



COOL ENERGY SAVING TIPS FOR

AIR CONDITIONERS

Minimize the opening and closing of doors in air-conditioned rooms.

Avoid setting the temperature too low.

The objective of AC Unit is to cool the room to a comfortable temperature. Lower temperatures require the compressor to work more frequently. The higher the temperature of the thermostat the less energy will be used. Recommended temperature range for air-conditioner units in Guyana is 25 to 26 degrees Celsius.

Instead of setting the temperature lower and the fan speed higher, focus the vents where needed. You will save a significant amount of energy.

Use an additional fan to help circulate air

Always keep Units serviced and clean

Monthly cleaning of the air filters will improve the performance and life span of the air-conditioner and will save energy.

Ensure the air-conditioned room is properly insulated.

Inspect air-conditioned rooms to ensure they are properly insulated. Replacement of louvre windows, use of door sweeps and other insulation techniques result in better functioning units and reduce energy consumption.

Know your Energy Costs

Electrical energy is measured by the kilowatt hour (kWh).

For residential consumers, 1 kWh of energy costs \$53.78.

A bulb rated at 100Watts consumes 100Watts for each hour of operation.

If a 100W bulb is on for 5 hours, the amount of energy consumed is 100Watt x 5 hours = 500 Watt hours.

If the same bulb is in operation for 5 hours per day in a 31 day month, the energy consumed in that month would be:

$$\begin{aligned} 100W \times 5 \text{ (hours per day)} \times 31 \text{ (days per month)} \\ &= 15,500 \text{ Watt hours per month} \\ &= 15.5 \text{ kilo Watt hours per month} \\ &= 15.5 \text{ kWh/month} \end{aligned}$$

The cost of operating the bulb per month at residential rates would be:

$$\begin{aligned} 15.5 \text{ (kWh/month)} \times \$53.78 \text{ (per kWh)} \\ &= \$833.59 \text{ per month} \end{aligned}$$

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Building Design

ENERGY
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BUILDING DESIGN TIPS

A new home provides the best opportunity for energy efficient design. It's the ideal time to take advantage of the sun's rays and natural cooling.

1 Reflect Heat away from the home by installing white window shades, drapes or blinds.

2 Make maximum use of fresh air instead of air conditioning.

3 Grow trees and vines around the home or office when appropriate since they provide shading and cooling.



4 Install windows with double glazing and spectrally selective coating to reduce heat build-up.

5 Paint exterior with light colours to keep the building cooler
Light colours and pastel shades have good natural solar reflectivity than darker shades.

6 Decorate with light colours.



Look for ways to make use of daylight.

Use loose-weave curtains on your windows to allow daylight to penetrate the room while preserving privacy.

Placement of rooms, doorways, windows and air vents should be considered when planning the layout of your home.

Rooms should be oriented to maximize natural lighting and airflow taking advantage of the North Easterly winds.

Explore the use of renewable energy options where appropriate.

Solar power and wind power can power lights or equipment.

Solar Panels installed on the roof of a house.



7 Use roof overhangs to protect exterior from moisture & sun.



8 Ensure lighting fixtures are not placed too high in the building.
Lowering them would increase the available light output and reduce the need for extra lamps.

9 The colour of a roof can impact on thermal performance.
Light-coloured roofs can help reduce temperatures by reflecting the sun's rays.

10 Install ceiling fans to help circulate air in rooms.

11 Install occupancy or motion sensors on lights in rooms that aren't used often.

12 Windows such as louvres & casements help to redirect breeze into the home.

13 Build with the right materials.
Construction materials such as concrete and brick can absorb and hold large amounts of heat. This heat is then released when the air becomes cooler.

14 Install light sockets that carry switches, so appliances plugged into the outlets can be turned off with the flip of a switch.

