



Energy Conservation Booklet

Jyoti Power Sol!

Lighting up Lives!®

A Tata Power Initiative





Tata Power Energy Conservation Program Mumbai

The Energy Crisis that Mumbai currently faces is getting graver by the minute and it is every individual's responsibility to save electricity. Apart from the significant contribution we can make towards curbing energy wastage, we will also help in conserving our fossil fuel reserves and mitigating emission of greenhouse gases that lead to global warming and climate change.

Tata Power Energy Club is formed for curbing energy wastage through various active measures. We have developed an interactive website and our MR.ENER-JI intends to engage youth as energy savers, to reduce power wastage and protect our resources and environment. Tata Power has gone one step ahead and developed an interactive website www.tatapowerenergyclub.com to bring together this energy brigade.

If we act with urgency of purpose, we can quickly and easily cut down monthly energy expenses and help reduce global warming.

Shift away from the 10am - 8pm Peak time:

There is a huge demand on the power supply during these hours as commercial establishments (the heart of Mumbai) switch on power. Let us avoid adding to the load by using our daily appliances before 10 am or after 8 pm washing machines, geysers, etc.

Keep the ACs at 26°C:

Every time one more AC is switched on and every time an AC's temperature is lowered by 1 more degree, a huge load is added to the power supply. We can avoid power cuts if we give up 'freezing' for 'cool enough'. Let's all go 26 from now on it's not that hard to get used to.

Switch from the Plug Point:

We can save an unbelievable 5% of Mumbai's power if we switch off from plug points! Because, most of us don't realize that every time we leave a plug point 'ON' after switching on electrical appliance 'OFF' from the machine button, power is still being consumed in the so called 'stand-by mode'. So let's switch off our ACs, TVs, washing machines, microwaves, mobile chargers, building water pumps, etc from the plug point.

We request you to send all your queries, suggestions and feedback to engyclub@tatapower.com. Come forward and help us preserve Mother Earth and prevent global warming by Lighting up Lives with responsibility!



LIGHTS



- One of the best energy saving devices is the main switch. Turn off lights, fans and other appliances from the main switch, when not in use.
- Use Fluorescent tube lights and CFLs (compact fluorescent lamps), as it saves about 70% of electricity while delivering the same luminosity.
- Instead of using artificial light during the day time make optimum use of natural light.

ACs



- Keep ACs at 26°C. For each degree that is set above 22°C, you will use 3 to 5 percent less energy. Keep ACs at 26°C.
- Set your window ACs with non digital display at 'low cool' or 'medium cool' instead of 'high cool'.
- Turn on your ACs one hour after office commences and turn them off an hour before it shuts.
- Clean AC filters increase the efficiency of cooling and energy consumption. Ensure that filters are cleaned at regular intervals.
- Use tinted glass or solar film on your windows - they save as much as 40% energy.

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REFRIGERATOR



- Allow enough space for air circulation around the refrigerator. Keep a six inch distance from the wall to allow heat generated by the compressor and motor to escape.
- Do not stuff your refrigerator. Adequate space for air circulation increases cooling efficiency.
- Set the temperature to 'medium' for optimum cooling.
- Do not keep the refrigerator door open unnecessarily for long periods. Decide what you want before you open the door.
- Make sure that food items are cooled to room temperature and securely covered before they are placed in the refrigerator.

WASHING MACHINE



- Use your washing machine with full load as the electricity usage remains same even when you run it with half the load.
- When purchasing, choose the energy efficient one.
- Always switch it off from the plug point as the 'stand-by' mode still consumes power.
- Avoid using the washing machine between 10am and 8pm as it is the peak hour of power consumption.

WASHING MACHINE



- Use a laptop computer as they use much less energy than desktops. If you use a desktop, use an LCD monitor. A typical desktop computer uses about 65 to 250 watts. A laptop uses about 15 to 45 watts.
- Make sure your computer is set to sleep automatically when you take short breaks though switching it off is the best option for longer breaks. When your computer is in sleep, standby or hibernate mode the computer uses 0 to 6 watts of electricity.
- A screensaver does not save any energy - you save energy only if the monitor goes blank. If you turn the monitor off at the switch it will use 0 to 10 watts of electricity.

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PLUG POINTS



- What most of us fail to realize is that every time we leave a plug point 'on' after switching an electrical appliance 'off' from the machine button, power is still being consumed, in the 'stand-by mode'.
- Make it a habit to switch off your appliances from the plug point; it saves an unbelievable 5% of power.
- Switch off your appliances like the TV, music system, juicer, mixer etc. from the plug point itself, as unknowingly we end up keeping them on stand-by mode and waste unnecessary power.
- Don't keep your computer monitors on 'sleep' or 'screensaver' mode as this consumes power as well.

PEAK HOUR



- The time zone between 10am to 8pm witnesses the highest demand on the power system, due to commercial entities that operate during this period.
- Avoid using power between 10am and 8pm as far as possible.
- This can be done by avoiding the usage of geysers, washing machines, water pumps etc. at this peak hour.
- Try ironing your clothes at one go, either before 10 am or after 8pm.
- If possible wash your clothes before 10am or after 8pm.

PEAK HOUR



- Unplug mobile phone and all battery chargers when the batteries are fully charged. Many chargers draw power even when the device is not plugged into the charger.
- Use staircase instead of an elevator as far as possible because lifts/ elevators are high energy consumers. Each flight of stairs that you walk up saves enough energy to power 150 light bulbs.
- Use electronics devices such as torches that have solar powered cells instead of single-use batteries. Solar energy is renewable energy.

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ENERGY CALCULATOR

Appliances	Approximate Load (Watts)	No. of Equipment	Total Load (Watts)	Average Hours / Day	No. of Days in a month	Approximate Units / Month
	A	B	C = A x B	D	E	Units = CxDxE / 1000
General Lighting						
	CFL Lamps					
		5				
		8				
		11				
		15				
	20					
	Regular Lamps					
		25				
		40				
		60				
	100					
	Tube Lights					
		36				
	40					
Heating Appliances						
	Electric Iron					
		600				
	1000					
	Immersion Heater					
		1000				
	1500					
	Water Heater / Geyser					
		1000				
		1500				
	2000					
	Toaster					
	750					
	Room Heater					
		1000				
		1500				
	2000					
Cooling Appliances						
	Refrigerator (165 liters)					
	(210 liters)	150				
		270				
	Air - Conditioner					
		1000				
	1500					
	Table Fan / Ceiling Fan					
		60				
	100					
	Exhaust Fan					
	150					
	Washing Machine					
	700					
	Radio					
	40					
	Television					
	200					
	Mixer-cum-Grinder					
	200					
	Computer					
	200					
	Pump Motor					
		380				
	740					
			Total Load			Total Consumption

For details visit www.tatapowerenergyclub.com

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ENERGY AUDIT SHEET

Month	Last Year (LY)			Current Year (CY)			Units Saved / Extra (CY-LY)	Amount Saved / Extra (Rs.) (CY-LY)
	Bill No.	No. of Units	Bill Amount (Rs.)	Bill No.	No. of Units	Bill Amount (Rs.)		
January								
February								
March								
April								
May								
June								
July								
August								
September								
October								
November								
December								
Total Savings								

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