

STATE ENERGY CONSERVATION AWARDS –2008

"Award for Excellence in Energy Conservation and Management"

Award Questionnaire for Commercial/ Educational/Institutional Building"

- 1.0 Name of the Commercial Building :
- 2.0 (a) Complete address of Office location
with telephone, telex, fax nos. & E-mail :
- (a) Year of Establishment :
- 3.0 Type of Business carried out in
Commercial building :
- 4.0 (a) Building Connected Load (KW) :
- (b) Building Connect Demand (KVA) :
- 5.0 Energy Consumption and Cost :
- 6.0 Electrical Consumption and Cost :**
- (A) For Building Lightening

Year	Electricity Consumption	
	In KW	In Rs. (lacs)
B. For Water Pumping		
Total		

Year	Electricity Consumption	
	In KW	In Rs. (lacs)
Total		

C, For other purposes (Water Heating, Refrigeration, lift etc.)

Year	Electricity Consumption	
	InKW	In Rs. (lacs)
Total		

5.2 Fuel oil Consumption and cost (For D.G .Set)

Year	Fuel oil consumption	
	In Litres	In Rs. (lacs)
Total		

6.0 Total Energy Cost (From 5.1 & 5.2)

Year	Energy in terms of Rs.	
	Electrical	Fuel oil
2006		
2007		
2008		
Total		

7.0 Energy saving measures

7.1 Please list Technology Innovation measures undertaken in your buildings to reduce energy consumption during the last three years.

Year	Technology Innovation undertaken (please specify)	Savings achieved in		Investment (Rs. in lacs)
		Energy value	Rs. lacs	
2006				
2007				
2008				
Total				

7.2 Please list In-house R & D efforts undertaken in your buildings to reduce energy consumption during the last three years.

Year	In -house R & D efforts undertaken (please specify)	Savings achieved in		Investment (Rs. in lacs)
		Energy value	Rs. lacs	
2006				
2007				
2008				
Total				

7.3 Please list measures undertaken, savings achieved and investment made during the last three years in energy substitution.

Year	Measures undertaken	Savings achieved in		Investment (Rs. in lacs)
		Energy value	Rs. lacs	
2006				
2007				
2008				
Total				

Note: Energy substitution can be from Electricity to oil/gas and conventional (such as oil, gas, electricity) to non conventional (renewable such as solar, bio mass, wind etc.)

8.0 Total Energy Saving (From 7.1,7.2,7.3)

Year	Energy Saving (In KW)	In Rs.
2006		
2007		
2008		
Total		

a. Implementation of energy conservation measures & investments From 7.1,7.2,7.3					
Year	No. of measures implemented (I)	Investment made (Rs. in Lacs) (ii)	Savings achieved (Rs. Lacs/Yr.) (iii)	Energy cost S.No 5.0 (Rs. Lacs/Yr.) (iv)	% savings of energy cost (iii/ivx100)
2006					
2007					
2008					

Remarks (if any)

9.0 Organizational set up for Energy Conservation

- (a) Does your organization have an Energy Conservation (EC) cell?
If yes, please give details.
- (b) Give salient features of EC Cell's constitution, functions, amount of finances available, achievements, future plans strategy followed to implement energy conservation programmes and policies etc.
- (c) Whether any energy audit has been undertaken in your unit in last three years? If Yes, please give details.

DOCUMENTS ATTACHED:

- One copy each of the audited annual reports (if available) for the years 2004,2005 & 2006 are enclosed.

Date:
Place:

Signature of the Chief Executive-----
Name & designation of he Chief Executive
Organization Seal

(vi) Total coal cost for process (Rs.lakhs/year)
 $E(iv) \times E(v)$
 10^5

(vii) Total coal cost for 3 years (Rs.lakhs)

F) Other purchased solid fuels (pl.specify)

Provide data on similar lines as indicated
Under 'Coal'

G) Furnace Oil

(i) Quantity purchased (KL/year)

(ii) Quantity used for power (Electricity)
Generation (KL/year)

(iii) Quantity used as raw material (KL/year)

2005 2006 2007

iv) Quantity used as raw material (KL/year)
 $G(i) - G(ii) - G(iii)$

v) Av. Price of Furnace Oil Cost for process

vi) Total Furnace Oil Cost for process
(Rs .lakhs/year)
 $G(iv) \times G(v)$
 10^5

(vii) Total Furnace Oil cost for 3 years
(Rs. lakhs)

**'(H) Diesel/Other oils (purchased) provide
Data on similar lines on Indicated under
"Furnace Oil"**

(I) Natural Gas

(i) Quantity purchased (lakh m³/year)

(ii) Quantity used for power (Electricity)
Generation (lakh m³/year)

(iii) Quantity used as raw material
(lakhs m³year)

(iv) Quantity used for process
(lakh m³/year)
 $I(i) - I(ii) - I(iii)$

(v) Average price of natural gas
(Rs./ m³)

(vi) Total cost of natural gas for process
(Rs. lakhs/year)
$$\frac{I(iv) \times I(v)}{10^5}$$

(viii) Total cost of natural gas for 3 years
(Rs. lakhs)

**J) : Any other purchased gas (say LPG) etc.
Provide Data on similar lines as
Indicated under natural gas:**

	2006	2007	2008
K) Total Fuel cost for process (Rs.lakhs)			
i) Fuel cost per year (Rs. lakhs) E (vi) +G(vi)+I(vi) + .. etc.			
ii) Total fuel cost for 3 years (Rs. lakhs / year)			

6.3 Total Energy Cost (Rs. lakhs year)

- i) Energy Cost per year (Rs. lakhs year)
- ii) Sr. no. 6.1 D(a) + Sr. no. 6.2(K)(i) Total Energy Cost for 3 year (Rs. lakhs/ year)
Sr. no. 6.1 D(b) + Sr. no. 6.2K(ii)

7. Organizational set up for Energy Conservation

a) Does your Organizational have an Energy Conservation (EC) cell
If yes, who heads the EC cell? Weather Energy Conservation is his exclusive or add!. responsibility? To whom he is reporting?
Give salient features of EC cell's constitution, functions, amount of finances available, achievements future plans, strategy followed to implement energy conservation program and policies etc.

b) Is the unit/organization has declared it's Energy Management Policy? If yes, please attach a copy of the same

8(a) Whether any energy audit has been undertaken in your unit in last three years? If yes, please give the details on the following:

i) When was last energy audit carried out? What is the frequency of carrying out energy audits ?

ii) Who did the energy audit? Whether this was done by in house team or an external agency was engaged? Please give salient details.

b) Did you engage with any Energy service Company (ESCO) to implement Energy Conservation measures. If yes please the name of agency and other details (i.e experience, benefits etc.)

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- 9) Please provide details in the following format on energy efficiency improvement projects/ measures including in-house R&D efforts, technology innovation, energy substitution and renewable energy systems commissioned during last three years giving energy savings achieved and investment incurred.

Note: With the commissioning of a particular project/measure annual energy saving indicated in one year, should not be shown in the second or third year as recurring energy savings.

Year of Commissioning	Project Description	Achievement of Energy Savings per year					Total (Rs.Lakhs)	Investment incurred on the project (Rs. Lakhs)
		Power Lakhs KWH)	Fuels.					
		Coal (Tonne)	Furance Oil (KL)	Gas (Lakh M ³)	Total (Fuel) in MKcal			
2006								
	SubTotal							
2007								
	Sub Total							
2008								
	Sub Total							
	Grand Total of 3 Years							

. Delete or add fuels as the case may be

Note:1 Saving in fuels under the column" Total (fuel) in Mkal should be presented in million Kcal by multiplying the coal! furnace oil! Gas quantity with the appropriate calorific value of the fuel and appropriate multiplying factor.

Very Important:

2. For the year 2006-08 a two paragraphs write up to be enclosed for each project giving in brief (I) background of the project, (II) observation made, (III) technical & financial analysis made and (IV) implementation. The plants not submitting this information are likely to loose certain weightage.

10. * Please List technology innovation measures undertaken in the plant to reduce energy consumption during the last three years.

Year	Technology innovation undertaken (please specify)	Savings achieved in		Investment (Rs. in lacs)
		Energy value	Rs. lacs	
2006				
2007				
2008				

11. Please list in-house R & D efforts undertaken in the plant to reduce energy consumption during the last three years

Year	In-house R & D efforts undertaken (please specify)	Savings achieved in		Investment (Rs. in lacs)
		Energy value	Rs. lacs	
2006				
2007				
2008				

12. 7 Please list measures undertaken, savings achieved and investment made during the last three years in energy substitution

Year	Measures undertaken	Savings achieved in		Investment (Rs. in lacs)
		Energy value	Rs. lacs	
2006				
2007				
2008				

Note: Energy substitution can be from Electricity to coal/oil/gas and conventional (such as oil, coal, gas electricity) to non-conventional (renewable such as solar, biomass, wind etc.)

* You may highlight under S. No. 10,11 & 12 all the related measures including the measures listed under S No. 09.

13. Please list energy conservation measures planned for the future, investment planned & expected savings.

Energy conservation Measures (Planned)	Anticipated savings in		Approx. investment (Rs. lacs)	Project commencement & completion year
	Energy value	Rs. Lacs		

STATE ENERGY CONSERVATION AWARD -2008
SUMMARY SHEET
(Please summarize the information provided in the Questionnaire)

Unit Name -----

1. Implementation of energy conservation measures & investments (S.No. 09, Page -9 and S.No. 6.3(1), page-8)					
a. No. of measures implemented, investment made and savings achieved					
Year	Nos. of measures implemented (Sr. No. 09(1))	Investment made (S.No. 09)(ii)	Savings 'achieved (S.No. 09) (Rs.lacs/yr.) (iii)	Energy cost S.No. 6.3(1) (Rs.Lacs/Yr.) (iv)	% Savings of energy cost (iii/ivx100)
Remarks (if any)					

2. Technoloav Innovations (S.No. 10, Page-9)			
\ Year	Nos. of measures	Savings achieved (Rs. in Lacs)	Investment (Rs. in lacs)
Remarks (if any)			

3. In-house R & D (S.No. 11, Page-10)			
Year	Nos. of measures	Savings achieved (Rs. in Lacs)	Investment (Rs. in lacs)
Remarks(if any)			

4. Energy Substitution (S.No. 12, Page-10)			
Year'	Nos. of measures	Savings achieved (Rs. in lacs)	Investment (Rs. in lacs)
Remarks(if any)			

DOCUMENTS ATTACHED:

- One copies each of the audited annual reports (if available) for the year 2005,2006 & 2007 are enclosed.
(Note: if audited report for the latest year is not available, the draft may please be enclosed indicating the same)

Signature of the Chief Executive ..

Date:
Place:

Name & designation of
the Chief Executive-----m---
Organization Seal

STATE ENERGY CONSERVATION AWARD-2008
CRITERIA FOR EVALUATION

1. Implementation of energy conservation measures & investments.
 - a. No. of measures implemented, investment made & savings achieved.
2. Energy savings:
 - a. Absolute Savings (From S.No. -17")
 - Electrical
(Iacs Kwh)
 - Thermal
(Million K.Gal)
 - b. Specify Energy consumption (SEC) Reduction during the period 2006-2008.
3. Technology innovations
4. In-house R & D efforts.
5. Energy Substitution
6. Organizational strength for providing plant energy conservation.
7. Presentation of Data as per the Award Questionnaires format.

