


Greenolution *Digest*

Greenolution e-Newsletter, July 2015

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Write for Greenolution & get it published on the blog:
www.tatapowergreenolution.blogspot.in
Topic for this month
Biodiversity Conservation

You may share your ideas and/or pictures and other interesting bits on rain water harvesting on
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Fuel Conservation

About

Conservation of non-renewable sources of energy has assumed greater importance in recent times, for not only are these in high demand, but also extremely difficult to replenish. Like other resources, it is important therefore, that we use non-renewables judiciously.

Tips to conserve fuel

...when on the road

The faster you go, the more wind resistance your vehicle will face. If you go at speeds above 60 Km/H, you will waste petrol. Tests on Indian cars prove that you can get up to 40 % extra mileage at 45-55 Km/H as against 80 Km/H. Also, avoid accelerating or decelerating unnecessarily. Avoid banking by anticipating stops and curves well in advance.



If your engine emits black smoke, has poor pulling power or consumes large quantities of oil, get it checked immediately at a reputed garage. A delay, may prove more expensive in terms of petrol and oil as compared to the cost of an overhaul.

Incorrect gear shifting can lead to as much as 20% increase in fuel consumption. Start your car in the 1st gear only, except if you are in a muddy patch or going downhill then engage the 2nd gear.

Don't wait for your car to warm up. Instead, drive in low gear till the engine warms up. Use choke briefly only when necessary.

Stop-and-go driving wastes fuel. When you slam on the brakes, a lot of useful energy is wasted in the form of heat. A good driver always anticipates stops. Use clutch only when you change gears. Riding the clutch causes loss of energy and damages clutch-linings.

Air filter prevents dust from Fouling the engine. Dust causes rapid wear of engine components and increases fuel consumption.

Under inflated tyres increase rolling resistance, which leads to higher petrol consumption.

Always keep your car ready to start. Keep the battery, dynamo, self-starter and fan-belt in good condition. This will ensure a quick start whenever you need it.



Fuel Conservation

Check the car manual and oil manufacturer's recommendations, before using any particular grade of oil.

Rush hour, or stop-and-go traffic, can waste fuel excessively. You will get more mileage from each litre if you take a less congested route, even though it is slightly longer.

Unnecessary loads increase fuel consumption. A reduction of weight by 50 kg can lead up to 2% saving in fuel, when driving in the city. Overhead racks increase wind resistance leading to higher fuel consumption.

Carpool. This way you can share your car and the costs.

Before you start on a trip, ask yourself two questions: Is this trip really essential? Can I combine this trip with other trips in the same direction?



...when at home

A few minutes of planning ensures a big fuel saving.

Pressure cooking saves fuel. Use separators in

the pressure cooker to cook different items at the same time.

Use only the optimum quantity of water for cooking. Reduce the flame when boiling starts. Sizeable savings in fuel are possible if you soak cereals in water before cooking.

Always place a lid on an open cooking vessel or pan.

Use the small burner or lower flame more often, as the case may be especially when you have time to spare.

It is important to/clean the burner of your gas range regularly and trim or replace the wicks of the kerosene stove. Soot clogged gas burners and charred wick-ends of a kerosene stove increase fuel consumption. Regular maintenance of your stove helps you save fuel. In case stove knobs do not move more freely, get them attended to.

A bright, steady blue flame means efficient burning. If you see an orange, yellow or non-uniform flame, clean the burner or wick as the case may be.

The use of 'ISI' marked kerosene wick stoves in place of non-'ISI' marked stove saves upto 25% of kerosene and the use of higher efficiency 'ISI' marked LPG stove (the thermal efficiency level of which is 68%+) saves upto 15% of gas.

Allow frozen food to reach room temperature before cooking. Very cold food consumes a larger amount of fuel.

Content courtesy: www.pcra.org

**OUR
GREEN
HEROES**

Meet the Fuel champs of Tata Power!

Not only solar cooking, its baking cakes!

Not merely a science project in school , but actually putting solar cooker to use is Mrs. Swati Joshi, wife of Mr. Aseemkumar Joshi, Chief Manager, Procurement at CGPL Mundra. She has been using solar cooker for daily meals viz. rice, vegetables, pulses for more than 4 years now.

Whats more.. she treats her guests with eco – friendly parties serving solar baked cakes and confectioneries. With a little advance planning the time consuming cooking is made fun and doesn't forfeit her commitment towards a greener environment.

So who's up for some solar cooker cake recipes!!



Carpool is smart pool!

Joining the carpool kitty are Vinod Krishan Sawant - Transmission Projects, Amaresh Mishra - DSS and Deepak Mhase- Distribution Capex. They carpool everyday from Tata Power Trombay colony to office. All it takes is to sync your timings for carpool and reduce carbon footprints!

Way to go Green Heroes!

Green Heroes:
Vinod Krishnan Sawant
Amaresh Mishra
Deepak Mhase



Cycling to green glory!

Taking one step forward towards sustainability initiatives, Trombay CMD has initiated the use of bicycle for internal site visits by the staff. Indeed cycling to a greener glory in true sense in terms of fuel conservation, reducing carbon footprints and saving costs!

Where Tata Steel is strongly encouraging use of bicycles within the plant premises. Trombay has been a trendsetter for Tata Power!

Let's begin the change!



Every bit counts!

Did you know - You save between 1/5 to 7/10 of a gallon of fuel for every hour of not idling your vehicle!

So our Green Hero- Daleep Singhal has pledged to switch off his vehicle engine at red lights if the duration is more than 10 seconds.

This saves fuel, money, mileage per litre & the environment.

Surely, every bit counts!



Daleep Singhal, DSS-GIS, Dharavi

GREEN HERO- Mr. N Mukilan, Jojobera

Mr. Mukilan is doing his bit in saving fuel and reducing his carbon footprint!

He rides his bicycle for approximately 16 Kms per day (to & fro) in place of petrol/diesel vehicle which his other colleagues usually do.

By doing this he is not only saving the environment but also reducing carbon emission and keeping fit.

Total kms that he cycles each month (16 Kms x 30 Days) is 480 Kms.

For a 500km journey one consumes about: $500 \text{ km} \times 0.065 \text{ l/km} = 32.5$ litres of petrol.

So, the CO₂ released for burning 32.5 litres of petrol: $32.5 \text{ litres} \times 2.3215 \text{ kg/l} = 75.45 \text{ kg of CO}_2$

So Mr Mukilan is saving 75.45 Kg of CO₂ per month or more than 900 KG per annum!



Keep up the good work GREEN HERO



Saving Fuel and reducing their Carbon Footprint

Transport Department,
Distribution Division

All company drivers have decided to switch off Air-conditioning of company vehicles for at least half an hour per day while driving. It will result in saving fuel and reduce CO₂ Emissions, thus contributing towards green environment.

Savings per Month:

Vehicles running Without AC for about 2000 Kms. (About 25 % of 8320 Kms expected to run without AC, other time vehicles may run with AC ON) divided by 7.8 Kms (Consumption without AC) = **256 Liters Diesel**

Vehicles running With AC on for 2000 Kms divided by 6.8 Kms = **294 Liters Diesel**

Hence saving **38 Liters of Diesel per Month.**

1) Savings Rs. 1800 per month.

2) CO₂ Emissions are reduced for 38 Liters per month.

GREEN QUIZ

Quiz

1 Natural gas is mostly made up of?

- A. Propane
- B. Methane
- C. Hydrogen
- D. Carbon dioxide

2 The World Bank has partnered with many nations and energy companies to reduce the practice of “flaring”—the burning off of natural gas as a byproduct at crude oil wells, typically where there is no pipeline to capture the gas. Why is the practice criticized?

- A. For causing light pollution
- B. For damaging drilling equipment
- C. For wasting a valuable energy source
- D. For driving down energy prices

3 Compressed natural gas (CNG) vehicles have a drawback. What is it?

- A. The tank full of natural gas is extremely dangerous in a crash
- B. CNG tanks tend to be large and bulky, making their use difficult in small cars
- C. Natural gas can't move a vehicle faster than 35 miles per hour
- D. Burning natural gas creates an unpleasant smell that bothers other drivers

4 People object to the burning of fossil fuels because:

- A. Not everyone has an open fire
- B. They release polluting gases
- C. They are cheap
- D. They produce a lot of energy

To know the winner for last issue

visit www.greenolution.com

Send in your answers to
greenolution@tatapower.com

**GREEN
CLICK**

DT 3,5-4,5 / 16-80 AZ



Amaresh, Tata Power Solar



Arpit Jain, Carnac



Prasad Karnik, SED Bangalore



Tushar Tripathy, CGPL