

## **Energy Efficiency And Renewable Energy Management Centre**

- Govt. of NCT of Delhi vide Notification No.F.11(149)/2004-Power/1753 dated 28.7.2006 has notified Delhi Transco Limited as State Designated Agency under Energy Conservation- Act 2001 for Delhi. Considering the importance of Energy Conservation and the responsibilities to be discharged by the state Designated Agency, a separate Energy Efficiency and Renewable Energy Management Centre has been established within DTL on 5<sup>th</sup> July 2006 at SLDC Building Minto Road, New Delhi as a focal point.
- The Centre under the aegis of Delhi Transco Ltd. was inaugurated by Hon'ble Minister of Power (GNCTD).

### **The EE & REM Centre has following objectives.**

- To Implement Energy Conservation Act-2001 in NCT of Delhi
- To create partnerships between Industry, Consumers, Manufacturers and Financial Institutions, NGOs and other concerned organizations to promote energy conservation.
- To create awareness about Energy Efficiency and Renewable Energy resources for implementation in various applications in domestic,commercial,industrial,trade and buildings.
- To train personnel in different fields and levels on Energy Efficiency and Renewable Energy.
- To advice on regulatory measures under the provision of Energy Conservation -Act 2001.
- To create a panel of Experts or consultants in various sectors to help in promoting energy Conservation as a bankable proposal.
- To Organize Awareness Camps in Schools for creating awareness through Debates, Essay Writing Competitions, Exhibitions, Painting Competitions etc.
- To set up a Energy Conservation Fund and / or Collaborate with Financing Institutions to Fund Energy Conservation activities including Research Projects having demonstration effects with reputed Institutions.
- To collaborate with the Bureau of Energy Efficiency (BEE) and other state agencies for promoting various programmes such as standards and labeling program for appliances.
- To sensitize architects and planners for promoting Green Building concepts in Delhi to conserve Energy/water/Air quality and promote Green Delhi Campaign of Delhi Government.
- To promote Techno-economic feasibility of pilot projects which have a demonstration effect in other areas after their successful implementation.

### **Salient features of Notification dated 28<sup>th</sup> September, 2006 on Energy Conservation in Delhi.**

- Mandatory use of CFL and Electronic Chokes in all new buildings of Govt. / Govt. Aided institutions/Board/Corporations.
- Replacement of defective incandescent lamps and chokes with CFL and Electronic Chokes in existing Buildings
- Mandatory use of Solar Water Heating System in Institutions, hospitals, Hotels, Buildings with Plot / Area 500 Sqmtr and above.
- Mandatory use of ISI mark motor pump sets, power capacitor, foot reflex valves in agriculture sector and all Govt. /private Sectors.

## Some Energy Savings Tips

Switch off appliances such as Air Conditioner along with Stabilizers, Fans, and Tubelights, T.Vs, Computers, UPSs, CVTs and other appliances when not in use.

### Lighting

- Replace ordinary Incandescent lamp with CFL to provide same light.
- Replace Conventional choke with Electronic choke.
- Use Energy Efficient table lamp for reading.
- Clean the luminaries regularly to maintain light output.
- Use LED based lighting in signboards for advertising and traffic signals.
- Use Infrared /motion occupancy sensor to switch off the light.

### Air Conditioner (AC)

- Use evaporative coolers in place of air conditioners during hot /dry summer months.
- One AC consumes energy equivalent to 10 evaporator cooler or 25 Fans.
- Set thermostat of AC at 25-27 °C for digital or set thermostat with wall thermometer.
- Use ceiling or room fans for better cooling in the room and set the thermostat higher.
- Avoid overcooling the room with AC and avoid use of quilt sleeping.
- Install double glass windows in South-West facing walls.
- Use latest energy efficient AC with rotary compressors with digital thermostat and having programmable modes.

### Refrigerator

- Adjust the thermostat to set inside temperature according to room temperature.
- Cool hot food items to room temperature before placing them in refrigerator.
- Avoid frequent opening of refrigerator doors.
- Defrost the refrigerator on regular intervals in direct cool refrigerator.
- Allow enough space for air circulation around the refrigerator.
- Make sure that door rubber seal is clean and leak proof when door is closed.

### Solar Water Heater

**Use solar Water Heater instead of storage electric geyser for hot water.Why?**

**Advantages are that the system:**

- pays back with in 3-4 years.
- is safe ,simple to use and has a long life span
- has near zero maintenance.
- saves upto 1500 units of electricity in a year.

All appliances such as Battery Chargers, Laptops, Mobile phones, TVs etc consume power in stand-by mode also. Do not use “remote” for switching off. Pull the plug when not required and save electricity.

## Monthly Electricity Consumption of Domestic Appliances

(Approx.)

Appliances	Load (Watt) (a)	No of Appliances (b)	Consumption (hour/day) (c)	Unit/month <u>axbxcx 30</u> 1000	Saving potential Units/Month
Bulb(lamp)	100	04	06	72	60 (By using CFL)
Tubelight with Ordinary Choke	55	04	06	40	11 (By using Electronic Chokes in place of Conventional Chokes)
Tubelight with Electronic Choke	40	04	06	29	
CFL	15	04	06	11	
Refrigerator (250 Ltr.)	-	01	-	45/32	Three 3*/5* 13 Units with 5*
Table Fan/ Ceiling Fan	80	01	08	19	
Cooler (medium size)	200	01	08	48	
Air Conditioner Window AC					BEE label EE appliances:-
(i) 1.5 Ton	1861	01	08	450/315*	135 (with 3*)
(ii) 2.0 Ton	2561	01	08	630/441*	189 (with 2*)
Split Unit					
(i) 1.5 Ton	1696	01	08	420/292*	126(with3*)
(ii) 2.0 Ton	2110	01	08	510/357*	153(with 4*)
Pump Motor(1 HP)	740	01	01	22	Avoid running on idle load.
Washing Machine	500	01	01	15	Use machine on full load
Colour Television	120	01	06	22	
Water Heater (Storage Type)	2000	01	01	60	60 units with use of Solar Water Heater.
Iron (Press)	500	01	0.5	08	

Further 30% Energy may be saved by setting thermostat at 25-27°C & proper closing of doors & windows.

**USE ISI MARKED AND BEE LABEL ENERGY EFFICIENT APPLIANCES.**