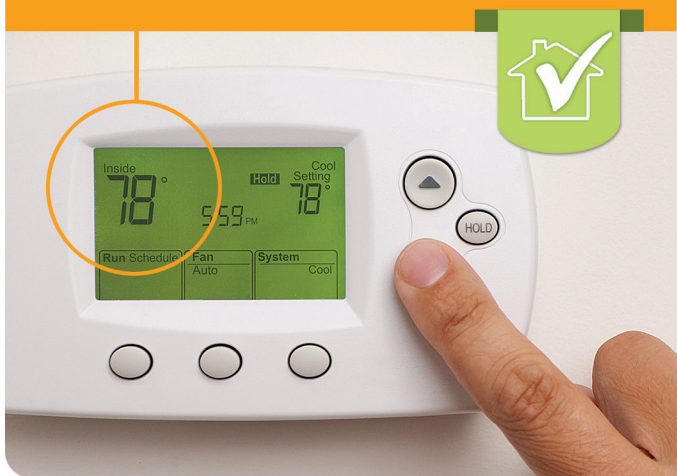




Smart Choices  
for Saving Energy  
to help keep your  
utility bills down



and your home  
energy efficient



## SMART ENERGY CHOICES ADD UP TO SAVINGS

At Jackson Energy Authority, our mission is to provide exceptional utility services that create value for our customers and our community. A key part of that mission is to deliver those services as safely and cost-effective as possible. An important role in helping to maintain cost-effective services is energy conservation. When we all take steps to save energy, we are not only saving money but also helping to reduce the overall demand for energy, thus reducing the need for additional energy sources.

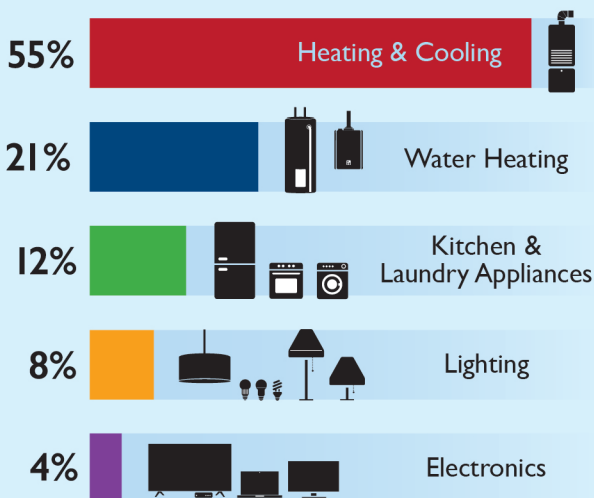
This Energy Saving Guidebook provides you with information and energy efficient tips to get you on your way to better energy management at home. By following the guidebook's easy, practical tips, you can save energy in all areas of your home - which lowers your energy usage and saves money. Smart choices for your wallet and the environment.



# AVERAGE HOME ENERGY USE

According to the Federal Government's Energy Star program, an average American household spends over \$2,000 per year on home utility bills. It's possible that a portion of that cost is spent on inefficient energy use. Although many factors influence the amount of energy your home uses, you have the choice to modify that usage. Understanding the energy consumption of your home is key to saving energy and money.

Typically, around half of your energy bill comes from heating and cooling your home. Water heating comes next followed by major appliances, lighting, electronics and smaller appliances.



FIND OUT HOW YOUR HOME USES ENERGY BY CONDUCTING A SIMPLE HOME ENERGY AUDIT. IT COULD HELP SAVE UP TO 30% ON YOUR ENERGY BILL. FOR FREE TOOLS AND ENERGY CALCULATORS VISIT:

[www.energy.gov/energysaver/energy-saver](http://www.energy.gov/energysaver/energy-saver)

[www.energy.gov/eere](http://www.energy.gov/eere)

[www.energyright.com](http://www.energyright.com)

[www.energystar.gov](http://www.energystar.gov)





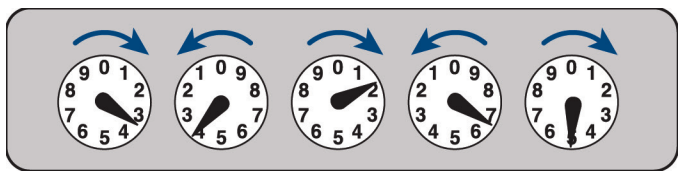
## LEARN HOW TO READ YOUR METERS AND CALCULATE YOUR USAGE

You can monitor your energy usage by reading your meters and calculating your usage. Meter types vary depending on the type of service (electric, gas or water) but are fairly simple to read using the guide below. Just remember to read your meters at the same time each day for consistency.

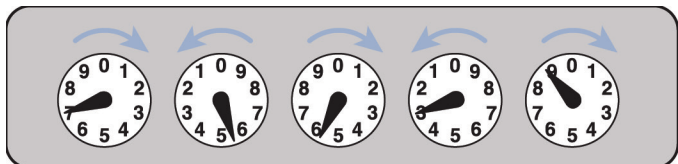
**DIGITAL METERS** are the easiest to read: simply read it like the mileage odometer on your car. *The reading shown is 36972.*

36972  
kWh

**MULTI-DIAL METERS** are a little more challenging. There are four or five small dials with arrows and numbers. Each dial is numbered 0-9, 0 at the top, with a directional arrow above it. The arrow hand in each dial moves from the smaller number to the larger one.

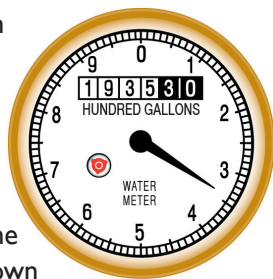


Read the meter from left to right, in sequence and based on the directional arrow above it. If the pointer is between two numbers, always write down the smaller number. If the pointer looks like it's exactly on a number, look to the dial immediately to the right. If the pointer on the right dial is after 0, record the number on the left dial that the hand is on. If the pointer on the right dial is before 0, record the smaller number on the left dial. (see below)



*The reading shown here is 75528*

SINGLE-DIAL METERS are found on most water meters and are easy to read. They record water volume by gallons and read in hundred gallons. The sweep arm rotates clockwise and records the water in gallons as it flows through the meter. Every time the arm passes 0, ten gallons have flown through the meter. It reads like the milage odometer on your car as well. *The reading shown is 1,935.*



Your energy usage is determined by taking your current meter reading and subtracting your previous month's meter reading. As you monitor your energy usage, keep in mind there are a variety of factors that can change monthly usage, such as changes in outside temperature, hours of sunlight, number of people in the home and how those individuals use each service. Also, your reading may be different from the reading actually used to calculate your bill. Meters are read each month on a cycle and that cycle changes from month to month. Based on the day we read your meter and the day you read your meter, your reading could contain more or fewer days in the billing period. For more information on meters, visit [www.jaxenergy.com](http://www.jaxenergy.com).

## KNOW HOW TO READ YOUR JEA BILL



Every effort you make to conserve energy will eventually affect your usage, so it helps to know how to read your bill. Pay close attention to:

1. How many days are in this billing cycle?
2. How does this month's usage compare to last month/last year?
3. Has the weather been warmer or colder?
4. How much is your average daily utility cost?

Each month, review the "Compare Your Use" chart at the bottom of your bill. This will allow you to see the fluctuation of usage per month. For a more thorough look at your bill, visit [www.jaxenergy.com/support](http://www.jaxenergy.com/support) and click the "Bills and Payments" icon.



## SMART ENERGY CHOICES FOR THE WHOLE HOUSE

In order to effectively save energy and money on your utility bill, smart choices in your energy use throughout the whole house must be made. Taking the whole house approach will ensure the greatest amount of savings per year. Follow the checklist of tips from the biggest consumption to the smallest to get started making smart energy choices.

### HEATING AND COOLING

The biggest consumption of energy

55%



#### ☐ YEARLY MAINTENANCE/PRE-SEASON CHECK

Have your Heating and Cooling unit checked once a year by a licensed professional HVAC contractor for safety and to help keep your unit efficient. You save energy and money, and your system may last years longer with minimal costs for yearly maintenance.

#### ☐ CHECK DUCT SYSTEM FOR LEAKS

The duct system in your home is one of the most important systems but could be an energy waster! Inspect your duct work to check for leaks and improper insulation. A leaky duct system can add hundreds of dollars a year to your utility bill. For major duct sealing and insulation, always contact a qualified professional to make appropriate repairs.

#### ☐ REPLACE AIR FILTERS

Clean and or replace the air filters on your heating and air conditioning system monthly. New filters usually only cost a few dollars. They prevent your unit from overworking and create a cleaner home. When cleaning or replacing the air filters, don't forget to clean return-air vents and air registers for better performance. Plus, make sure they are not blocked by draperies or furniture.

## ☐ CHECK THE THERMOSTAT SETTINGS

Set your thermostat at 68 degrees in winter and 78 degrees in summer for your best energy savings. If that doesn't work, set your thermostat as low as is comfortable in winter and as high as is comfortable in summer. Note: summer highs and winter lows can cause the greatest swings in your monthly utility bill.

## ☐ UPGRADE THE THERMOSTAT

If you have an older thermostat control, replace it with a programmable digital type. They are inexpensive and allow you to better manage your home's temperature. Some even allow you to control your home's temperature by smart phone or computer, making saving energy even more convenient. When away from your home for more than 8 hours or at night while you sleep, setting your thermostat back by 8 degrees can reduce your yearly usage by 10%. Experiment with temperature settings to find the best set-backs for your home.

## ☐ CHECK THE INSULATION

Insulation makes a tremendous difference in heating/cooling your home. Check the insulation in your attic, around the attic access and in your basement for any voids or dirty spots which could indicate air infiltration. Add or replace insulation as recommended based on the Department of Energy values. These values have been updated so be sure to check [www.energy.gov](http://www.energy.gov) to find current recommended values.

## ☐ CHECK FOR AIR LEAKS

Air leaks throughout your home can be a culprit of significant heating and cooling waste. Common sources of air leaks are attic access doors, windows, doors, electrical outlets and switches, plumbing accesses, dryer vents and fireplaces. Easy economical actions you can take are to caulk, seal and weatherstrip all seams, cracks and openings to the outside, install foam gasket seals behind outlets and switchplates and close the damper to your fireplace when not in use.

## ☐ **USE WINDOW COVERINGS WISELY**

The radiant heat from the sun can help save energy. In the summer, keep blinds, shades or curtains closed to keep heat out. In the winter, keep them open to let the radiant heat in to help warm your home.

## ☐ **USE FANS TO CIRCULATE AIR**

Fans create moving air which can help maintain a comfortable temperature and humidity within your home. On a nice day, a box fan in the window or whole facility fan in the attic can push warm air out and draw cool air in from the outside. Fans reduce the need for air conditioning allowing you to increase your temperature settings on your thermostat, saving energy. Each degree of higher temperature can save about 3% on cooling costs.

## ☐ **ADD SOME WELL-PLACED LANDSCAPING**

Landscaping around your home not only adds to the curb appeal of your home but can also help keep your home cool in the summer as well as disguise your outdoor cooling unit. Make sure all plants and shrubs are at least 2 feet away from the cooling unit. For proper air flow, use a water hose to gently rinse dirt, grass or debris from the cooling fins.

## ☐ **UPGRADE THE HVAC UNIT**

If you have an older HVAC unit, consider replacing it with a newer, more energy efficient unit. There are many types of units available that run on different fuel sources, so choose the unit that best fits your needs and budget. Be sure to work with a qualified contractor who can help you with size, installation and even financing.

## ☐ **CHECK THE HVAC'S OPERATING EFFICIENCY**

The performance of your HVAC unit is determined largely by the equipment's operating efficiency. Air conditioners use the SEER rating (Seasonal Energy Efficiency Rating), furnaces use the AFUE rating (Annual Fuel Utilization Efficiency) and heat pumps use the HSPF rating (Heating and Seasonal Performance Factor). When buying a new HVAC

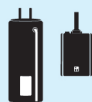


unit, refer to the efficiency ratings to get the most efficient model for your needs. Keep in mind that the higher the efficiency rating of the system, the less energy it will consume and therefore greater energy savings. Visit [www.energy.gov](http://www.energy.gov) for more information on home heating and cooling units.

## WATER HEATING

Second biggest consumption of energy

21%



### ☐ CHECK THE TEMPERATURE SETTING

Water heaters often come from the factory with high temperature settings. Set your temperature at 120° for comfortable hot water. For each 10° reduction, the water heater energy consumption is reduced 3-5%.

### ☐ INSULATE THE HOT WATER HEATER TANK

To save up to 20% of water heater energy costs, insulate it with an approved insulating blanket. If you have an electric water heater, be careful not to cover the thermostat. If you have a natural gas water heater, be careful not to cover the top, bottom, thermostat or burner compartment. Always follow manufacturer's recommendations or get professional help.

### ☐ INSULATE THE PIPES

Energy used for water heating is lost moving water to and from the tank and your faucets. Insulating the pipes helps reduce the energy loss during distribution. Insulate the first 3 feet of pipes connected to the water heater.

### ☐ CHECK FOR LEAKS OR DRIPPING FAUCETS

Water leaks, dripping faucets or leaky toilets can waste gallons of water. A faucet dripping 2 drops/second wastes up to 200 gallons of water in a month.

### ☐ REDUCE WATER USE IN THE BATHROOM

Leaving the water running while brushing your teeth or shaving uses more water than one person normally drinks in a week. Don't leave the water running. Also, take showers instead of baths, especially if you have a

large jetted tub. When showering, reduce your time in the shower to help conserve water and energy.

### ☐ REPLACE WITH A HIGH EFFICIENCY MODEL

If your water heater is old, consider replacing it with an efficient model, including tankless models as they reduce standby storage costs and waste. Learn about all options at [www.energy.gov/energysaver/articles/selecting-new-water-heater](http://www.energy.gov/energysaver/articles/selecting-new-water-heater). The right size water heater is important as well. The U.S. Department of Energy offers information to help you find the right size at [www.energy.gov/energysaver/articles/sizing-new-water-heater](http://www.energy.gov/energysaver/articles/sizing-new-water-heater).

## KITCHEN AND LAUNDRY

Third biggest energy consumption

12%



### ☐ CHECK REFRIGERATOR/FREEZER TEMPERATURES

Don't keep your refrigerator/freezer too cold. On average, refrigerator compartments should be 37-40° and freezer compartments should be 5°.

### ☐ REMOVE THICK FROST BUILD UP

Frost buildup decreases the energy efficiency of your appliance. Frost build up should be no more than 1/4 inch thick. If you have a manual defrost refrigerator or freezer, defrost it regularly to prevent frost buildup.

### ☐ CHECK FOR AIRTIGHT DOOR SEALS

Your refrigerator/freezer door seals should be airtight. To test, close the door on a piece of paper so that it's half in/half out of the refrigerator. If you can pull the paper out easily, the seal needs to be replaced. Also, limit the opening of doors and don't leave them open for extended periods of time.

### ☐ COVER LIQUIDS AND WRAP FOODS UP

Uncovered liquids and foods stored in the refrigerator release moisture, making the compressor work harder. Be sure to cover all liquids and tightly seal foods.

### ☐ BE SMART ABOUT DISH WASHING

Your dishwasher uses a great deal of energy heating

water. Run the dishwasher with full loads only and when they finish, open the door to let dishes air dry instead of using the “heat dry” option. Also, avoid using special cycles such as pre-rinse, they can increase the amount of energy and water used.

#### ☐ **USE MICROWAVES & TOASTER OVENS**

To keep from heating up your kitchen and wasting unnecessary energy, use a microwave, electric skillet or toaster oven for simple meals. They use about 40% less electricity than a full-sized oven. Even better, if the weather is permitting, use the barbecue grill.

#### ☐ **MATCH COOKWARE TO COOKING ELEMENTS**

When your cooking pots fit the size of the cooking element on your cooktop, energy waste is minimal. If you cover cooking pots with lids, it speeds boiling as well as retains heat for faster cooking.

#### ☐ **KEEP BURNERS & COOKTOP SURFACES CLEAN**

Cooktop elements, burners, reflectors and solid surfaces will reflect heat better if they are kept clean.

#### ☐ **USE COLD WATER IN THE LAUNDRY**

When washing clothes, wash only full loads and consider cold water wash/rinse. Using cold water rinse can save about 17 gallons of hot water per load. Be sure to match the water level to the wash load and don't overload, which leads to inefficient washing.

#### ☐ **CHECK FOR DRYER LINT BUILD-UP**

Always clean the lint filter in the dryer after every load to help improve air circulation. Periodically inspect the dryer vent to make sure there are no blockages. A blocked vent could cause poor performance or a fire.

#### ☐ **DON'T OVERLOAD OR OVERDRY CLOTHES**

Heavier loads take longer to dry, so dry towels and heavier cottons separately from lighter-weight clothes. Most dryer models have a moisture sensor feature to help prevent overdrying. For even greater savings, use a clothes line or drying rack to air dry clothes.

## INDOOR/OUTDOOR LIGHTING

Fourth biggest energy consumption

8%



### ☐ USE LIGHTS ONLY WHEN NEEDED

Instead of lighting a whole room, use task lighting such as table lamps instead. Be sure to turn off all lights when you leave a room as well. For added convenience, install motion detecting switch plate occupancy sensors to automatically turn lighting on/off as detected.

### ☐ USE MORE EFFICIENT LIGHTING INSIDE

Only about 10% of energy that incandescent lights consume results in light - the rest is turned into heat. Replacing incandescent bulbs with more efficient ENERGY STAR models is one of the fastest ways to cut your energy bills. There are many choices of energy efficient lighting and energy saving lighting controls available. For more information on lighting options, visit [www.energy.gov/energysaver/articles/lighting-choices-save-you-money](http://www.energy.gov/energysaver/articles/lighting-choices-save-you-money).

### ☐ USE MORE EFFICIENT LIGHTING OUTSIDE

Outdoor lighting is critical to safety, so they are usually on for long periods of time. Choosing energy efficient models will help save on energy costs. Most bare spiral CFL's can be used in enclosed fixtures that protect them from weather. CFL's have been tested to withstand the elements, so they can be used in exposed flood lights. Always follow manufacturer's recommendations.

## ELECTRONICS (TV'S, COMPUTERS, ETC.)

Fifth biggest energy consumption

4%



The average American household owns at least 25 consumer electronic devices and those numbers are steadily increasing. All of these devices continue to use energy even when they are turned off. This power, referred to as “ghost power” or “phantom power,” can add up to 10% to your utility bill. Make smart choices to avoid using phantom energy.

## ☐ UNPLUG ALL CHARGERS WHEN NOT IN USE

Most every American has some sort of rechargeable device and one or more chargers. When plugged in, these chargers continually use power, even when nothing is connected to them. Always unplug chargers after your device is fully charged.

## ☐ PLUG ELECTRONICS INTO POWER STRIPS

Just as chargers consume phantom power, so do electronics. Cable boxes, DVR boxes, DVD players, gaming consoles, stereos, small appliances, etc. continue to draw power even when they're switched off. The best way to avoid phantom power consumption is to plug electronics into a power strip. Using the switch on the power strip cuts all power to the electronics. For even more savings, unplug any devices that aren't used as often.

## ☐ TURN OFF THE COMPUTER/PRINTER

Contrary to popular belief, keeping your computer or office equipment on all the time will not lengthen the life. It only wastes energy. Turn off all monitors, computers, printers, etc. when not in use.

## ☐ UNPLUG UNUSED SMALL APPLIANCES

Keep small appliances such as hair dryers, flat irons, portable heaters, radios, toasters, blenders, coffee makers, etc. unplugged until you are ready to use them. This will help save on phantom power.

## ☐ UPGRADE YOUR DESKTOP COMPUTER

If your computer is old or you are upgrading, consider buying a laptop or tablet. They use much less energy than a desktop computer.

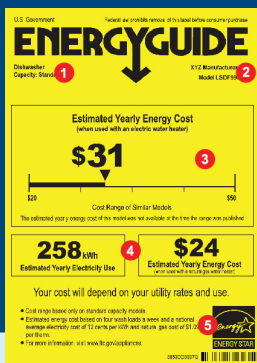
WHEN SHOPPING FOR ENERGY-CONSUMING PRODUCTS, INCLUDING WINDOWS AND DOORS, ALWAYS LOOK FOR THE ENERGY STAR® LABEL. THIS LABEL IS ON ALL QUALIFIED PRODUCTS THAT MEET SPECIFIC STANDARDS FOR ENERGY EFFICIENCY. FOR MORE INFORMATION, VISIT:

[www.energystar.gov](http://www.energystar.gov)



# CHOOSING THE RIGHT APPLIANCE

To determine whether an appliance is energy efficient, the federal government requires most appliances to display the bright yellow and black “EnergyGuide” label. These labels show you average annual energy consumption and operating costs for each so you can compare appliances. Keep in mind that actual costs may vary depending on how you use the appliance. For more, visit the website at [www.energystar.gov](http://www.energystar.gov).



## ENERGYGUIDE SHOWS:

1. Key features of the appliance model.
2. Make, model number and size.
3. Estimated yearly operating costs (based on the national average cost of electricity) and the range of operating costs of similar models.
4. Estimated yearly energy consumption and operating costs for other energy sources.
5. Energy Star logo indicating energy efficiency.

## APPLIANCES AND ENERGY CONSUMPTION

Knowing how much electricity your appliances consume can help you make smart energy choices. To get an idea of your appliance energy use and operating costs, you can determine estimates by using the formula below. Remember that family size, lifestyle, amount of usage and wattage ratings affect consumption.

$$(\text{Wattage} \times \text{Hours Used/Day}) \div 1000 = \text{Daily kWh}$$

Kilowatt-hour consumption

Once you have your daily kWh consumption (from above), you can estimate monthly usage:

$$\text{Daily kWh} \times \text{Hours Used Per Month} \times \text{kWh rate}^* = \text{cost per month}$$

*\*For current rates, refer to your most recent JEA utility bill or visit <https://www.jaxenergy.com/learning-center-articles/rates>.*

## DETECT YOUR HOME'S ENERGY WASTE AT ITS SOURCE



Every smart choice you make from the information and references in this brochure will help you save energy, which saves you money on your utility bill.

To help improve the energy efficiency of your home and help you save money, Jackson Energy Authority is proud to partner with TVA EnergyRight® to provide resources that allow you to learn what upgrades your home needs to be its most energy-efficient. With TVA EnergyRight® resources, you can complete a home energy evaluation with a Home Energy Advisor either in person or from your smartphone, hire TVA-approved contractors to complete your home energy upgrades, apply for financing for qualifying home upgrades, take a free DIY Home Energy Assessment, introduce your kids to the EnergyRight® Monsters, and more.

To find out more information about TVA EnergyRight®, visit [www.energyright.com](http://www.energyright.com) to get started.

ENERGY EFFICIENT IMPROVEMENTS NOT ONLY MAKE YOUR HOME MORE COMFORTABLE, THEY CAN YIELD LONG-TERM FINANCIAL REWARDS. FOR MORE INFORMATION, CALL 422-7500 OR VISIT THE WEB AT [www.jaxenergy.com](http://www.jaxenergy.com).

FLIP A SWITCH  
REPLACE AIR FILTERS  
CHANGE A BULB  
LOWER THE BLINDS  
USE CEILING FANS  
INSULATE | UNPLUG

SAVE ENERGY  
[www.jaxenergy.com](http://www.jaxenergy.com)



**Jackson Energy Authority**  
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