HOME ENERGY SAVINGS GUIDE

A resource for operating your home efficiently.

Touchstone Energy Cooperatives
TOUCHSTONEENERGY.COM
FIND OUT HOW THE LITTLE CHANGES ADD UP.

Flip the switch. Lower the blinds. Insulate your attic. Lower the temperature on your thermostat. These sound like simple tasks. Take all of these steps around your home and you can rack up big savings.

TOGETHER WE SAVE.

This home energy savings guide contains valuable tips on how to improve your home's efficiency.

For more information, please contact your local Touchstone Energy cooperative and visit TOUCHSTONEENERGY.COM
HOME ENERGY SAVINGS
Your Touchstone Energy cooperative works hard to hold down energy prices. You can help control your energy costs by evaluating your home and using the following simple tips to trim energy use.

HOME ENERGY COSTS
Get a clear picture of which parts of your home use the most energy.

- The first step in reducing home energy costs is to review last year’s utility bills. Using the below national “percentage” averages, a homeowner who spent $2,060 a year according to the US Dept of Energy.

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Heating</td>
<td>$597.40</td>
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<tr>
<td>Cooling</td>
<td>$267.80</td>
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<tr>
<td>Water heating</td>
<td>$267.80</td>
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<tr>
<td>Lighting</td>
<td>$247.20</td>
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<tr>
<td>Appliances</td>
<td>$247.20</td>
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- When implementing energy-saving measures, be aware of the energy savings from the investment.
- Contact your local Touchstone Energy cooperative to review your bills and receive a more accurate estimate. Go to TogetherWeSave.com for more information.

Where Does My Money Go?
Annual Energy Bill for a typical single family home is $2,060

Electronics include: telephone and external power adapters, consumer electronics (computer, TVs and DVD player), home office equipment, and small appliances

Appliance include: refrigerator, dishwasher, clothes, washer and dryer

HOME ENERGY SAVING TIPS
Assess how your family uses energy in your home.

- Don’t leave unnecessary lights on.
- Turn off computers and other office equipment when they’re not being used, especially overnight and on weekends.
- A one degree increase in heating setpoint or reduction in cooling setpoint can increase energy use by 3 – 5%.
- Taking long showers runs up the water heating (and water/sewer) bills.
- Plug electronic devices such as cable boxes, printer and TVs into power strips to turn off during vacation or long periods without use. Smart power strips make it an easy task to save money!
- Replace shower heads with low flow shower heads.
- When replacing your water heater consider a heat pump water heater which is a much lower operating cost.

INSULATION
- If you have insulation in your attic graded at R-19 or less, consider bringing it up to R-38 in moderate climates and R-49 in cold climates.
- In cold climates, if you have floor insulation graded at R-11 or less, consider bringing it up to R-25.
- Make sure there are no openings from the attic into the home, e.g., air ducts, openings around chimneys, open cavities into the home.
WINDOWS

Windows leak heat. If you have single-pane windows, consider doing the following:

• Tighten and weather-strip your old windows and then add storm windows.
• Close shades and drapes during the day to help keep your home cooler in the summer and warmer in the winter.
• In colder climates, “low-e” coatings on glass can help reduce heat loss through windows.
• In hot climates, consider adding solar screening to west-facing windows that catch a lot of heating late in the day. Solar screening is sold at many home improvement stores.
• Plants that shade the house help too.

AIR INFILTRATION

Air that transfers in and out of homes through cracks, crevices and holes increases energy consumption. Here are some helpful tips to avoid air infiltration:

• Seal around pipe penetrations coming through walls.
• During hot and cold weather, ensure windows are closed tightly and locked.
• Ensure weather-stripping around doors and windows is tight.
• When your fireplace is not operating, its flue should be closed tightly, with a sign hanging from the flue handle warning it is closed.
• Check the ceiling behind the cornice of built-in bookshelves for holes cut during construction.
• Attic accesses stairways should fit tightly into the ceiling and be carefully weather-stripped using insulated sheathing board.
• Remove the whole-house fan if not used and seal and insulate.
• Make sure your outside dryer vent door closes when the dryer is not in use. This requires cleaning away lint accumulation periodically.
**WASHERS & DRYERS**

Drying clothes uses a lot of energy.

- Don’t over-dry your clothes. If 50 minutes works, don’t set to 70 minutes.
- Make sure to clean the inside lint filter before each drying cycle.
- Periodically check your flexible metal dryer vent hose to ensure it is still tightly connected and not kinked.
- Dryers with service problems should be replaced with an Energy Star® rated machine.
- Wash clothes in cold water.
- Replace old washers with an Energy Star® Rated system. They provide great savings from lower water use and fast spins that reduce the need for drying.

**WATER HEATER**

Your water heater works with many of your home’s other systems.

- Make sure your water heater is set at the lowest point. Try setting it to 120°.
- For older washers, set the water level to the amount of clothes to be washed.
- Insulate accessible hot water lines.
- Overfilling your washer can increase your energy use.
- If your water heater is located in an unconditioned space, consider installing a thermal wrap around it. Take care to install it in accordance with the tank and wrap manufacturer instructions.
REFRIGERATION

Trim your refrigerator’s energy use.

• Make sure refrigerator and freezer seals fit tightly when doors close.
• Keep outside coils clean. Dirty coils make your refrigerator compressor work longer to remove heat.
• Setting your freezer below 0° uses extra energy.
• Setting your refrigerator below 37° uses extra energy.
• Ensure refrigerator door seals are tight and coils are clean.
• Replace seals if they no longer seal.
• Eliminate unnecessary refrigerators.

HEATING & AIR CONDITIONING

Heating, ventilating, and air conditioning (HVAC) uses the largest chunk of your home energy dollar. Keep it running “lean and mean.”

• HVAC systems should be checked to verify they are moving the correct amount of air. An HVAC technician can tell you if it is.
• Heat pump and air conditioning systems should be checked annually to verify they are properly charged, strictly in accordance with manufacturer guidelines.
• Inside and outside coils should be kept clean and free of debris.
• Gas furnaces should be tuned for maximum combustion efficiency.
• Change HVAC air filter monthly. We recommend low air flow resistive filters.
• Have an HVAC technician check carefully for duct leaks. Leaks that are found should be sealed with fiberglass mesh and mastic sealant.
• Leaks at the return, air handler and supply can be a major source of high bills. Mobile homes check at the grill, cross over duct and down flow air handler, for leaks.
Take a look at your home's lighting. Consider these points:

- An LED light uses 1/5th the energy of incandescent lighting and lasts up to 50 times longer. Consider replacing incandescent lighting with energy-saving LEDs. They use about one quarter of the energy, last much longer and give off less heat.
- LED lights have different colors, soft white or 3,000 K bulbs are best for indoor use.
- Turn off lights when not needed.
- Don’t leave unnecessary lighting on during the day.
- Take a look at the security lighting you use at night. Check with your Touchstone Energy cooperative to see if it can help save you money by installing a pole-mounted outdoor light.
- Smart bulbs, outlets and switches allow you to save energy by customizing a schedule that fits your families needs.
SELECTING A CONTRACTOR

Some of the work you will want to complete will require the services of a contractor. When selecting a contractor, keep in mind that the best price is not always the best value. Here are some questions to ask when deciding who to use:

- How long have you been in business?
- Can you provide proof that you are state-licensed and carry workers’ compensation insurance?
- Can you provide the names of neighbors who have used your services?
- Are you a member of the Better Business Bureau?
FOR MORE INFORMATION ON ENERGY SAVINGS CHECK WITH THE FOLLOWING SOURCES:

- VISIT TOUCHSTONEENERGY.COOP FOR INFORMATION AND TO LOCATE YOUR LOCAL TOUCHSTONE ENERGY COOPERATIVE.
- U.S. DEPARTMENT OF ENERGY – ENERGY.GOV/YOURHOME.HTM
- ENERGY STAR – ENERGystar.gov
- ALLIANCE TO SAVE ENERGY – ASE.ORG
- YOUR STATE’S ENERGY OFFICE.