

Appliance Cost Fact Sheet

2010

Use this fact sheet to find out the approximate cost to run appliances in your home and office. On the last page, you will find the formula used to figure out these costs, so that you can calculate costs for any appliances not listed. The appliances are listed by room areas.

	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Kitchen Appliances				
Blender	200	20	4	\$0.30
Breadmaker	600	15	9	\$0.68
Broiler	1400	4	5.6	\$0.42
Can Opener**	180	0.5	0.09	\$0.01
Clock	2	720	1.5	\$0.11
Coffee-maker, Auto	880	4	8.7	\$0.27
Coffee-maker, Drip	1500	4	7.7	\$0.45
Convection oven	1600	30	48	\$3.64
Crock-Pot	70	32	2.24	\$0.17
Dishwasher with heater	1300	30	39	\$2.96
Dishwasher without heater	1200	30	36	\$2.73
Electric Tea Kettle	1200	2	0.72	\$0.18
Food Dehydrator	875	10	9	\$0.66
Fan, kitchen	250	30	7.5	\$0.57
Freezer (16 cu.ft.)man.def	350	286	100	\$7.59
Freezer (16 cu.ft.)auto def	450	333	150	\$11.36
Food Processor	480	0.5	0.24	\$0.02
Fryer, deep fat	1500	4	6	\$0.45
Frying pan	1200	8	9.6	\$0.73
Garbage disposal	450	3	1.35	\$0.10
Hot plate w/ 2 elements	1250	2	2.5	\$0.19
Microwave oven	1000	30	30	\$2.27
Mixer (portable)	125	8	1	\$0.08
Popcorn popper	660	5	3.3	\$0.25
Range (surface & oven)	12000	15	180	\$13.64
Range (during self cleaning)	4000	1	4	\$0.30
Refrigerator (12 cu ft man def)	120	417	50	\$3.79
Refrigerator (12 cu ft auto def)	180	367	66	\$5.01
Ref/Freezer (14 cu ft frost free)	300	437	131	\$9.94
Ref/Freezer (18 cu ft frost free)	430	437	188	\$14.24
Rice Cooker	490	4	2	\$0.15
Freezer	300	170	51	\$3.87
Toaster	1100	2.05	2.25	\$0.17
Toaster Oven	1500	5	7.5	\$0.57
Trash Compactor	400	15	6	\$0.45
Waffle Iron	1200	2	2.5	\$0.18
Well Pump (1 hp)	1000	180	180	\$13.64

* Based on the average rate of \$0.0758 per kilowatt hour

** Less than \$.01 per Month

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Utility /Laundry Room	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Clothes Dryer	5000	18	90	\$6.82
Clothes Washer, general	500	18	9	\$0.68
Clothes Washer, horizontal axis	263	18	4.7	\$0.36
Garage Door Opener	350	1	1.42	\$0.03
Iron	1100	4	4.4	\$0.33
Sewing Machine	75	12	0.9	\$0.07
Vacuum Cleaner	600	4	2.4	\$0.18

Bedroom / Bath appliances	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Bathtub with jets	75	20	1.5	\$0.11
Hair Dryer	1000	15	15	\$1.14
Hair Curlers	350	7.5	3	\$0.20
Shaver	15	7.5	0.11	\$0.01
Sun Lamp	250	10	2.5	\$0.19
Toothbrush, Electric	10	10	0.1	\$0.01
WaterBed Heater	400	370	148	\$11.22

Light Bulb, incandescent	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Compact Fluorescent W/Ballast	39	150	5.85	\$0.44
Compact Fluorescent W/Ballast	25	150	3.75	\$0.28
Compact Fluorescent W/Ballast	22	150	3.3	\$0.25
Compact Fluorescent W/Ballast	20	150	3	\$0.23
Compact Fluorescent W/Ballast	15	150	2.25	\$0.17
Fan Box 20"	167	120	20	\$1.52
Fan, Ceiling, small	60	120	7.2	\$0.55
Fan, Ceiling, large	100	120	12	\$0.91
Fan, Oscillating	47	120	6	\$0.43
Light Bulb, incandescent	150	150	22.5	\$1.71
Light Bulb, incandescent	100	150	15	\$1.14
Light Bulb, incandescent	75	150	11.25	\$0.85
Light Bulb, incandescent	60	150	9	\$0.68
Light Bulb, incandescent	50	150	7.5	\$0.57
Light Bulb, incandescent	40	150	6	\$0.45

Electronics	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Computer	80	20	1.6	\$0.12
Computer Monitor	80	20	1.6	\$0.12
Printer	180	20	3.6	\$0.27
Laptop	50	120	6	\$0.45
DVD Player/VCR	22	45	0.99	\$0.08
Fax machine	100	20	2	\$0.15
Radio	20	120	2.4	\$0.18
Radio/stereo	80	120	9.6	\$0.73
Television	300	120	36	\$2.73
Television - Projection	170	120	20.4	\$1.55
Television - Flat Screen	120	120	14.4	\$1.09
VCR	38	40	1.52	\$0.12

* Based on the average rate \$0.0758 per kilowatt hour

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	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Heating, Ventilating & Air Conditioning Appliances				
Air Conditioner, room	320	67	21	\$1.63
Air Conditioner, central	8500	67	570	\$43.17
Dehumidifier	250	210	53	\$3.98
Electric Furnace	15000	150	2250	\$170.55
Electric Furnace	10000	150	1500	\$113.70
Electric baseboard- 4 foot	1000	150	150	\$11.37
Electric baseboard- 8 foot	2000	150	300	\$22.74
Electric Heater, portable	1500	150	225	\$17.06
Electric Wall Heater	1500	150	225	\$17.06
Furnace Fan (1/3 HP) Energy Star	375	150	96	\$4.26
Hot Tub - Electric Heater (240v)	5000	183	915	\$69.36
Hot Tub Pump (Circulation)	1000	183	183	\$13.87
Humidifier	170	63	11	\$0.81
Water Heater, Typical Family of 4	4500	138	621	\$47.07
Water Heater,- Typical Family of 2	4500	92	414	\$31.38

	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Office Machines (based on 30% of name-plate rating)				
Calculator, desk	14	15	0.21	\$0.02
Calculator, printing	70	15	1.05	\$0.08
Laser Printer	850	240	204	\$15.46
FAX Machine	65	720	46.8	\$3.55
Photocopier, small	450	240	108	\$8.19
Photocopier, large	1800	240	432	\$32.75
Printer	760	240	182.4	\$13.83
Typewriter	138	240	33.12	\$2.51
Water cooler	140	240	33.6	\$2.55

	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Tools				
Circular Saw	1,150	2	2	\$0.17
Drill	300	3	0.9	\$0.07
Electric Lawn Mower	1,000	3	1	\$0.23
Table Saw	1,000	8	8	\$0.61
Sander	300	3	2	\$0.07

	<i>Average Watts</i>	<i>Hours Operated</i>	<i>Kilowatt- Hrs/Month</i>	<i>Average* Cost/Month</i>
Miscellaneous				
Air Cleaner	50	275	13.75	\$1.04
Electric Blanket	190	80	15.2	\$1.15
Fish Tank (20 gallon)	86	730	62.78	\$4.76
Sewing Machine	100	10	1	\$0.08
Pond Pump	varies	720	158-504	\$11.52 - \$36.75

* Based on the average rate of 0.0758 cents per kilowatt-hour

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Calculating Your Energy Costs

If you want to control how much you spend for electric energy, it's important to know how to compute the operating costs of your electrical appliances, electric furnace and your lights.

Knowing these costs will help you see where your electric energy dollars are going, how much one appliance costs to operate compared to others, and how to use energy wisely to control your energy costs.

Orcas Power & Light Cooperative charges for the electricity you use by the kilowatt hour (kWh).

To determine the kilowatt-hour usage of an appliance, you must first determine the wattage of the appliance. For example, a 60-watt light bulb has a wattage of 60; a 1500-watt heater has a wattage of 1500. Next, you need to determine how many **hours** you use the appliance.

The formula to determine kilowatt hours is:

$$\text{(Wattage x Hours of use)} \div 1000 = \text{Kilowatt hours (kWh)}$$

To determine the operating cost of the appliance, you will multiply the kilowatt hours (**kWh**) by the current **OPALCO** rate. Currently the rate per kWh is \$.0758

$$\text{kWh x OPALCO rate} = \text{Operating Cost}$$

FOR EXAMPLE:

Your fan is rated at 600 watts and you use it for 40 hours during the month. To find the kilowatt hours:

$$(600 \times 40) \div 1000 = 24 \text{ kWh for the month}$$

The cost to operate this fan would be:

$$24 \text{ kWh x } .0758 = \$1.82$$