

Average Cost to Operate Household Appliances

This data compiled by the Edison Electric Institute in 1988 should be helpful to customers in approximating their monthly energy bill based on average usage. The average monthly cost is based on an average household rate of \$0.1564 per kilowatt-hour (effective January 1, 2009).

If you have appliances which are not listed, or your average usage is different from that shown on the chart, you can estimate your monthly cost as shown on the next two pages.

<u>Appliance</u>	<u>Rated Wattage</u>	<u>Monthly Kilowatt-Hours</u>	<u>Monthly Cost</u>
Food Preparation			
Boiler	1140	7	\$1.09
Coffee Maker	894	9	\$1.41
Deep Fryer	1448	7	\$1.09
Dishwasher**	1200	30	\$4.69
Frying Pan	1196	8	\$1.25
Hot Plate	1200	7	\$1.09
Microwave Oven	1450	16	\$2.50
Range: ***			
Conventional	12200	98	\$15.33
Self-Cleaning	12200	100	\$15.64
Roaster	1333	5	\$0.78
Sandwich Grille	1161	3	\$0.47
Toaster	1146	4	\$0.63
Trash Compactor	400	4	\$0.63
Waffle Iron	1200	2	\$0.31
Food Preservation			
Freezer:			
Chest - 15-21 cubic foot		110	\$17.20
Upright - manual defrost		110	\$17.20
Upright - automatic defrost		165	\$25.81
Refrigerator:			
10-15 cubic foot manual defrost		58	\$9.07
16-20 cubic foot automatic defrost		150	\$23.46
Over 20 cubic foot, automatic defrost		158	\$24.71
Laundry			
Dryer	4856	83	\$12.98
Iron, hand	1100	5	\$0.78

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Washer, automatic**	512	9	\$1.41
Water Heater	4500	400	\$62.56
Water Pump - 3/4 HP	550	35	\$5.47
Home Entertainment			
Radio	71	7	\$1.09
Television:			
Black & White - tube type	100	19	\$2.97
Black & White - solid state	45	9	\$1.41
Color - tube type	240	44	\$6.88
Color - solid state	145	27	\$4.22
Pool Filter	583	420	\$65.69
Lighting	1000	304	\$47.55
Personal Computer	200	12	\$1.88

<u>Appliance</u>	<u>Rated Wattage</u>	<u>Monthly Kilowatt-Hours</u>	<u>Monthly Cost</u>
Health & Beauty			
Germicidal Lamp	20	12	\$1.88
Hair Dryer:			
Cap Type	381	2	\$0.31
Gun Type	1200	5	\$0.78
Heat Lamp - infrared	250	2	\$0.31
Sun Lamp	279	2	\$0.31
Comfort Conditioning			
Air Conditioner:			
5,000 BTU/hr	1500	1.5 x no. hrs. used	
10,000 BTU/hr	3000	3.0 x no. hrs. used	
Dehumidifier	257	31	\$4.85
Fan			
Attic	370	25	\$3.91
Circulating	88	4	\$0.63
Roll Away	171	12	\$1.88
Window	200	15	\$2.35
Electric Heater			

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1000 Watts	1000	450	\$70.38
1500 Watts	1500	675	\$105.57
Humidifier	177	13	\$2.03
Oil Burner			
Gun Type	250	75	\$11.73
Mobile Home Type	650	185	\$28.93
Water Bed	350	40	\$6.26
Heat Tape	156	1.56 x no. hrs. used	
Block (head bolt) heater, car/truck	1200	1.20 x no. hrs. used	

**** Does not include water heating cost.**

***** Use same figures for separate oven and cook top.**

We have listed some of the common items around your home. It is easy to estimate the energy usage and cost of appliances which are not listed by some simple arithmetic.

- 1) Find the rated wattage of the appliance from the user's manual or the data plate on the appliance. The data plate or sticker is often found on the bottom or the back of the appliance.
- 2) Estimate the monthly hours of use for the appliance.
- 3) Multiply the rated wattage by the monthly hours of use and then divide by 1000 to find the monthly kilowatt-hours.
- 4) Multiply the monthly kilowatt-hours by the cost per kilowatt-hour, currently \$0.1564, to find the monthly cost in dollars.

Here is an example:

You have a 1650 watt portable electric heater which you use for 4 hours per day during the winter months. You can find the cost per month of operating the heater during the winter like this:

- 1) The rated wattage = 1650.
- 2) The monthly hours of use = 4 x 30 = 120 hours per month.

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3) The monthly kilowatt-hours is:

$$\text{monthly kilowatt-hours} = \text{rated wattage} \times \text{monthly hours of use} / 1000 = 1650 \times 120 / 1000 = 198.$$

4) The monthly cost is:

$$\text{monthly cost} = \text{monthly kilowatt-hours} \times \text{cost per kilowatt-hour} = 198 \times \$0.1564 = \$30.96.$$

If you have other questions, please feel free to contact the Wolfeboro Municipal Electric Department at 569-6975.