



JIYO POWER SE ANTHEM!

“Pal pal.. hum roshan kare, yeh jahan.. hum behetar banaye..
 Badle Mausam, Badle Zindagi.. Badle na humari yeh koshish...
 Let’s make a difference, Let’s light up lives, Jiyo, Power Se!”
 Let’s make a difference, Let’s light up lives, Jiyo, Power Se!”
 “Together, we can Together, we should...
 It’s time to think, Time to act.. Time to light up lives...
 Time to save energy “Jiyo.. Power Se!!”
 Let’s make a difference, Let’s light up lives, Jiyo, Power Se!”
 Let’s make a difference, Let’s light up lives, Jiyo, Power Se!”

How did you like the programme?
 Write to us clubenerji@tatapower.com



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ACCOMPLISHED 10 YEARS OF MAKING RESPONSIBLE CITIZENS!

Focus on “**Say No to Plastics**”, Energy &
 Resource Conservation, Moral & Civic Values



Years



Who is a Responsible Citizen ?

An Enerji Champion, is the one who follows Civic & Moral Values and actively practices & propagates energy & resource conservation and also protecting the environment through measures like Saying No to Plastics!

Tata Power Club Enerji is about creating responsible citizens with focus on conservation of Resources, Combating the climate change by saying no plastics , disaster management preparedness + Energy & Natural Resource Conservation + Conservation of civic & moral values + building a healthy ecosystem through responsible citizens.

Why is it important to save electricity?

The production of electricity uses coal, water (hydro-plants), oil/ gas (bio-fuel), which releases huge amounts of CO₂ into the atmosphere and depletes the natural resources. CO₂ is a greenhouse gas that acts as a blanket surrounding the Earth. This blanket prevents the sun's heat from escaping into space, keeping the Earth warm. When we release more greenhouse gases into the atmosphere, Earth gets even hotter, leading to Global Warming.

As a result of global warming, our cities are getting hotter and floods & storms are becoming common. These are all signs of Climate Change.

However, production of electricity is not the only source of CO₂ emissions:

FUEL: There are over 8.5 crore vehicles in India, most of which burn petrol or fuel, thus releasing CO₂

WATER: Supplying Water, whether by pumping it from below the ground or transporting it in tankers, requires energy. Producing this energy releases CO₂

WASTE: Producing, packaging, transporting, and disposing off products consumes energy. This energy consumption can be reduced if we Reduce, Reuse, Recycle

TREES: The more trees we cut, the less CO₂ these trees will absorb from the atmosphere

To truly curb climate changes, we must therefore focus not only on Energy Saving, but rather on Resource Conservation!

Why is it important to Say No To Plastics?

- Plastic bags are one of the major reasons for the environment and the oceans. They have serious consequences on the ecosystem, on marine animals and on mankind. It harms animals in the water when they eat plastic bags thinking they are jellyfish.
- Plastic is not biodegradable.
- It does not break down under high pressure and heat unlike the other waste materials. It cannot be destroyed.
- Manufacturing of plastic bags is harmful to the environment because non-renewable resources are used (petroleum and natural gas). The manufacturing process itself uses toxic chemicals, pollutes the atmosphere and consumes energy

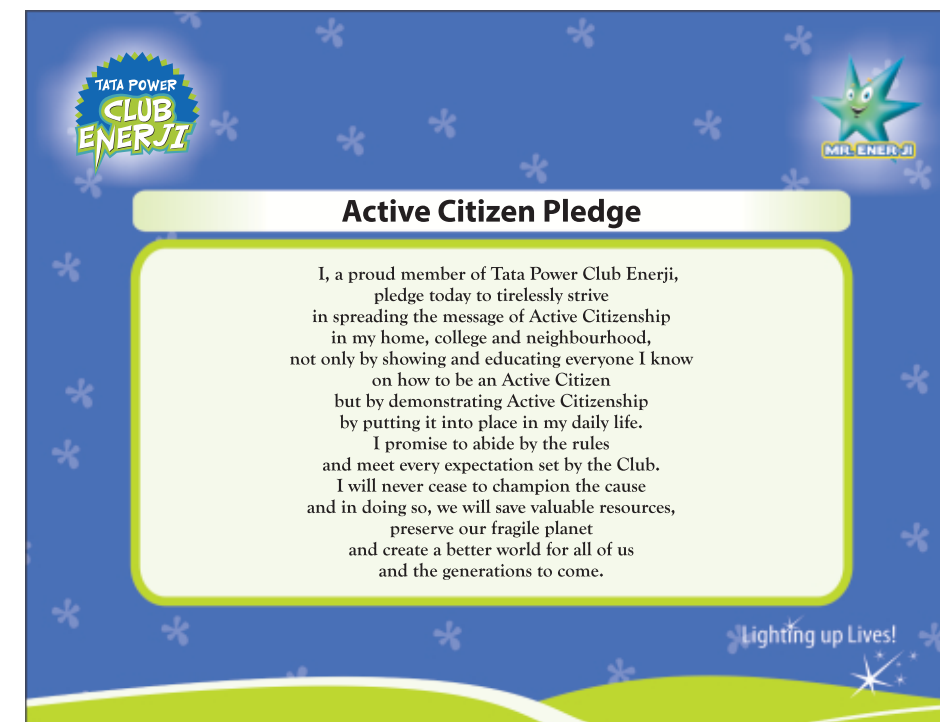
So this year we will focus on Saying No To Plastics while continuing our efforts to save Electricity, Fuel, Water, Trees and Manage Waste



Joining The Tata Power Club Enerji

You and your family can become members of the TataPower Club Enerji by taking the following three steps:

- 1) Take the pledge given below:



CUT ALONG THIS LINE

- 2) Fill in these details: _____
 Full Name : _____
 Name of your school: _____ Std: _____
 Mother's Name: _____ Father's Name: _____
 Email ID: _____ Tel No.: _____
- 3) Tear out this section (which has your family's details) and hand it over to your Class Teacher along with a copy of your latest electricity bill.

You and your family will soon be registered as members of the Tata Power Club Enerji!

OR

Log on to www.clubenerji.com to become member of the Tata Power Club Enerji.



carbon footprint calculator

NAME: _____ GENDER: _____ AGE: _____

SCHOOL NAME: _____

CLASS: _____ DIVISION: _____ CITY: _____ PINCODE: _____

Answer the questions by selecting the best answer from the given options

1) What is your average monthly electricity bill at home?

- A. less than Rs 500
- B. Rs 500 to 1000
- C. Rs 1000 to 2500
- D. More than 2500

2) How do you travel to school?

- A. I walk or cycle
- B. I use the school bus/local bus/train
- C. I carpool or share a taxi/auto rickshaw with friends
- D. I travel by myself in a car/taxi/auto rickshaw

3) How long do you take a bath for?

- A. 3-5 minutes
- B. 5-10 minutes
- C. 10-15 minutes
- D. 15 minutes or more

4) What do you do with gray water?

(Water left over from washing utensils, cloths, etc.)

- A. Re use it to water the garden or plants in your home
- B. Throw it on the tree outside your house
- C. Pour it over dirty utensils
- D. Throw it in the Kitchen sink

5) How do you segregate the garbage at home?

- A. The kitchen waste is put in a separate container and the rest of the garbage is put in another container
- B. All the garbage is thrown in a single container which the Municipal Corporation people pick up
- C. The garbage is thrown in a big dump next to your house
- D. The garbage is filled in polythenes and kept on the road for the Municipal Corporation people to pick up

6) How can you help in Afforestation?

- A. Adopting and caring for trees in and around your residential area
- B. Pledging to plant at least two saplings every year
- C. Planting saplings somewhere where you can care for them regularly
- D. All of the above

Scoring

For every A you selected, give yourself 1 point
 For every B you selected, give yourself 2 points
 For every C you selected, give yourself 3 points
 For every D you selected, give yourself 4 points

Assessment

- 16 to 20 points: Your high carbon footprint is stressing the planet out! You need to start saving energy and natural resources by cutting down your electricity water avail waste fuel consumption.
- 11 to 15 points: You are energy-conscious but can still do more to reduce your carbon footprint.
- 5 to 10 points: You have a low carbon footprint and are a friend of the planet. Make sure to spread the message of energy and resource saving amongst friends and family.

This Personal Carbon Footprint Calculator is specially designed for school students. It will help you estimate your carbon footprint based on your response to a few easy questions. The questions posed relate to carbon-intensive activities in your everyday life. An honest answer will help you know your carbon footprint and how your lifestyle choices could influence the same.



Understanding Climate Change & the need to Say No to Plastics

Harmful Effects of Plastics

- Plastic lasts forever. It takes 1 plastic bag more than 600 years to decompose.
- Plastic affects human health. Harmful chemicals from plastic leach out and are found in our blood and tissue. It can lead to cancer.
- Plastic threatens wildlife. Birds get entangled in plastic while other animal mistake it for their food.
- Plastic Doesn't Decompose
- Plastic Pollutes the Air, land and water.

Effects on Human Health

- Due to the use of chemical additives during plastic production, plastics have potentially harmful effects that could prove to be cancer-causing agents or promote endocrine disruption.
- Humans can be exposed to these chemicals through the nose, mouth, or skin.

Effects animals/Marine life

- Entanglement - Getting entangled in plastic debris has caused many death including marine life, birds and animals. They have either drowned or choked themselves to death.
- Ingestion - Some species in marine are consumers of jelly fish. They often confuse plastic bags with their natural prey jelly fish. Some of the tiniest part of plastics are consumed by small fishes. Plastic pollution does not only affect animals that live solely in oceans. Seabirds are also greatly affected. In 2004, it was estimated that gulls in the North Sea had an average of thirty pieces of plastic in their stomachs.

How you contribute to saving the environment by saying no plastics?

- Stop Using Plastic Bags, Plastic Covers, cheap plastic cutleries, Use & Throw plastic products and plastic bottles
- Do Not Buy Plastic in any form
- Take Paper Bags from our Home for Shopping

TAKE A PLEDGE - NOT BUY or USE PLASTIC

Use of other materials instead of plastic through following steps:

- a) Instead of using plastic bottles, use glass or stainless steel bottles.
- b) Instead of plastic bags use jute bags.
- c) Instead of plastic glasses or spoons use paper cups.
- d) Use glass straws or don't use anything.



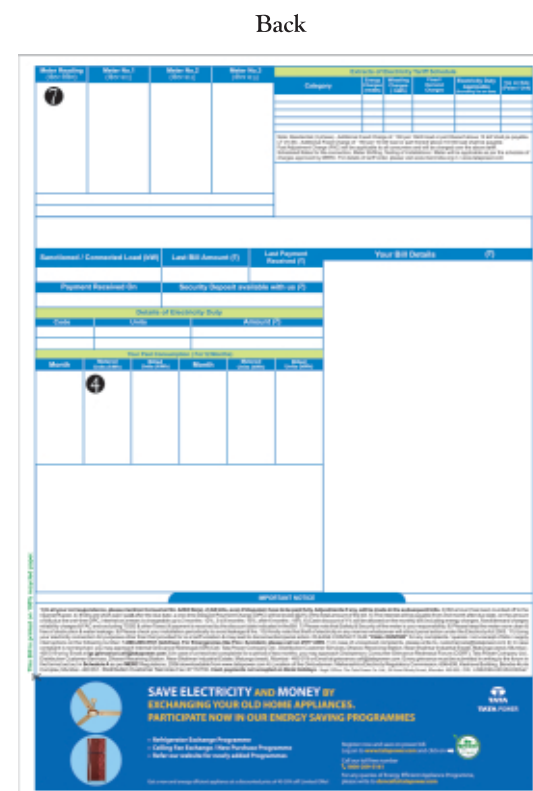
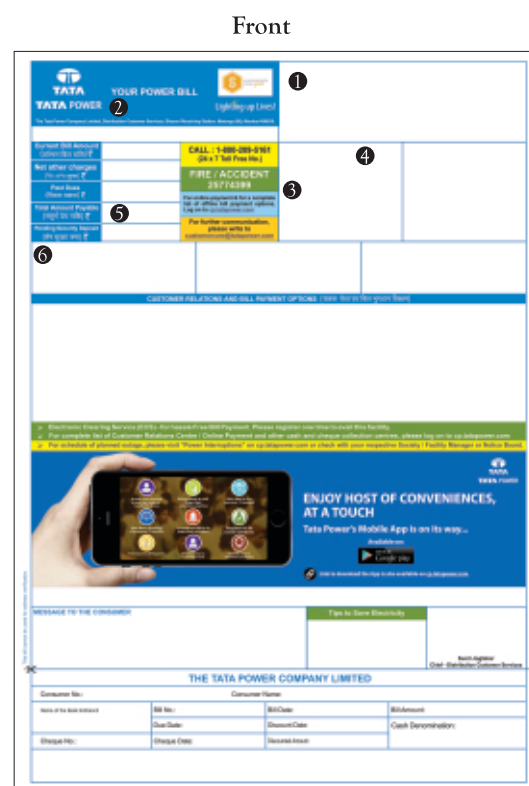
Keep Tabs on your Electricity Bills

How to read your electricity bill:

Electricity bills tell you how much electricity you have used and how much you have to pay for it. A lot of people have trouble reading their electricity bills so here's a quick guide to help you understand your own electricity bill.

Any electricity bill, regardless of what company it comes from should have the following information:

1. Your name and address.
2. The name of your energy supplier (such as Tata Power or BEST) and its contact details.
3. The period of the bill i.e the number of days for which you are being charged for using electricity (almost all electricity bills are for a period of one month).
4. The number of units of electricity you've used (this is given in kWh).
5. How much you need to pay (including any money owed from previous bills).
6. The date on which your payment is due (this is a date you don't want to miss!).
7. And finally, your meter number (so you know it's actually your meter they are measuring – it will always be the same!).



Energy Calculator

Use the ENERGY CALCULATOR table given below to calculate your own energy usage at home. Feel free to change the wattage if you know the exact load of your electrical appliances (column A).

Appliances	Approx. Load (Watts)	No. of Equipment	Total Load (Watts)	Average Hours / Day	No. of Days in a Month	Approx. Units / Month
	A	B	C = A*B	D	E	Units = C*D*E/1000
GENERAL LIGHTING						
Regular Lamps	60					
Tube Lights	36					
CFL	8					
LED	3					
HEATING APPLIANCES						
Electric Iron	600					
Immersion Heater	1000					
Water Heater Geyser	1500					
Toaster	750					
Room Heater	1000					
COOLING APPLIANCES						
Refrigerator (165 L)	150					
Airconditioner	1500					
Table Ceiling Fan	60					
Exhaust Fan	150					
OTHERS						
Washing Machine	700					
Television	200					
Plasma (42 inches)	270					
Desktop Computer (15" CRT monitor)	200					
Laptop	45					
Radio	40					
Mixer-cum-Grinder	200					

CUT ALONG THIS LINE



Conducting an Energy Audit

You can keep track of the energy you have used each month at home by filling in the Energy Audit Sheet given below. Look at the page with the title 'KEEP TABS ON YOUR ENERGY BILLS' if you need any help fill this Energy Audit Sheet.

Complete this Energy Audit For the next five month starting today. Conduct Energy Audit Review by answering the question on next page. Submit both of these pages duly filled in to the teacher after tearing along the performed line. The last month of submission is January 2017.

Month	Last Year (LY)			Current Year (CY)			Units Saved / Extra (CYLY)	Amount Saved / Extra (Rs.) (CYLY)
	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 Saving								



The Energy Audit Sheet helps you compare the Energy per month and helps you calculate how much money you have saved. The energy Audit Review helps you to assess how you improved your Energy Audit Results.

- Did you draw up a plan to save Energy? Yes / No
- From where did you learn most about saving Energy? Tick the right answer:
 - This Energy Saving Booklet
 - The Tata Power Club ENERJI Website
 - Teachers & Parents
 - Internet search
 - All of the above
- What according to you were the best ways that worked in making your entire family save Energy?


- List the different ways by which you saved energy?
 -
 -
 -
- In your Audit which month had the highest bill? Why was this so?

- Do you have any new ideas that will help you save even more energy in the coming months? Write these down.




The 10 Commandments of Say No to Plastics, Active Citizenship, Disaster Management, Energy, Resource and Moral & Civic Values Conservation


While we learn Say no to Plastic, Active Citizenship and Disaster Management, we must keep up our efforts to Manage Waste, and Save Electricity, Fuel, Water & Trees. Taking continuous steps across all the pillars of Energy & Resource Conservation is the key to the success of our goal to make this planet a better place!




SWITCH OFF FROM THE PLUG POINT




USE LEDS AND BEE 5-STAR RATED APPLIANCES




KEEP ACS AT 26°C OR MORE




REDUCE WATER & FUEL CONSUMPTION AND RECYCLE WATER




PROTECT AND PLANT TREES




ALWAYS KEEP A LIST OF IMPORTANT CONTACT NUMBERS HANDY.
EG. EMERGENCY SERVICES LIKE POLICE, AMBULANCE AND FIRE BRIGADE




ALWAYS KEEP AN EMERGENCY SAFE KIT HANDY



LOWER THE USE OF ELECTRIC HEATING AND COOLING APPLIANCES



SWITCH OFF



TRAVEL EFFICIENTLY

Facebook just rolled out a 'Town Hall' feature in the US, which lets users connect with offices of their representatives at all levels of government - city, state and federal. Users can also switch on 'voting reminders', so that one never misses an election day. Sociologists expect that with Facebook's civic engagement tools, there will be an increase in 'social pressure' to actively engage in civic life. Great example of technology driving active citizenship!

