

Energy Leveling Ideas for Summer

Use major appliances early in the morning and late at night on very hot days. The best times vary, but generally before 8:00 a.m. and after 8:00 p.m. whenever possible.

Spare your electric range and oven by cooking meals in a toaster oven, slow cooker, or other energy-saving appliance. If you must use your oven, cook several dishes at once and turn it off a few minutes before the food is cooked.

Dry your laundry on an indoor or outdoor clothesline instead of in your dryer.

Use house and window fans, and a dehumidifier to keep cool and comfortable on warm days, without air conditioners. When you must use air conditioning during a heat wave, set the thermostat no lower than 78 degrees Fahrenheit.

Low Cost/No Cost Energy Tips for Winter

Caulk and/or weather strip cracks around doors and window frames.

Block openings at bottom of door to prevent drafts.

Lower the setting on your thermostat at night and dress warmly.

Lower the setting on your hot water heater to 120 degrees Fahrenheit, and use a water heater wrap. If you have a dishwasher, then use 140 degrees Fahrenheit (normal/medium) and run only when the dishwasher is full.

Open shades during winter days to let the warm sunlight in and close the shades at night.

Wash clothes with **warm** water and rinse them in **cold** water.

Leaking faucets should be repaired promptly, especially hot water.

Turn off all unused lights and appliances.

Close all windows tightly and use locks to prevent cold air from leaking in. Cover windows with plastic.

Broken windows should be repaired immediately and close all storm windows.

Window air conditioning units should be covered or removed during heating season.

Furnace filters should be kept clean.

Furnace should be checked for safe and efficient operation at least once a year.

Vacuum refrigerator and freezer coils every six months to improve efficiency.

Close off unused rooms.

Flow restrictors should be added on faucets to reduce water usage.

Water Saving Ideas

A dripping faucet or fixture can waste 3 gallons a day.....a total of 1095 gallons a year. Conserve Water and Save Money! A continuous leak from a hole this size would, in one month, waste water in the amounts shown.

			Water Cost	Sewer Cost	Total Cost
●	1/4"	527 ccf	\$1,886.66	\$2,550.68	\$4,437.34
●	3/16"	297 ccf	\$1,063.26	\$1,437.48	\$2,500.74
●	1/8"	131 ccf	\$468.98	\$634.04	\$1,103.02
•	1/16"	33 ccf	\$118.14	\$159.72	\$277.86

Water Saving Ideas in the Bathroom.....

- Use a displacement device (a water-filled plastic bottle or bag) in the toilet to reduce the amount of water required to flush.
- Use the toilet only for its intended purpose, not for the disposal of tissues or trash
- Be alert for leaky toilets or faucets and repair immediately. A slow drip wastes 15 to 20 gallons of water a day. A leaky toilet wastes hundreds of gallons a day.
- When installing a new toilet, consider a small-capacity model. They're usually less expensive and cut down significantly on the amount of water used.
- Flush the toilet less often. In most cases, several uses can be made of the toilet for liquid wastes before flushing.
- Take shorter showers. Get wet, turn off the water, lather up, then turn on the water to rinse. Showers require less water than tub baths. Every inch in the tub equals approximately 5 gallons.
- Up to five gallons a minute goes straight down the drain when taps are left running to shave or brush teeth. Turn on the taps only when needed.

In the Kitchen.....

- When washing dishes by hand, fill a basin or use a stopper in the sink for rinsing rather than running the faucet.
- Automatic dishwashers use 12 to 25 gallons for each full cycle, so avoid using the rinse only cycle and washing small loads.
- Avoid running the faucet for a glass of water. Put a bottle or pitcher of water in the refrigerator.
- Since washing machines require 40 gallons or more, save water by washing only full loads.

Outdoors.....

- Use buckets and tubs to wash your car or the dog, rather than a continuously running hose.
- Water lawns and gardens only when needed and only during the early morning or evening when evaporation is lower.
- A garden hose will dispense up to 600 gallons in two hours. A nozzle will act as a flow restrictor and reduce water use significantly.
- Cutting grass at a two to three inch height instead of cropping it closely will reduce the amount of water needed.
- Sweep sidewalks and driveways instead of washing them down with a hose.
- Re-use as much water as possible.
- If lawn watering is scheduled, let youngsters play in the hose spray or sprinkler in a grassy area instead of filling a wading pool.

Water Use Habits.....

Item	Typical Usage	Good Water Saving Habits
Showering	20-40 gals	5 gals (wet down, soap up, rinse off)
Tub Bathing	36 gals (full)	10-12 gals (low level)
Toilet Flushing	6 gals	3-5 gals (tank displacement or half flush device)
Teeth Brushing	2 gals (faucet running)	1 pint (wet brush, rinse briefly)
Hand Washing	2 gals (faucet running)	1 gal (fill basin, rinse briefly)
Shaving	3-5 gals (faucet running)	1 gal (fill basin, rinse briefly)
Dish Washing	20 gals (faucet running)	5 gals (wash, rinse in pans or sink)
Automatic	15 gals (full cycle)	DO ONLY FULL LOADS

Dishwasher		
Washing Machine	40-60 gals (full cycle)	DO ONLY FULL LOADS
Outdoor Watering	5-10 gals per minute	Be sensible, seek local lawn/garden expert advice

High Efficiency and Long Lasting Lighting Products

What are compact fluorescent lamps? How do they work?

Compact fluorescent lamps are an exciting new family of lighting products. They incorporate the best features of fluorescent tubes - high efficiency and long life. Compact fluorescent lamps also have improved color characteristics and a compact size. The result is a variety of products that replace common standard incandescent bulbs and consume only one-fourth the energy.

Compact fluorescent lamps contain a small fluorescent tube and a ballast. The ballast is an electric device required to start and operate the bulb.

Compact fluorescent lamps come in two basic configurations. Modular units contain a screw-in base and a replaceable bulb. The base houses the ballast. The bulb can be replaced when needed for a fraction of the cost of the original unit. Modular compact fluorescent lamps tend to be larger and heavier than standard incandescent.

Integral compact fluorescent lamps contain the bulb and ballast in a self-contained package. They are smaller and lighter than modular units. Most use an electronic ballast that eliminates the start up flicker and hum associated with modular units. The disadvantage of integral lamps is that the whole unit must be discarded at the end of its life.

Will my lighting fixtures accept compact fluorescent bulbs? What about their color?

Compact fluorescent bulbs screw into standard lamp sockets. They are in available in sizes to replace incandescent bulbs of 40, 60, 75 and 100 watts. Compact fluorescent bulbs duplicate the natural color produced by standard bulbs. They are free of the bluish light given off from cool white fluorescent tubes.

How long do compact fluorescent bulbs last?

Compact fluorescent bulbs last a long time-most have a rated life of 10,000 hours. This is eight to 13 times the life of standard incandescent . For example, the rated life of a 100 watt incandescent bulb is 750 hours. In average home use, a compact fluorescent bulb can be expected to last for over eight years!

Why pay \$20 for a light bulb? Compact fluorescent bulbs are a good investment even though good quality products sell for \$15-\$25. While that seems a lot to pay for a bulb, it will eliminate the need to purchase 8-13 standard incandescent bulbs.

Where can I use compact fluorescent bulbs in my home?

The best candidates for a switch to compact fluorescent bulbs are areas that are lighted at least two hours per day. These include the kitchen, family room, bathroom and hallways.

What else do I need to consider when using compact fluorescent bulbs?

Compact fluorescent bulbs are usually a little larger and heavier than the bulbs they replace. This makes using them a bit of a challenge because current models won't fit into small fixtures. In addition, they cannot be used in fixtures controlled by dimmer switches.

Compact fluorescent bulbs come in different shapes and sizes. Experiment with one or two compact fluorescent bulbs by trying them in various fixtures in your dwelling to see where they fit.

Compact fluorescent bulbs have temperature restrictions. Generally, modular units can't be used below freezing. Integral units will usually operate down to zero degrees and lower in an enclosed fixture. Follow the manufacturer's temperature restrictions provided with the bulb.

Recently, fixture manufacturers have begun producing fixtures designed for compact fluorescent lamps. Instead of an incandescent socket, they contain a ballast and socket for the fluorescent lamp. Many fixtures are decorative and are appropriate for use in homes.

Home Appliances - Estimate Usage Costs

We determine the electricity you use (and your electric bill) by measuring the kilowatt-hours or kWh, you use. One kilowatt-hour is equal to operating a 100-watt light bulb for 10 hours. Many factors may affect how much electricity an appliance may use where it's located, your home wiring, how the appliance is used.

Your largest appliances generally use the most kilowatt-hours, while your smaller ones need much less electricity to operate. Look at the chart below for an idea of average

kilowatt hours used by some common appliances.

Comfort	Average KWH Use Per Month
Central Air Conditioning	840
Electric Hot Water Tank	300
Portable Electric Space Heater	66
Dehumidifier	64
Window Fan	60
In the Kitchen	
15 cu. ft. upright frostless refrigerator/freezer	153
Dishwasher	30
Oven (on Abake@)	22
Slow cooker (crock pot)	11
Garbage Disposal	3
Toaster	3
Help Around The House	
Dryer	83
Iron	13
Washing Machine	9
Sewing Machine	1

Entertainment	
Color (solid state) 19" TV	17
Stereo	10
Beauty Aids	
Hairdryer	4
Hairsetter/curlers	1
Shaver	.03
Working at Home	
Personal Computer (CPU Only)	33
Laser Printer	25
Color Monitor	9

Estimate Your Costs

The costs of operating an appliance can be estimated to help you manage your electricity use and the size of your bill. First, determine the wattage used by the appliance, the number of hours it is used per month, and the rate you pay per kilowatt-hour (shown on your electric bill). Then use this simple formula:

$$\frac{\text{Wattage} \times \text{hours}}{1000} \times \text{rate} = \text{estimated monthly cost of operation}$$

Choose an appliance and try the formula!