RESIDENTIAL TIPS

simple ways, great savings
LIGHTS

Check the suggestions to minimizing the Light Load

- Make maximum use of natural daylight. Add a skylight to bring more sunshine to dark areas.
- While decorating your home, keep illumination in mind. Light coloured walls and ceilings reflect more light, making the room brighter.
- Make sure your everyone at home turns off all lights while leaving the room.
- When decorating your home, install clean lighting fixtures, lampshades and reflectors. A cleaner lamp gives a brighter output.
- If you are using multi-bulb fixtures, use lower wattage bulbs and save energy.
- Use task lighting instead of illuminating the whole room.
- Install motion-sensors for outside lighting. They turn the lights off when there is no motion and hence are ideal for passages, corridors and porch lighting.
- You can also use solar powered lights for outdoor lighting.
- You can change the light intensity by using dimmers that automatically detect and prevent energy wastage.
- Replace conventional lighting fixtures with EE ones. You can refer to the replacement chart to decide the right replacement for your home lighting.
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REFRIGERATORS

Check the suggestions to minimizing the refrigerator load

- Always ensure the refrigerator is installed in a well ventilated room.
- The refrigerator should not be near heat sources like heating equipment, windows, gas stoves, ovens etc.
- Keep at least a 6 inches gap between walls and the refrigerator for circulation of air. This improves the cooling efficiency.
- Change temperature setting according to the seasons.
- Keep 'automatic Ice maker' in OFF mode. Whenever required turn it on.
- Avoid frequent opening of refrigerator. Do not keep refrigerator door open for a long time.
- Allow hot foods to cool before placing them in the refrigerator.
- Cover liquids and wrap foods stored in the fridge. Uncovered foods release moisture, which puts a load on the compressor.
- Defrost single door refrigerators at regular intervals.
- Clean the door gasket and sealing surface regularly.
- Clean your refrigerator's coils (back) and air intake grill (below the doors) regularly.
- When buying a new fridge, look for the energy efficient star labelled Refrigerator. More the stars in red, more the efficiency and less the electricity consumption.
- To find more about energy efficient air fridges, please visit the website of Bureau of Energy Efficiency (BEE) at http://www.bee-india.nic.in/
- Look for the capacity appropriate for your requirement.

Check the suggestions to minimizing the washing machine Load

- Choose the capacity as per your requirement depending upon your family size, frequency of using the washing machine etc.
- Do not run the machine for multiple half loads. Instead use it for full loads only. The machine uses same amount of Electricity for half loads and full loads.
- Run Cold Water washing cycles instead of hot water cycles. It saves upto 90% of energy that is otherwise used by the machine to heat up the water.
- Always switch off Washing Machine from the "plug point switch" as a safety precaution and to prevent any "Stand-by Power Loss".
- Dry your clothes under sun or in natural air instead of drying them in the Washing Machine. It saves the power otherwise being used for the Drying cycle.
- Help the utility to control peak power demand by using non essential appliances before 10am or after 9pm.
**AIR CONDITIONING**

Check the suggestions to minimizing the air conditioning load

- Allow adequate space for the installation, maintenance, and repairs of AC system.
- Place the condensing unit in a shady spot.
- Get the installation done by authorised professional personnel observing manufacturer’s instructions.
- Use fan in stead of air conditioners whenever possible. They use much less energy.
- Do not set temperature setting too low as costs you additional power. 24°C is comfortable for human body and is recommended.
- Keep the room doors, windows and vents tightly shut when Air Conditioner is running, to prevent leakage of cooled air.
- Check the air conditioner settings. Make sure the ‘fresh air’ vent is closed. Open this vent once everyday for fresh air intake.
- Draw the curtains and drapes of the room during summer months to prevent solar heat gain.
- Clean the air conditioner filter every month.
- Air conditioner condenser should be cleaned periodically by seeking professional help.
- Recycle or recharge the air conditioner refrigerant every few years by seeking professional help.
- If your air conditioner is not giving desired output, consider replacing it with a new Energy Efficient air conditioner.
- Look for the energy efficient BEE Star labeled air conditioner. More the stars in Red, more the EER (Energy Efficiency Ratio) and lesser the energy consumption.
- Use the ceiling fan along with the AC to increase the the circulation of cool air and to enhance the cooling effect.
- If wish to know more about energy efficient air conditioners visit the website of Bureau of Energy Efficiency (BEE) at www.bee-india.nic.in

**WATER HEATERS**

Check the suggestions to minimizing the Water Heaters Load

- Turn ON water heaters only when you are going to use the heated water.
- Avoid overflow of hot water through buckets. Turn off the water taps in wash-basin and shower when not in use even for a short time.
- Repair leakages in the water heater connectors and water taps immediately.
- Do not keep the storage type water heater ‘ON’ once your hot water requirement is over to avoid any standby heat loss.
- Always use water heaters with in-built thermostat to control the temperature of water.
- Carry out periodic maintenance to check the electrical connections, heating element and thermostat operation periodically.
- Keep the thermostat setting for water heaters to lower temperature for saving energy. The factory setting for thermostat is usually set at higher temperature around 60oC. A setting of 40-50oC is usually recommended.
- Use geysers with ‘Seasonal Selection’ control to optimize the energy consumption as per season.
- Choose from the Storage type (boiler) or Instant water heater depending upon your family size and requirement of hot water.
- For your next purchase pick BEE star labeled water heater. More the stars in RED, more the savings.
- Use Gas water heaters or Solar water heaters in place of electrical ones.
- Solar water heaters also produce hot water during rainy season and winter.
Check the suggestions to minimizing the air conditioning load

➢ Turn on the computer, monitor, printer only when you need it.
➢ Turning a computer on and off doesn't use any extra electricity and won't damage your computer.
➢ On an average 50% of the power taken by a desktop is converted into heat. Hence switch it ON only when you need it.
➢ Save power by turning off the computer monitor when you'll be away from it for more than 15 minutes.

➢ Screen savers are NOT energy savers. Automatic switching to sleep mode or manually turning monitors off is always a better energy-saving strategy.
➢ Consider buying a laptop for your next computer upgrade. Laptops use upto 90% less energy than desktop computers.
➢ Select the right-sized monitor / TV to meet your needs. The bigger the monitor, the more energy it uses.
➢ Consider using flat panel liquid crystal display (LCD) monitors/ TVs versus conventional CRT monitors / TVs. LCD monitors provide up to 70% power savings and provide up to twice the lifespan of CRT monitors.

KITCHEN APPLIANCES

Check the suggestions to minimizing the Kitchen Appliances

➢ Use leftover heat in the oven to keep the food warm. Ovens retain heat for up to 30 minutes after they have been turned off.
➢ Inspect the seal around the oven. If it is damaged or perished replace it.
➢ Use microwave ovens in place of conventional electric ovens. Microwave oven cooks food faster and hence reduces the energy consumption substantially.
➢ Microwave oven cooks food from the outside edge toward the centre of the dish, Hence while cooking more than one item, place larger and thicker items on the outside.
➢ While using an electric kettle, do not use the keepwarm feature. In this mode kettle has to constantly keep reboiling every time the temperature of the liquid inside drops below a certain level, using extra electricity.
➢ Only boil the amount of water required for your preparation.
➢ Put lids on pans while cooking food.
➢ To maximize the heat generation always use flat bottom pans on hot plates and electric stoves.
➢ Use gas stoves rather than using electric ovens/ microwave ovens or electric stoves to save on electricity consumption.
➢ Turn off the appliances from plug point switch as a safety precaution and to avoid any 'Stand By Power Loss'.
➢ Standby Power is electrical power that a device consumes when not in present use, but plugged in to a source of power and ready to be used.

➢ Use gas stoves rather than using electric ovens/ microwave ovens or electric stoves to save on electricity consumption.
➢ Turn off all electrical appliances from Plug Point Switch when not in use.
➢ Turn off the battery chargers as soon as your mobile phone is charged.

➢ It is the power consumed by appliances when they are turned off using a remote control and not from the 'Plug Point Switch'.

➢ Turn on the appliances only when you are done with the preparation and are ready to operate it.
➢ Defrost the frozen food before keeping into oven.
➢ Minimising preheat time as per the requirement of food to be cooked and avoid energy wastage.
➢ Cooking with a full oven, the energy required to cook multiple dishes together is less than cooking one dish at a time repeatedly.
➢ Not opening the door of the oven to check if the food is done. every time you open the oven door, the oven temperature is lowered by around 25 degrees.
➢ Selecting ovens with window that allow you to check food without opening the door.
➢ Using glass or ceramic pans that reduces the energy requirement.
➢ Turning off the oven a little before the food is ready, this completely utilizes the heat available inside.

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