



# Tips for Energy Conservation

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# Lighting System

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01. One of the best energy-saving devices is the light switch. Turn off lights when not required.
02. Many automatic devices can help in saving energy used in lighting. Consider employing infrared sensors, motion sensors, automatic timers, dimmers and solar cells wherever applicable, to switch on/off lighting circuits.
03. As far as possible use task lighting, which focuses light where it's needed. A reading lamp, for example, lights only reading material rather than the whole room.
04. Dirty tube lights and bulbs reflect less light and can absorb 50 percent of the light; dust your tube lights and lamps regularly.
05. Fluorescent tube lights and CFLs convert electricity to visible light up to 5 times more efficiently than ordinary bulbs and thus save about 70% of electricity for the same lighting levels.
06. Ninety percent of the energy consumed by an ordinary bulb (incandescent lamp) is given off as heat rather than visible light.
07. Replace your electricity-guzzling ordinary bulbs (incandescent lamps) with more efficient types.

# Room Air Conditioners

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01. Use ceiling or table fan as first line of defence against summer heat. Ceiling fans, for instance, cost about 30 paise an hour to operate - much less than air conditioners (Rs.10.00 per hour).
02. You can reduce air-conditioning energy use by as much as 40 percent by shading your home's windows and walls. Plant trees and shrubs to keep the day's hottest sun off your house.
03. One will use 3 to 5 percent less energy for each degree air conditioner is set above 22°C (71.5°F), so set the thermostat of room air conditioner at 25°C (77°F) to provide the most comfort at the least cost.
04. Using ceiling or room fans allows you to set the thermostat higher because the air movement will cool the room.
05. A good air conditioner will cool and dehumidify a room in about 30 minutes, so use a timer and leave the unit off for some time.
06. Keep doors to air-conditioned rooms closed as often as possible.
07. Clean the air-conditioner filter every month. A dirty air filter reduces airflow and may damage the unit. Clean filters enable the unit to cool down quickly and use less energy.

# Refrigerators

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01. Refrigerator motors and compressors generate heat, so allow enough space for continuous airflow around refrigerator. If the heat can't escape, the refrigerator's cooling system will work harder and use more energy.
02. A full refrigerator is a fine thing, but be sure to allow adequate air circulation inside.
03. Think about what you need before opening refrigerator door. You'll reduce the amount of time the door remains open.
04. Allow hot and warm foods to cool and cover them well before putting them in refrigerator. Refrigerator will use less energy and condensation will be reduced.
05. Make sure that refrigerator's rubber door seals are clean and tight. They should hold a slip of paper snugly. If paper slips out easily, replace the door seals.
06. When dust builds up on refrigerator's condenser coils, the motor works harder and uses more electricity. Clean the coils regularly to make sure that air can circulate freely.
07. For manual defrost refrigerator, accumulation of ice reduces the cooling power by acting as unwanted insulation. Defrost freezer compartment regularly for a manual defrost refrigerator.

# Water Heater

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01. To help reduce heat loss, always insulate hot water pipes, especially where they run through unheated areas. Never insulate plastic pipes.
02. By reducing the temperature setting of water heater from 60 degrees to 50 degrees C, one could save over 18 percent of the energy used at the higher setting.

# Microwave Ovens & Electric Kettles

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01. Microwaves save energy by reducing cooking times. In fact, one can save up to 50 percent on your cooking energy costs by using a microwave oven instead of a regular oven, especially for small quantities of food.
02. Remember, microwaves cook food from the outside edge toward the centre of the dish, so if you're cooking more than one item, place larger and thicker items on the outside.
03. Use an electric kettle to heat water. It's more energy efficient than using an electric cook top element.
04. When buying a new electric kettle, choose one that has an automatic shut-off button and a heat-resistant handle.
05. It takes more energy to heat a dirty kettle. Regularly clean your electric kettle by combining boiling water and vinegar to remove mineral deposits.
06. Don't overfill the kettle for just one drink. Heat only the amount of water you need.



# Computers

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01. Turn off your home office equipment when not in use. A computer that runs 24 hours a day, for instance, uses - more power than an energy-efficient refrigerator.
02. If your computer must be left on, turn off the monitor; this device alone uses more than half the system's energy.
03. Setting computers, monitors, and copiers to use sleep-mode when not in use helps cut energy costs by approximately 40%.
04. Battery chargers, such as those for laptops, cell phones and digital cameras, draw power whenever they are plugged in and are very inefficient. Pull the plug and save.
- 05 Screen savers save computer screens, not energy. Start-ups and shutdowns do not use any extra energy, nor are they hard on your computer components. In fact, shutting computers down when you are finished using them actually reduces system wear - and saves energy