

# HOW MUCH YOUR ELECTRIC APPLIANCES USE

If you really want to control how much you spend for electric energy, it is important to know how to compute the operating costs of electric appliances, your electric furnace, the lights you use and even your new hot tub!

Knowing those costs, you can see where your electric energy dollars are going, how much one appliance costs compared to another, and how to conserve energy to lower your electric bill.

First, you need to know that electricity is measured in **watts**. The number of watts shown on an appliance tells you how much electricity it uses. You should also know that a **KILOWATT** (kW) equals a thousand watts and a **KILOWATT-HOUR** (kWh) equals one kilowatt used for one hour. This is the amount of electricity required to operate a 1000-watt hair dryer for one hour.

Before you can figure the operating cost of an appliance, you need to know its **WATTAGE**, which is usually listed on its serial plate, and the number of **HOURS** the appliance is "used." Remember, you must use hours, not minutes. Round off the minutes to the closest half-hour (.5 hour) or quarter-hour (.25 hour).

You also need to know the **COST OF ELECTRICITY**. The average rate for our standard residential customer is **4.87 cents** per kilowatt hour.

To compute the cost of operating your appliances, furnace or lights, first use this formula to determine the kilowatt hours of use.

**Formula:**

$$\frac{\text{Wattage} \times \text{Hours}}{1,000} = \text{Kilowatt Hours}$$

**Example:** You have a **100-watt** light bulb that is used **40 hours** per month. Dividing the 100 watts by 1,000 equals **.1 kW** times **40 hours** equals **4 kilowatt hours** of use per month.

Now that you know how many kWh per month the light uses, use the following formula to determine the operating cost:

**Formula:**

$$\text{kWh} \times \text{Energy Rate} = \text{Operating Costs}$$

**Example:** Multiplying **4 kWh** times the standard rate of **\$0.0487** shows you it costs **19 and a half cents** per month to operate the light bulb for **40 hours**.

Now, take a few moments to figure out your other electrical expenses -- and then look for ways that you can reduce them with changes in lifestyle and habit.

# Appliance Power Costs / Family of Four

rate = 4.87 cents

<u>Appliances</u>	<u>Average Watts</u>	<u>Hours Operated</u>	<u>KWH/Month</u>	<u>Av. Cost/Month</u>
Hot water heater	4,500	111	500	\$24.35
Hot tub	10,000	80	800	\$38.96
Clothes washer	600	12	7	\$0.34
Clothes dryer	4,350	20	87	\$4.24
Refrigerator	262	423	112	\$5.45
Refrig/Freezer	600	250	150	\$7.31
Dishwasher	1,200	30	36	\$1.75
Range	12,000	8	96	\$4.68
Self-cleaning oven	4,000	2	8	\$0.39
Convection oven	1,500	8	12	\$0.58
Freezer (15 cu.ft.)	350	171	60	\$2.92
Frost-free freezer	440	204	90	\$4.38
Heater (auxiliary)	1,320	30	40	\$1.95
Television (black/white)	225	120	27	\$1.31
Television (color)	315	120	38	\$1.85
Microwave oven	650	30	20	\$0.97
Air Conditioner	860	74	64	\$3.12
Electric Blanket	190	80	15	\$0.73
Clock	3	720	2	\$0.10
Coffee maker	850	15	13	\$0.63
Corn popper	660	3	2	\$0.10
Crock pot	70	32	2	\$0.10
Curling iron	4	8	0.03	\$0.00
Drill (1/4")	250	2	0.5	\$0.02
Hair blower	1,100	5	5.5	\$0.27
Shaver, rechargeable	12	24	0.29	\$0.01
VCR	38	40	1.5	\$0.07
Dehumidifier	400	360	144	\$7.01
Garbage disposal	400	2	1	\$0.05
Electric fence	9	720	6	\$0.29
Fan (kitchen)	250	30	8	\$0.39
Fry pan	1,160	25	29	\$1.41
Fryer (deep fat)	1,500	4	6	\$0.29
Furnace blower	600	90	54	\$2.63
Griddle	1,500	6	9	\$0.44
Hair rollers	720	10	7	\$0.34
Heat lamp	250	10	3	\$0.15
Iron	1,100	12	13	\$0.63
Lamp (100W light bulb)	100	120	12	\$0.58
Lawn mower	1,000	8	8	\$0.39
Mixer	125	8	1	\$0.05
Oil burner	255	100	26	\$1.27
Projector	1,000	2	2	\$0.10
Radio (table top)	50	120	6	\$0.29
CD Player	160	30	5	\$0.24
Sewing Machine	100	10	1	\$0.05
Circular Saw	1,000	6	6	\$0.29
Sunlamp	280	10	3	\$0.15
Toaster	1,130	4	5	\$0.24
Toaster oven	1,350	5	7	\$0.34
Trash Compactor	1,200	2	3	\$0.15
Vacuum cleaner	700	10	7	\$0.34
Waffle iron	1,100	2	2	\$0.10
Water bed heater	400	420	168	\$8.18