



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  $100\text{Watt} \times 5 \text{ hours} = 500 \text{ Watt hours}$ .

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:

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

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  
CONSERVATION  
TIPS**



**GUYANA ENERGY AGENCY**

# 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.

