DIY Energy Audit

Jasper County REMC
Powering Member-Driven Innovation

Conduct your own simple but diligent walk-through to determine where your home is losing energy and where you can save.

- ☐ **Locate and seal air leaks.** Check for air leaks in the following locations:
  - ☐ Baseboards or edge of the flooring
  - ☐ Light fixtures
  - ☐ Electrical switches and outlets
  - ☐ Open fireplace dampers
  - ☐ Junctures of the walls and ceiling
  - ☐ Windows
  - ☐ Doors
  - ☐ Plumbing fixtures
  - ☐ Unfinished spaces behind cupboards and closets
  - ☐ Recessed lights in insulated ceilings
  - ☐ Also check for outdoor air leaks, especially in areas where two different building materials meet

  Seal gaps and holes with caulk or foam sealant. All the little cracks and holes may add up to as much as an open window or door without you ever knowing it!

- ☐ **Examine the light bulbs in your house and consider replacing inefficient light bulbs with light-emitting diode (LED) bulbs.** The best targets are 60-100 W bulbs used several hours a day. Also look for ways to use connected home devices or lighting controls such as sensors, dimmers, or timers to reduce lighting use.

- ☐ **Maintain your appliances.**
  - ☐ Make sure your HVAC system receives professional maintenance each year.
  - ☐ Clean or replace filters regularly in your furnace, air conditioner, and heat pump.
  - ☐ Set both the upper and lower water heater thermostats no higher than 120° F.
  - ☐ Ensure refrigerator door seals are tight.

- ☐ **Replace aging, inefficient appliances.** Even if the appliance has a few useful years left, replacing it with a top-efficiency model is generally a good investment. Look for ENERGY STAR® labeled products when shopping, they can cut your energy bills by up to 30%.

  Jasper County REMC offers the following rebates for your energy-efficient appliance upgrades through PowerMoves®:

  - ☐ **Air Source & Geothermal Heat Pump Rebates** REMC bill credit applied after verification of Air Source Heat Pump (ASHP) installation
  - ☐ **Get PowerMoves rebates if your unit fits the program and REMC bill credits, too!**

- ☐ **Consider installing a programmable thermostat.** You can adjust the temperatures according to your schedule. A one degree increase in heating setpoint or reduction in cooling setpoint can increase energy use by 3 – 5%. Look for the ENERGY STAR® label when shopping.

- ☐ **Check your insulation.** Heat loss through the floor, ceiling, and walls in your home could be very large if the insulation levels are less than the recommended minimum. Check the following areas for insulation:
  - ☐ Hot water pipes
  - ☐ Heating ducts in unheated areas, such as attics and crawlspaces
  - ☐ Walls
    - ☐ Checking a wall's insulation level can be difficult. Select an exterior wall and turn off the circuit breaker or unscrew the fuse for any outlets in the wall. Be sure to test the outlets to make certain that they are not "hot." Once you are sure your outlets are not getting any electricity, remove the cover plate from one of the outlets and gently probe into the wall with a thin, long stick or screwdriver. If you encounter a slight resistance, you have some insulation there. You could also make a small hole in a closet, behind a couch, or in some other unobtrusive place to see what the wall cavity is filled with. Unfortunately, this method cannot tell you if the entire wall is insulated, or if the insulation has settled. Only a thermographic inspection can do this.
  - ☐ Attic
    - ☐ The entire attic floor should be covered with at least the current recommended amount of insulation.
    - ☐ If the attic hatch is located above a conditioned space, check to see if it is at least as heavily insulated as the attic, is weather stripped, and closes tightly.
    - ☐ In the attic, determine whether openings for items such as pipes, ductwork, and chimneys are sealed. Seal gaps and holes with non-combustible caulk or foam sealant.
    - ☐ Check to see if there is a vapor barrier under the attic insulation. It might be tarpaper, kraft paper attached to fiberglass batts, or a plastic sheet. If there does not appear to be a vapor barrier, you might consider painting the interior ceilings with vapor barrier paint.
    - ☐ Make sure that the exterior attic vents are not blocked by insulation. Baffle vents may be installed to allow air flow into your attic space.
  - ☐ Basement or crawlspace

    In most areas of the country, an R-25 is the recommended minimum level of insulation for basements and crawlspaces.
    - ☐ If your basement or crawlspace is unconditioned and open to the exterior, determine whether there is insulation under the living area flooring.
    - ☐ Insulation is recommended in some situations where the basement is conditioned. If the sub-space is enclosed and contains heating or cooling appliances, air ducts or plumbing, you should insulate the sub-space perimeter rather than the living space floor. The insulation at the top of the foundation wall and first floor perimeter should be R-19 or greater.

Sources: Touchstone Energy Cooperatives®, Energy.gov