



What Causes the Usage on Your Monthly Electric Bill?

Your monthly electric bill is determined by three factors:

1. the amount of electricity you use
2. weather conditions
3. the price you pay for electricity

The amount of electricity you use is the single largest contributor to your monthly electric bill and is the one factor you can control.

While many of the appliances and electronic devices we have in our homes require only small amounts of electricity to operate, some are more energy intensive. The amount of electricity that an appliance uses is determined by both the wattage of the device and the length of time the device is used. Using your energy-intensive electronic devices wisely can help you manage your usage and keep your monthly electric bill under control.

Calculating Usage & Cost

To calculate the amount of electricity it takes to operate an appliance, multiply the wattage of the appliance by the approximate number of hours you plan to operate it (the wattage of an appliance is usually listed on the appliance). Next, divide by 1,000 this will give you the number of kilowatt-hours (kWh) the appliance uses.

Example: An oil-filled heater with three settings (600, 900 and 1,500 watts) operated on the highest setting for eight hours a day.

1. Multiply 1,500 watts by eight hours
(1,500 x 8 = 12,000 watt-hours)
2. Divide by 1,000 (12,000 : 1,000 = 12 kWh)

The heater uses 12 kWh to operate.

To calculate how much the heater costs to operate, multiply 12 kWh by your overall cost per kWh (your total electric bill divided by your total kWh consumption). Let's use nine cents per kWh:

$$12 \text{ kWh} \times 9 \text{ cents} = \$1.08$$

The heater costs about \$1.08 a day to operate (based on eight hours of use). Multiply by 30, and the heater costs approximately \$32.40 to operate per month. If the heater was set on its lowest setting (600 watts), the monthly cost would be about \$12.96.



The Cost of Operating Appliances

Listed below are some of the common electronic devices you might find in your home. The chart shows how much electricity these devices use in kWh and their potential impact on your monthly electric bill.

Operating Costs of Various Electronic Devices

	Estimated Typical Wattage	Avg. Op. Usage (Hrs/mo.)	Use (\$/mo.)
Air Conditioner (5,000 BTUH room unit)	900	200	\$16.20
Air Conditioner (12,000 BTUH room unit)	1,500	200	\$27.00
Clothes Dryer (24-32 loads)	5,000	24	\$10.80
Clothes Washer (24-32 loads)	550	16	\$0.79
Computer (Desktop)	250	120	\$2.70
Computer (Laptop)	75	90	\$0.61
Dishwasher	1,200	20	\$2.16
Freezer	400	120	\$4.32
Microwave	875	10	\$0.79
Range	12,000	10	\$10.80
Refrigerator	500	120	\$5.40
Television (conventional 32)	130	120	\$1.40
LCD (42)	216	120	\$2.33
Plasma (42)	286	120	\$3.09
Toaster	1,200	3	\$0.32
Vacuum Cleaner	1,050	5	\$0.47

Calculations are based on a rate of 9 cents per kilowatt-hour. Your actual rate may be different depending on where you live and the company that supplies your electricity.

** These appliances do not run continuously. The monthly costs are based on an average time the appliances are fully operational. These times may vary depending on your usage habits.*

Other Factors

Here are some other factors that may affect your usage and contribute to your monthly electric bill.

New Appliances

The addition of new appliances can increase your electricity usage. When shopping for appliances, be sure to look for the ENERGY STAR® label. Because they use less energy, these products can help protect the environment and can save you money. For more information, visit www.energystar.gov.

Houseguests

Houseguests or additional family members living in your home mean more laundry, more cooking and extended use of other electronic devices.

Time of Season

In the summer, you may cook less, use your lighting for shorter periods of time and use your air conditioner or fans. Winter months bring shorter days and longer nights, which means you'll have more indoor activity and use more energy.

Weather Conditions

Hot, humid weather in the summer causes your air conditioner to use more electricity to cool your home. Cold, windy weather in the winter forces your furnace to provide more heat to keep your home comfortable.

Number of Days in Your Billing Cycle

The number of days you are billed may vary from month to month. The more days you've used energy, the higher your usage and your electric bill may be.

Be a Watt Watcher

The *Watt Watchers: Use Energy Wisely* Campaign is our commitment to demonstrating the very real and positive impact that energy efficiency initiatives can have on your home. As a part of this campaign, we're developing a number of new energy conservation programs, including:

- Making energy-saving, compact fluorescent light bulbs available to customers
- Helping customers conduct home energy audits
- Launching an automated metering pilot program to help customers manage their energy use
- Educating students about energy conservation

For more information, visit www.allegHENYpower.com and click on the "Watt Watchers" logo.



Additional Resources

U.S. Department of Energy

Energy Savers: Tips on Saving Energy and Money at Home

www.eere.energy.gov/consumer/tips

A Consumers Guide to Energy Efficiency and Renewable Energy

www.eere.energy.gov/consumer

Weatherization Assistance Program

www.eere.energy.gov/weatherization

Alliance to Save Energy

Information to help you manage your energy costs.

www.ase.org

Energy Hog

Energy saving tips for the entire family.

www.energyhog.com

Allegheny Power

We can help you save money on your monthly electric bill. Visit our Web site and click on the Watt Watchers logo for more information.

www.allegHENYpower.com

If you would like to perform an online energy audit of your home, visit our Web site at www.allegHENYpower.com/CSC/Energysaver.asp and click on Home Energy Saver. This link will take you to the Home Energy Saver Web site, which is sponsored by the Department of Energy and the U.S. Environmental Protection Agency.

Energy Checklist

Would you like to save money on your electric bill? Listed below are some easy steps you can take today to start using energy more efficiently.

- Turn off the television when nobody is watching.
- Replace the incandescent light bulbs in your house with compact fluorescent lights (CFL). CFLs use 75 percent less energy and can last up to 10 times longer.
- Only run full loads when using the washing machine and clothes dryer, and clean the lint filter after each drying cycle.
- Unplug chargers for cell phones, MP3 players and coffeepots they can add five percent to your electric bill.
- Store dirty dishes in the dishwasher until you have a full load.
- Use your microwave oven instead of your conventional oven whenever possible. Microwaves can cook food in one-fourth or less the normal cooking time.



www.allegHENYpower.com

For electrical emergencies and outages, call us at 1-800-Allegheny (1-800-255-3443) 24 hours a day.

Take Control of Your Electric Bill

