

REGULATED
INDUSTRIES
COMMISSION **R**

SAVE
MONEY

on your next

electricity
bill

Protecting YOUR Interests



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RIC'S MISSION STATEMENT

To ensure the promotion of the highest quality of utility services at fair and reasonable rates while building a credible regulatory regime that responds adequately to stakeholders' concerns and also to ensure fairness, transparency and equity in the provision of utility services throughout the country.



There are many measures that residential customers can employ in order to reduce the amount of electricity that is consumed in their households and consequently reduce their utility bill.

This guide presents practical advice that can result in cost savings for customers. The cost estimations shown are based on appliance usage patterns observed in typical households. The average wattage (power requirement) for an appliance is presented along with the approximate hours of usage during the two month billing cycle and these values form the basis for calculating the estimated amount of kilowatt-hours (kWh) and bi-monthly cost.

As each household's use of appliances will be different from the average usage patterns presented here, you can adjust an appliance's wattage and hours of use in keeping with your situation in order to calculate accurate figures for the kWh consumed and the associated cost. The wattage of most appliances can be found on their electrical rating plate which is usually located on the back or underside of the appliance.





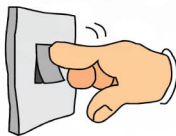
CONSUMPTION EXPENSES FOR COMMON HOUSEHOLD APPLIANCES

This listing ranks the appliances that are commonly used by residential customers in terms of Consumption Expense in decreasing order. Customers may have more than one of these appliances, hence, the electricity consumed may be greater than the amounts shown and is also dependent on the usage pattern of the appliance.

APPLIANCE	AVERAGE WATTAGE (WATTS)	EST. HOURS USED BI-MONTHLY	EST. kWh CONSUMED BI-MONTHLY	BI-MONTHLY COST (DOLLARS)
▪ Refrigerator <i>auto defrost 22 cu ft</i>	620	480.0	297.60	\$77.38
▪ Clothes Dryer	6,600	33.0	217.80	\$56.63
▪ Air Conditioner <i>5,150 BTU</i>	530	400.0	212.00	\$55.12
▪ Freezer <i>auto defrost 15 cu ft</i>	440	480.0	211.20	\$54.91
▪ Television Plasma 42"	330	370.0	122.10	\$31.75
▪ Shower Heater	3,000	27.0	81.00	\$21.06
▪ Television Flat Screen 27"	180	370	66.60	\$17.32
▪ Electric range <i>(Oven)</i>	12,500	5.0	62.50	\$16.25
▪ Water Pump <i>(1/2 hp)</i>	440	96.0	42.24	\$10.98
▪ Fan <i>(ceiling)</i>	80	400.0	38.40	\$9.98
▪ Toaster Oven	1,550	20.0	31.00	\$8.06
▪ Electric Kettle	1,500	20.0	30.00	\$7.80
▪ Fan <i>(circulating-16")</i>	60	400.0	28.80	\$7.49
▪ Computer <i>with 5 speaker Sound System</i>	300	75.0	22.50	\$5.85
▪ Iron	1,200	16.0	19.20	\$4.99
▪ Washing Machine auto <i>(20 lbs)</i>	512	33.0	16.90	\$4.39
▪ Stereo	100	164.0	16.40	\$4.26
▪ Microwave Oven (0.6 cu ft)	700	22.0	15.40	\$4.00
▪ Computer with printer	200	75.0	15.00	\$3.90

SAVE ENERGY

THIS
MEANS
YOU!



GENERAL CONSERVATION TIPS

- **UNPLUG** seldom-used appliances, such as an extra refrigerator. This can reduce your estimated kWh consumption by **1,785.60kWh / \$686.40** per year or greater (if the model is an older inefficient model.)
- Most homes continually have chargers for cell phones, digital cameras, cordless tools and other personal gadgets plugged in even when not in use. Use power strips (which protect and allow multiple devices to be plugged in) to easily switch off televisions, home theatre entertainment, cable boxes, VCRs, DVD players, stereos and chargers when not in use. A household's standby and off-mode power can amount to approximately **440kWh / \$114.40** per year.
- Make **INFORMED** appliance purchases. You can reduce the electricity bill by using high-efficiency large appliances and air conditioning equipment. While these models may be more expensive to buy than comparable models with lower or average efficiency, the savings will put money back into your pocket long before the appliance needs to be replaced. E.g. New energy-efficient refrigerator models can result in savings of about **800kWh / \$208.00** per year over 20 year old models.

LIGHTING

- Replace incandescent bulbs with compact fluorescent bulbs. Not only is less energy used but these bulbs last approximately 10 times as long as ordinary bulbs.
- Turn off lights when not in use or when leaving a room. Use "task lighting" (lamps, etc) for close work rather than lighting the whole room unnecessarily.

APPLIANCE	AVERAGE WATTAGE (WATTS)	EST. HOURS USED BI-MONTHLY	EST. kWh CONSUMED BI-MONTHLY	BI-MONTHLY COST (DOLLARS)
▪ Lighting 100W x 10 (incandescent)	1,000	600.0	600.00	\$156.00
▪ Lighting 23W x 10 (100W equivalent compact fluorescent)	230	600.0	138.00	\$35.88
YEARLY SAVINGS BY REPLACING 10 BULBS			462.00	\$120.12

COOLING & HEATING

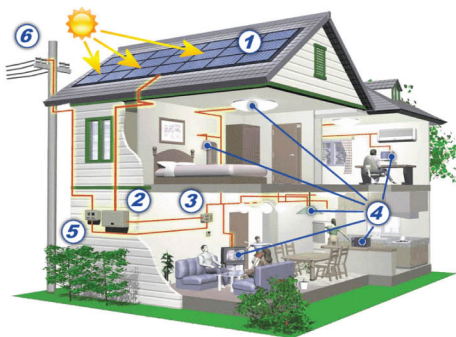
Two processes that consume a lot of energy in the house are the cooling of living spaces (air conditioning) or food storage (refrigerators and freezers) and the heating of water for various domestic purposes or the heating of air in clothes dryers. Any attempts to conserve energy in these activities will result in significant savings.



- The use of high-efficiency air conditioners and measures to reduce cooling loads can reduce energy use by 20-50%.

- The use of one circulating 16" fan in a room size between 100-150 sq. ft. rather than a 5,150 BTU air conditioner unit can result in savings of about 1,128kWh / \$293.28 per year.

- Replacing a 30 gallon Water Heater with Solar Water heating will reduce yearly electricity consumption by approximately 7,560kWh. The corresponding yearly savings of \$1,965.60 is currently estimated to payback for the installation cost of the new system in 5 years with further saving benefits over the remainder of the system's useful life (at least 10 years) and will also provide security against rising electricity costs.





TOP 4 HIGHEST ENERGY CONSUMING RESIDENTIAL DEVICES

Based on the estimated bi-monthly kWh consumption; typical usage of these devices will result in residential customers' bi-monthly kWh consumption approaching/exceeding 1000kWh with the balance above 1000kWh being charged at the highest tier.

APPLIANCE	AVERAGE WATTAGE (WATTS)	EST. HOURS USED BI-MONTHLY	EST. kWh CONSUMED BI-MONTHLY	BI-MONTHLY COST (DOLLARS)
▪ Swimming Pool Filter Motor	1,500	1,440.0	2,160.00	\$561.60
▪ Central Air Conditioner <i>2.5 tons</i>	3,500	400.0	1,400.00	\$364.00
▪ Water Heater <i>30 gallon</i>	4,500	280.0	1,260.00	\$327.60
▪ Air Conditioner <i>12,000 BTU</i>	1,500	400.0	600.00	\$156.00

To determine the cost of running appliances:

$$\begin{aligned} & \text{(Wattage x hours used)}/1,000 & & = \text{kWh} \\ & \text{kWh x cost per kWh} & & = \text{Usage Cost} \end{aligned}$$

The bi-monthly cost per kWh calculated for residential customers is based on the current rate at the lowest tier of 0.26 TTD per kWh. Residential customers' consumption is currently billed in three tiers:

- 1-400kWh @ 0.26TTD/kWh;**
- 401-1000kWh @ 0.32TTD/kWh;**
- >1000kWh @ 0.37TTD/kWh.**

The bi-monthly costs shown excludes VAT and customer charge.

Save Energy

Lighting

- Replace incandescent bulbs with compact fluorescent bulbs.

Washing/Drying/Ironing

- Wash full loads.
- Keep the lint screen in the dryer clean.
- Remove clothes promptly from the dryer and fold them, many items will require no ironing, or just a quick press.

Refrigeration/Freezing

- Refrigerator temperatures should be kept between 2oC and 5oC and freezer temperatures between -15oC and -18oC.

Cooking

- Use smaller kitchen appliances instead of the electric range depending on the size of the meal being prepared.

Other Appliances

- Flat panel computer monitors use a lot less power than traditional CRT monitors.
- When vacuuming, empty or replace the dust bag frequently.
- Keep Air Conditioned rooms closed and curtains pulled across windows as this will save energy.



Think.



Act.



Save.

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