN YOU BUY. WE RECOMMEND ONE WITH AN AUTOMATIC RELEASE THAT CAN BE PURCHASED FROM MOST LOCAL RETAILERS.**

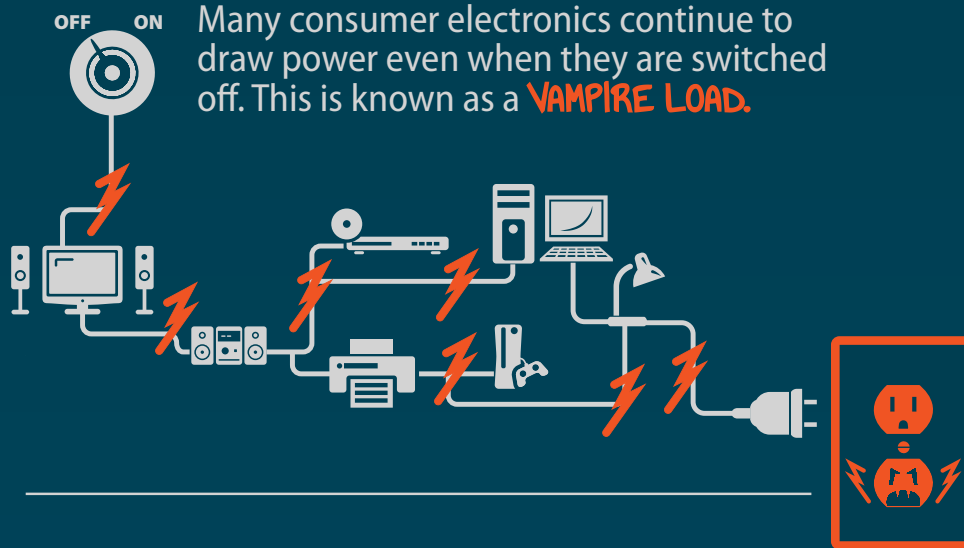
### Additional Sources:

[bit.ly/FCGovHomeEfficiency](https://bit.ly/FCGovHomeEfficiency)  
[bit.ly/EWForHome](https://bit.ly/EWForHome)  
[bit.ly/FortZEDInsulation](https://bit.ly/FortZEDInsulation)

### DIY Pages:

[bit.ly/EnergyGovHomeEnergyTips](https://bit.ly/EnergyGovHomeEnergyTips)  
[bit.ly/EnergyGovHomeEnergyAudits](https://bit.ly/EnergyGovHomeEnergyAudits)

# Saving Energy Through ADVANCED POWER STRIPS



Many consumer electronics continue to draw power even when they are switched off. This is known as a **VAMPIRE LOAD**.

**VAMPIRE LOADS** add up to about **\$200** in yearly energy costs for an average home

This **WASTED ENERGY** could have powered **11,000,000** homes



## About **ADVANCED POWER STRIPS**

Advanced Power Strips (APS) look just like ordinary power strips, except that they have built-in features that are designed to reduce the amount of energy used by many consumer electronics. There are several different types of APSs on the market, but they all operate on the same basic principle of shutting off the supply power to devices that are not in use. By replacing your standard power strip with an APS, you can significantly cut the amount of electricity used by your home office and entertainment center devices, and save money on your electric bill.

# ADVANCED POWER STRIPS

## Which one is right for me?



I want to stop **WASTING ENERGY** in my ...



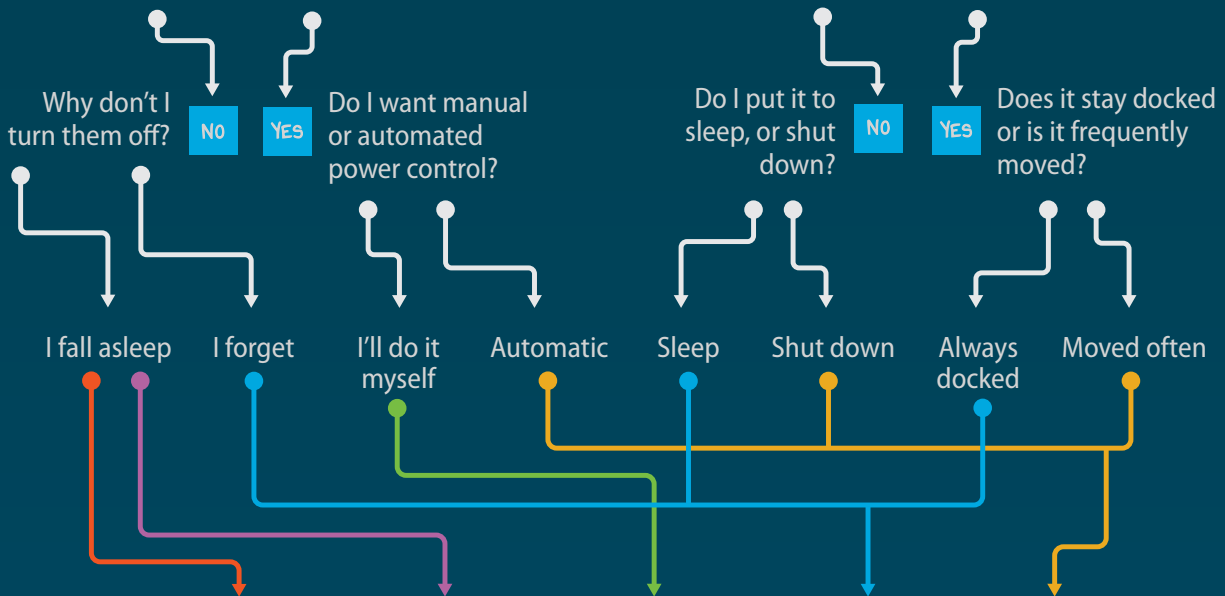
### ENTERTAINMENT CENTER

I always turn off my electronics when done



### HOME OFFICE

Is the computer a laptop or tablet?



**Timer Power Strip**



**Activity Monitor Power Strip**



**Remote Switch Power Strip**



**Master-Controlled Power Strip**



**Masterless Power Strip**

COST



FEATURES

Power strip automatically turns off outlets based on a pre-set schedule.

Power strip looks for signs of activity in the room, and turns off outlets if none is detected.

Power strip can be turned off by the user via a remote switch.

When a primary device (such as a computer or TV) is turned off by the user, the power strip automatically turns off the controlled outlets where the peripheral devices (such as the printer or game console) are plugged in.

When all of the controlled devices are turned off, the power strip turns off power to those outlets completely, eliminating all of the vampire loads.

POSSIBLE DRAWBACKS

You have to set up the timer and stick to your schedule for maximum energy savings.

Motion sensors don't always work perfectly.

To save any energy, you have to remember to turn off the power strip each time.

It can be tricky to select which appliance should be your "master" device.

Turning off one high-powered appliance could turn off the entire power strip.

WHAT TO LOOK FOR

Digital or dial timer.

Motion sensor or an infrared "eye" that detects remote control use around the TV or stereo.

A tethered switch or a remote switch.

One outlet is labeled as the "master."

No "master" outlet. Description may include "automatic switching" or "power detection."

PLUGSTRIPS FLIPPING OFF THE PHANTOM



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