

Tips to Creating an Energy Efficient Home



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731.422.7500



Jackson Energy Authority
One thing you can count on.

When It Comes to Energy Usage, Smart Choices Can Help You Save!

It takes energy to run a home 24-hours a day, every day. We use energy for heating and cooling, lighting, water heating and for using appliances. Today, energy demands, evolving technology and rising costs indicate that becoming energy efficient is more important now than ever before.

Although many factors influence the amount of energy used, you have the choice to change that energy usage. Practical changes such as replacing light bulbs, repairing leaky toilets or faucets or enhancing insulation can make a difference. This guide will provide you with tips on energy conservation, ways to improve the energy efficiency of your home and options that may help lower your utility bill.

Making smart choices to save energy can help create an energy efficient home. These homes are generally more affordable to maintain, more comfortable to live in, offer lower utility bills and have better indoor air quality. Plus, the less energy we use, the lower the impact we have on our environment.

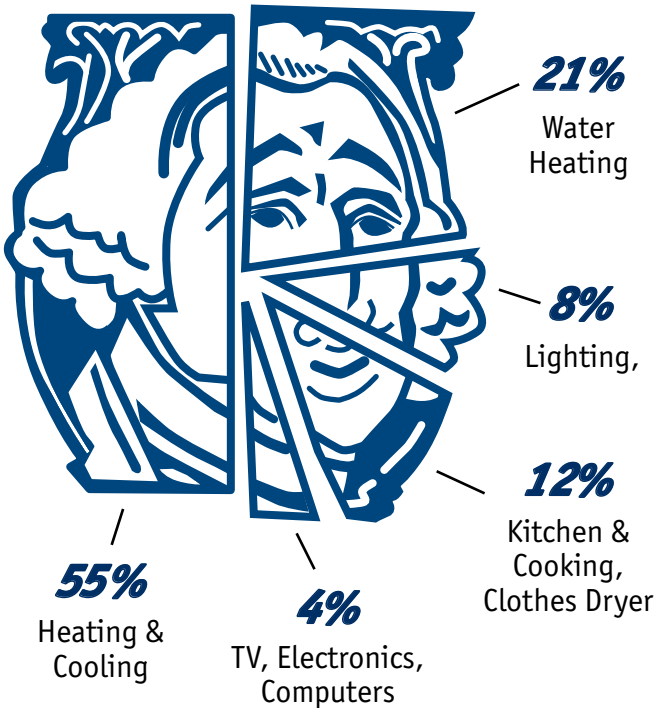
At Jackson Energy Authority, we work to help customers use energy smarter, safely and more efficiently. For more energy efficiency information, visit www.energyright.com. To determine the energy efficiency of your home, simply call 866-441-1430 to schedule an appointment for a TVA certified in-home energy audit.

We thank you for your conservation efforts!

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Your Home's Energy Use

Before taking any energy efficiency steps, it's best to know where your energy is being used the most. The biggest energy consumption in your home is from your heating and cooling equipment. Typically, 55% of your energy is used for heating and cooling. Water heating usually takes the next biggest bite followed by major appliances like refrigerators, freezers, stoves or ovens, washers and dryers. These are followed by much smaller appliances such as lamps, TVs, stereos and computers.



Energy Tips

Managing your utility bill doesn't have to be complicated or expensive. Exercise these helpful tips to help you gain real savings every month.

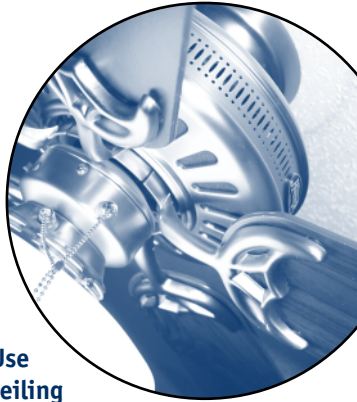
Heating and Cooling

- Have your heating and cooling unit checked once a year by a licensed contractor for safety and efficiency.
- Set your thermostat at a comfortable and healthy setting, such as 68° in winter and 75° in summer. You can save 3-5% per degree on your utility bill.
- If you own an old heating unit, now is a good time to replace it with an energy-efficient unit.
- Install a programmable or automatic thermostat and turn it back at night and when you are away from home. Turning it back 8 hours a day can cut your annual heating bill by as much as 10%.

Keep the filters of your heating and/or cooling unit clean.

Change out the fiberglass filters and wash the aluminum mesh filters on a MONTHLY basis.

- Open blinds and drapes on sunny days and close them on cloudy days and at night.



Use ceiling fans to direct heat down in rooms with high or vaulted ceilings.

- Use a draft blocker filled with sand or small beans or a rolled up towel to prevent drafts at the bottom of doors.



- When buying a new heating/cooling unit, buy the highest SEER rating you can afford. SEER (Seasonal Energy Efficiency Rating) is a federal government standard. Trying to save money on the front end will cost you more each month when running the unit.

- Likewise, when buying new appliances, look for the models that are the most energy efficient.

Water Heaters



Set the temperature of your water heater at 120°. For each 10° reduction in temperature, water-heating energy consumption is reduced 3-5%.

- If the outside of your water heater storage tank is hot or warm to the touch, cover it with an approved insulating blanket. They're inexpensive and can save as much as 20 percent of your water-heating costs.

- Insulate the first 3 feet of pipes leading to and from your water heater if they are warm to the touch.

- Check for leaks in your hot water lines. These leaks cost you in two ways: the water and the energy used to heat it.

Insulation

- Insulate your home well for the best savings. Insulating your attic, outside walls, between floors, and around heating ducts and any pipes exposed to outside air may cut your costs by as much as 50 percent. The recommended insulation for a ceiling under a ventilated attic is R-30.

- Look for places around your home where valuable heated air can escape to the outside. Close up holes, weatherstrip and caulk where necessary.

- Install foam or rubber gaskets behind outlet and switch plates on your exterior walls.

- ❑ Install storm or thermal windows and doors or double-pane glass. For a less expensive alternative, temporarily fasten plastic sheeting over doors and windows to prevent drafts and retain heat.

Attic/Basement

- ❑ If your ductwork is in your attic, check it for air leaks. This is the system that transports your heated or cooled air throughout your home. Repair any leaks with quality “UL” duct tape or mastic sealant.
- ❑ Make sure your ductwork is covered with at least two inches of insulation with a vapor barrier.
- ❑ Cover the attic access door with at least six inches of batt insulation.
- ❑ Proper ventilation is needed in your attic for both heating and cooling efficiency.
- ❑ If applicable, keep any foundation/crawl space vents closed.

Lighting

- ❑ Turn off lights when not in use. Household lights alone can add up your bill.
- ❑ Keep lamps and fixtures clean and free of dust for maximum illumination.



Consider replacing incandescent bulbs with compact fluorescent (CFL) or LED bulbs. CFL's use one-fourth and LED's use one-tenth of the energy of an incandescent bulb while giving off the same amount of light. Also, the lifespan of both is longer: about 8,000 hrs for CFL and 50,000 hrs for LED compared to 1,200 hrs for incandescent.

- ❑ For those areas that don't need a lot of light, choose lower wattage bulbs.

Living Room

- Turn the TV, VCR, DVD and video games off when not in use.
- Be careful not to block furnace ducts or heat registers with draperies, rugs or furniture.
- To prevent valuable heat from escaping up your chimney, keep your damper closed in cold weather and enjoy the fireplace in milder weather when you don't have the heat on.

Kitchen

- Match the size of your cooking pots to the size of the elements used. Retain heat and speed boiling by covering pots with lids.

When possible, use a microwave or barbeque grill instead of the stove. Microwaves use 40% less

electricity than a stove because faster cooking times at lower wattages.

- For simple meals, consider using small cooking appliances such as an electric skillet, toaster or crockpot instead of the oven.

When using frozen foods, defrost before baking or cooking. This can save as much as 50% of total cooking time.

- Try not to open the oven door while cooking, it can lose 20% of its heat each time the door is opened.
- Refrigerators and freezers run most efficiently when they are full. If you have a secondary refrigerator or freezer, unplug if it does not stay full.
- Try to run an envelope through the refrigerator door frame when it is closed to check for proper sealing. If you can run it through, cool air is leaking and door gaskets need to be replaced.
- Limit the opening of the refrigerator and freezer doors.



Dust or vacuum the grills and coils (if applicable) of your refrigerator and/or freezer.

- Cover all liquids and foods stored in the refrigerator. Uncovered, they release moisture and make the compressor work harder.
- Only wash full loads of dishes. When the wash cycle ends, open the door to let dishes air dry instead of using the heat-dry setting.

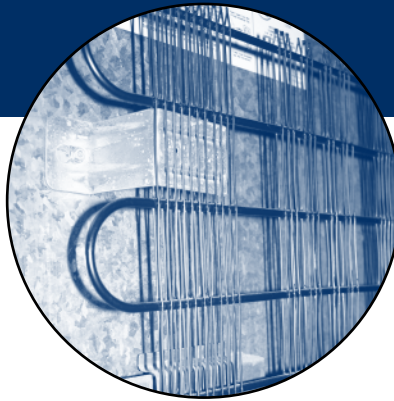
Carefully read the energy efficient label whenever you buy new appliances.

Though an energy-saving appliance may cost more, it will save up to half the amount of energy used by older models.



Bathroom

- Fix any leaky, dripping faucets or toilets and replace old aerators. A faucet dripping two drops per second can waste up to 200 gallons of water per month.



- Take showers instead of baths. If you prefer showers, reduce your shower time.
- Turn off the water as you brush your teeth or shave. Running the water while you shave, for example, uses more water than one person normally drinks in a week.

Laundry Room

- Clean the dryer lint trap after every use and vacuum on a regular basis to prevent buildup.
- Wash only full loads of clothes during non-peak hours. Use cold water to wash and/or rinse clothes. Changing the rinse water to cold can save about 17 gallons of hot water per load.
- Match the water level to the wash load. Overloading leads to inefficient washing.

- Inspect your dryer vent to help prevent blockages. Seal any area around venting material where air may escape.
- Dry heavier items separate from lighter weight items. Don't over dry.
- Consider using clothes lines (weather permitting) or purchasing drying racks to air dry clothes.

Outside

- Add storm windows and storm doors – home improvements that will pay for themselves in lower heating and cooling bills. For a temporary alternative, seal windows and seldom-used doors with inexpensive plastic sheeting.
- Inspect each window in your house for damage. Replace all broken or cracked window panes.
- Use outdoor lights with motion sensors so they will turn on only at night or when someone is present.

Reduce the use of decorative outdoor natural gas lamps.



- Use LED holiday light strands rather than traditional holiday light strands. They use about 99% less energy and last longer.
- Consider your landscaping. Trees that lose their leaves in the fall are the most effective at reducing heating and cooling energy costs. Strategic placement around your house provides excellent protection from summer sun but permits winter sun to shine through and warm your house.
- Consider reducing the use of outdoor circulation pumps for ponds, waterfalls and other decorative landscaping.
- For an outdoor pool, use a pool cover to reduce the evaporation of water by 90 percent. An average-sized pool can lose about 1,000 gallons of water a month.
- Install an emergency pump shut-off valve near the pool.

Monitoring Your Energy Usage

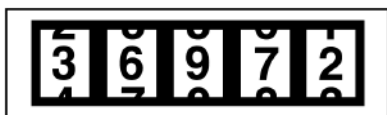
Electricity use is measured in kilowatt -hours by a meter on the side of your home. A kilowatt-hour (kWh) is 1,000 watts of electricity used for one hour. For example, if you operate a 100-watt appliance for ten hours, you have used one kilowatt-hour of energy. Jackson Energy Authority comes out and reads your meter once each month to determine your energy usage.

How to Read Your Meter

You can easily monitor your energy usage by reading your meter. There are various types of meters, but the two most common are digital and dial meters.

Digital Meters

These are the easiest of the two to read. All you have to do is read the meter like the mileage odometer on your car. As the amount of kilo-watt hours used increases so do the digital numbers displayed.



The reading here is 36972 Kilowatt Hours.

Dial Meters

These are little more difficult to read. There are four or five small dials with arrows and numbers along with a larger revolving disk. The more power you use, the faster the disk spins.



Each dial is numbered 0 through 9 with the 0 at the top. The arrow in each dial moves from a smaller number to a larger one. Read the meter from left to right and write down the numbers the same way. If the pointer is between two numbers, always write down the smaller number. If the pointer looks like it's exactly on a number, always look to the dial immediately to the right. If the pointer on the right dial is after 0, record the larger number on the left dial. If the pointer on the right dial is before 0, record the smaller number on the left dial. Subtract your last month's reading from this month's and this will give you your kilowatt hours used.



The reading here is 75528 Kilowatt Hours.



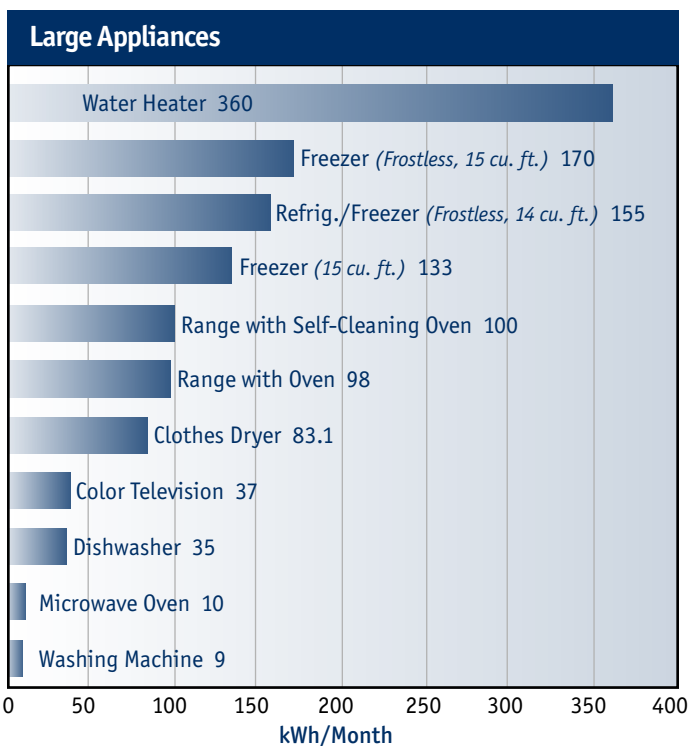
The reading here is 25642 Kilowatt Hours.

If you are considering monitoring your energy usage, please know that your reading may be different from the reading actually used to calculate your bill. Simply because your meter may be read on different days each month or your bill may include more or fewer days in the billing period.

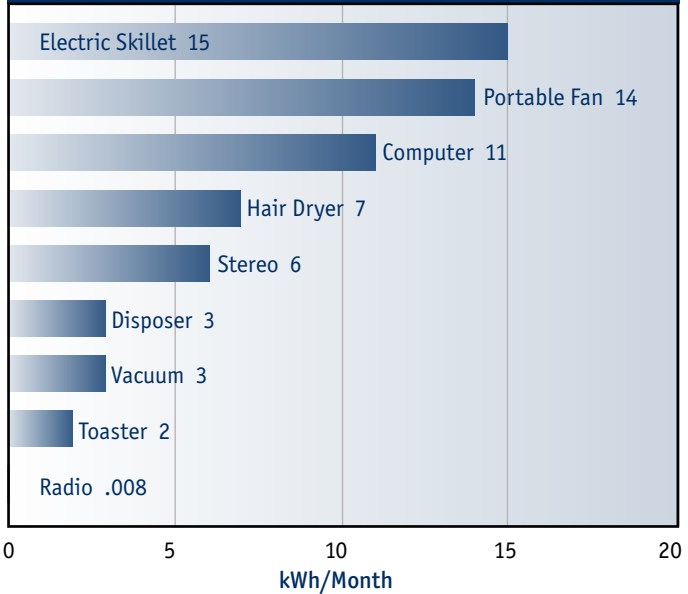
Typical Monthly Appliance Energy Usage

Your electric bill is determined by measuring how many kilowatt-hours (kWh) you use each month. One kilowatt-hour is equal to operating a 100-watt light bulb for 10 hrs.

The following charts show monthly appliance energy use for a variety of appliances. Energy saver models use less and some older models use more, therefore these are only approximate figures. Your use may vary due to family size, lifestyle, amount of appliance use and wattage ratings of your appliances. Heating and cooling are not included due to the variables that determine usage. These include lifestyles, home size, design, location, amount/type of insulation and type of heating and cooling equipment.



Small Appliances



Determining Your Kilowatt-Hour Use

You can estimate your monthly kilowatt-hour use and electrical cost of your appliances. Remember, energy use for any appliance will depend on the wattage rating (which is usually listed on the appliance or in the owner's manual) and the length of time the appliance is operating.

To determine your average monthly charge:

1. Refer to the wattage rating of the appliance.
2. Divide the number of watts by 1,000.
3. Estimate the number of hours you use the appliance in one month.
4. Multiply that number by the cost of a kilowatt-hour (for current rates, please refer to your most recent JEA utility bill or visit www.jaxenergy.com/rates).

Become Energy Efficient

Visit www.jaxenergy.com/wise_energy for a print-friendly chart to help you get started on recording your energy usage per month and becoming more energy efficient.

Jackson Energy Authority Can Help

Each tip in this brochure is designed to help you save on your utility bill. Since heating and cooling account for the biggest energy consumption in your home, start with savings that affect heating and cooling. Every effort you make to conserve will eventually affect your usage.

Compare your usage by reviewing the COMPARE YOUR USE section on your utility bills. It may take several months before you see a savings trend on your bill. It's important to remember that month-to-month changes in weather affect energy usage month-to-month.

COMPARE YOUR USE		ELECTRICITY		NATURAL GAS or PROP	
Period	Days	Kilowatt Hours		Therms or Gallons	
		Monthly	Daily Average	Monthly	Daily Ave
Current Month	29	3201	110	14	
Last Month	29	4565	157	14	
One Year Ago	30	2436	81	10	

If you have questions about your bill or want to know more about home energy efficiency, give us a call.

Sources for energy efficiency information and tools:

www.energyright.com

www.energysavers.gov

www.energystar.gov

www.eere.energy.gov

www.aceee.org/consumer

422.7500



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For more information, visit Jackson Energy Authority at:

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