

# **NATIONAL ENERGY CONSERVATION AWARD – 2016**

## **HOTEL AND HOSPITAL BUILDINGS**

### **Award for Excellence in Energy Conservation and Management**

#### **OBJECTIVE**

The objective of the scheme is to give national recognition to the management of Hotel and Hospital buildings who have made systematic and serious attempts for efficient utilization and conservation of energy during the years 2014-15 and 2015-16.

#### **THE AWARDS**

First and second prizes are proposed to be given to the management of nominated hotel and hospital buildings in the form of a Silver Plaque with appropriate citation on such awards as may be decided by the Ministry of Power. The performance of the nominated hotel and hospital buildings would be judged through a questionnaire (format enclosed) which would be evaluated by an Award Committee.

A Hotel and Hospitals buildings getting the First Position for the third year in a row will be eligible for a “Top Rank Award” for that year. The Hotel and Hospital building eligible for Top Rank Award for 3<sup>rd</sup> year in a row would be given the highest prize, namely “**Excellence Award**” (Instead of Top Rank Award) in recognition of its consistent performance.

#### **ELIGIBILITY**

The scheme is open to all **HOTEL AND HOSPITAL** buildings, which are **having connected load of 200 kW and above**. **Hotel category has been divided into two sub-category namely Hotels (5 star and above) and Hotels (4 star and below) and will be evaluated accordingly.**

**From the last year 2015, Hospital category has also been divided into two sub-category namely Hospitals (having annual electricity consumption less than 10 lakhs kWh, average of 2014-15 and 2015-16) and Hospitals (having annual electricity consumption equal or more than 10 lakhs kWh, average of 2014-15 and 2015-16) and will be evaluated accordingly.**

(Office Buildings and BPO Buildings to submit their applications separately under National Energy Conservation Award Scheme for Office & BPO Buildings - 2016)

#### **Criteria for Judging Merit**

- a) Evaluation of the nominations will be done in two phases, based on the Evaluation and Weightage criteria as given in Annexure-A
- b) In the first phase, evaluation will be made on the basis of the preliminary information, as required in Part - I and the best 10% of the participating buildings (subject to minimum of 4 buildings) would be short listed.
- c) These shortlisted buildings would then have to submit the details of the savings made and the projects implemented, as required in Part-II within 8 days from the date of intimation by BEE.

- d) The members of the Award Committee or their nominees may visit participating hotel and hospital buildings for verification of data supplied, if felt necessary and it will be obligatory on the part of the participating buildings to provide necessary co-operation.
- e) The Committee's decision would be final and no appeal would be entertained.

#### **Instructions for Filling up the 'Award Questionnaire'**

- a) The data required for the questionnaire pertains to the accounting years 2014-15 and 2015-16. If calendar year is the accounting year, then data should pertain to the years 2014 and 2015.
- b) The enclosed questionnaire is only a format and thus information sought should be separately computer printed or neatly typed or to be downloaded from the Bureau's Website: [www.beeindia.gov.in](http://www.beeindia.gov.in)
- c) The answers to the questions should be precise and specific and should be supplied in total compliance with the questionnaire format. The deviations may lead to improper evaluation or the rejection of the nomination.
- d) The information sought under any head should be highlighted under the same and no separate annexure should be attached.
- e) Each and every query mentioned in the questionnaire needs to be answered. Even, if answer is 'NO' or 'NOT APPLICABLE' the same may be stated, instead of ignoring it.
- f) The questionnaire should be filled in by a competent and responsible person of the Hotel/Hospital building. He/ she should be fully conversant with the energy terms and units, conversion / multiplying factors etc. The duly filled-in questionnaire should be signed by the Chief Executive of the hotel/hospital.

#### **Submission of nomination**

The filled in Questionnaires should reach the office of

**Director General**  
**Bureau of Energy Efficiency**  
**4<sup>th</sup> Floor, Sewa Bhawan, R. K. Puram, New Delhi-110 066**  
**Tel. No.: 011-2617 9699 (5 lines) Fax No.: 011- 2617 8328, 2617 8352**

Latest by **28<sup>th</sup> September, 2016**

#### **Note:**

1. The current year's Questionnaire is a revised version and contains some changes at appropriate places. Therefore, please do not use the last year's Questionnaire while submitting your application for consideration of Award
2. You may download the Questionnaire from [www.beeindia.gov.in](http://www.beeindia.gov.in).
3. The filled in application can also be e-mailed at [ecaward2016@beenet.in](mailto:ecaward2016@beenet.in), [ecaward16@gmail.com](mailto:ecaward16@gmail.com) and [ecaward2016@rediffmail.com](mailto:ecaward2016@rediffmail.com) followed by submission of duly signed hard copy by post at BEE office address.

## NATIONAL ENERGY CONSERVATION AWARD - 2016

### HOTEL AND HOSPITAL BUILDINGS

#### "Award Questionnaire"

**Note:** Hotel and Hospital Buildings having connected load of 200 kW and above are eligible to participate in the Award Scheme. Hotel category has been divided in to two sub-category namely Hotels (5star and above) and Hotels (4 star and below). From the last year, Hospital category has also been divided into two sub categories namely Hospitals (having annual electricity consumption less than 10 lakhs kWh, average of 2014-15 and 2015-16) and Hospitals (having annual electricity consumption equal or more than 10 lakhs kWh, average of 2013-14 and 2014-15)

Sl. No	General Description	
1 (a)	Name of the organization owning and maintaining the nominated Hotel/Hospital building	
1 (b)	The Sector to which unit's nomination should be considered <b>Hotel (5star and above / 4star and below) or Hospital (less than 10 lakhs kWh/yr or equal and more than 10 lakhs kWh/year)</b>	
2 (a)	Specific name of the nominated Hotel/ Hospital building	
2 (b)	Star Rating of the Nominated Hotel (1 to 7 stars)	
3	Year of commencement of the commercial activities in the building. Whether ISO 50001 Energy Management System Certified ? (Yes/No). If Yes, pl attach a copy of certificate.	
4	Complete address of Hotel/ Hospital building's location (including Chief Executive's name & designation) with telephone, fax nos., E-Mail and Mobile nos. (All details to be submitted)	
5	Name, designation, address, telephone, mobile, fax nos. & E-Mail of responsible person who could be contacted in connection with the application for Award (All details to be submitted)	

#### 6 Description of the Hotel/Hospital Building and Connected Load (kW)

- 6 (a) Building Status (Please tick appropriate box) ☐ Stand alone building ☐ Part of a building complex
- 6 (b) No. of storeys \_\_\_\_\_

6 (c)	Hotel/ Hospital Building Area and Connected Load	2014 - 15	2015 - 16
(i)	Total Built up Area (in m <sup>2</sup> )		
(ii)	Air-conditioned area (in m <sup>2</sup> )		
(iii)	Non-Airconditioned area (in m <sup>2</sup> )		
(iv)	Total Connected Load (in kW)		
6 (d)	Building contract demand with electric utility company (kVA)		
6 (e)	Average power factor for the period		
6 (f)	Building operating hours/ Year		
6 (g)	No. of Rooms in Hotel OR No. of Beds in Hospital		

#### 7 Energy (Electricity & Fuels) Consumption in the Hotel/Hospital Building

	Energy used	Units	2014 - 15	2015 - 16
<b>7 (A)</b>	<b>Electricity Consumption</b>			
(a)	Electricity Purchased	Lakh kWh		
(b)	Self generated (DG Set)	Lakh kWh		
(c)	Total Electricity Consumption (a+b)	Lakh kWh		
(d)	Total electricity consumption/ Total built-up area (in kWh/m <sup>2</sup> ) = $\frac{7 (A) (c) \times 10^5}{6 (c) (i)}$	kWh/m <sup>2</sup>		
(e)	Total electricity consumption/ room or bed (in kWh) = $\frac{7 (A) (c) \times 10^5}{6 (g)}$	kWh/ room (or) bed		

	Energy used	Units	Gross Calorific Value( use appropriate units like kCal/kg, kCal/litrer, kCal/m <sup>3</sup> )	2014 - 15	2015 - 16
<b>7 (B)</b>	<b>Fuels</b>				
(a)	Furnace Oil/ LDO/ HSD (It should <u>NOT</u> include fuel used for self-generation of electricity)	kilo litres (kL)			
(b)	LPG	kg			
(c)	Natural Gas /CNG	Lakh m <sup>3</sup>			
(d)	Any other fuel	Specify unit			
(e)	Total thermal energy consumption in building (Million kCal, MkCal) {(a)* GCV(a) + (b)*GCV (b) + (c)*GCV (c) + (d)*GCV (d) }				
(f)	Total built up area of building in m <sup>2</sup> S. No. 6 (c) (i)				
(g)	Total thermal energy consumption/ Total built-up area (in Million kCal / m <sup>2</sup> ) 7 B (e) 7 B (f)				
<b>8</b>	<b>Achievement of energy savings from implementation of new Energy Efficiency Projects during the year 2015 - 16</b> <b>(The energy savings achieved shall only from the projects which have been implemented during 2015 - 16)</b>				
	Year	Annual Electricity Savings (Lakh kWh)	Annual Fuel Savings		
			Coal (Metric Tonnes)	FO/LSHS/HSD/RFO ( kL)	Gas (Lakh m <sup>3</sup> )
	2014-15				
	Year	Annual Energy Savings in Rs. Lakhs		One time Investment in Rs. Lakhs	
	2015 - 16				

\* Thermal Energy consumption in the Building is to be obtained and presented in Million kCal by multiplying the quantity of Fuel (Coal, F.Oil, Gas, etc.) consumed with corresponding gross calorific value of the fuel and use of appropriate multiplying factor. The enclosed table at Annexure-`B'- may be used for working out the Million kCal.

## Summary

Please summarize the information and data provided in this questionnaire as per the format given below:

### NATIONAL ENERGY CONSERVATION AWARD –2016 HOTEL AND HOSPITAL BUILDINGS SUMMARY SHEET

Building Name .....

Sub-Sector(Hotel/Hospital) .....

9a. Specific Energy Consumption (SEC) Reduction during the period 2014 - 2016 (S.No. 7 A (d) & 7 B (g))					
Year	Total electricity consumption/ Total built-up area (kWh/m <sup>2</sup> )	% Reduction over 2014 - 15	Total Thermal Energy Consumption/ Total built-up area (Million kCal/m <sup>2</sup> )	% Reduction over 2014 - 15	
2014 - 15		--		--	
2015 - 16					

  

9b. Absolute energy savings and its percentage over energy consumption of previous year					
Elect. Saving (Lakh kWh) in 2015 - 16 (i)	Thermal (Fuel) Saving (Million kCal) in 2015 - 16 (ii)	Elect. Consumption (lakh kWh) in 2014 - 15 (7A (c )) (iii)	Thermal (Fuel) Consumption (Million kCal) in 2014 - 15 (7 B (e)) (iv)	% Elect.Saving (savings achieved/ electricity consumption of previous year) (i) / (iii) x 100	% Thermal (Fuel) Saving (savings achieved/ thermal energy consumption of previous year) (ii)/ ( iv) x 100

I, ..... Solemnly declare that to the best of my knowledge the information given in the Award Questionnaire (National Energy Conservation Award-2016) thereto is correct and complete.

(Signature of the Chief Executive)

Name & designation of the

Chief Executive.....

Mobile No. ....

Date:

Place:

Organization Seal .....

**PART-II (To be submitted after intimation by BEE)**  
**NATIONAL ENERGY CONSERVATION AWARD - 2016**  
**(HOTEL AND HOSPITAL BUILDINGS)**  
**"Award Questionnaire"**

1	Name of the Hotel / Hospital							
2	The Sector to which unit's nomination should be considered							
3 (a)	Complete address of Hotel /Hospital location (including Chief Executive's name & designation) with mobile,telephone,fax nos. & e-mail							
3 (b)	Year of Establishment							
4	Name, designation, address, mobile, telephone, fax nos. & e-mail of responsible person who could be contacted in connection with the application for Award							
5	<b>Please provide details in the following format on major energy efficiency improvement projects/ measures including in-house R&amp;D efforts, technology innovation, energy substitution and renewable energy systems commissioned during the year 2015-2016 giving energy savings achieved. (please also refer Part II - Annexure for the Energy Conservation Measures implemented during the year 2015-2016).</b>							
Year of Commissioning of the projects		Project description	Achievement of Annual energy savings in 2015 - 16					Total savings (Rs. Lakhs)
			Electricity	Fuels*				
			(Lakh kWh)	Coal (tonnes)	F.Oil (kL)	Gas (lakhs Nm <sup>3</sup> )	Total fuel (MkCal)	
		(i) Please list the projects title names which were implemented during the year (ii) Please mention the achievement of energy saving against each projects in the suitable columns.						
2015 - 16								

\* Delete or add fuels as the case may be

I, ..... Solemnly declare that to the best of my knowledge the information given in the Award Questionnaire (National Energy Conservation Award-2016) thereto is correct and complete.

Date: \_\_\_\_\_

Place: \_\_\_\_\_

(Signature of the Chief Executive)

Name & designation of the Chief Executive .....  
 Mobile No. ....

Organisation Seal .....

**DOCUMENTS ATTACHED:**

1. Copies of Certificate pertaining to statutory requirements such as safety and pollution control for the period 2015 - 16 are enclosed.
2. A brief write up of the building(not more than 3-4 pages) along with photographs depicting equipment / locations where energy efficiency activities have been undertaken and a CD containing the same is attached (Sample writeup may be seen at [www.beeindia.in](http://www.beeindia.in))

**Note: The Part-II and Part-II-Annexure to be kept ready and to be dispatched immediately after the intimation sent by BEE**

y o fill-up the
Investment incurred on the project (Rs. Lakhs)

rvation

.....  
.....  
  
.....

ties have

<b>NECA - 2016 - Evaluation &amp; Weightage criteria - Hotel Buildings</b>		
<b>S. No.</b>	<b>ITEM</b>	<b>Max 50 marks</b>
<b>1</b>	<b>ENERGY SAVINGS - Electrical and Thermal ( Hotel)</b>	<b>(35 marks)</b>
i	Electrical Energy (EE) savings in 2015-16	25 marks
	% Saving in EE over the previous year 2014-15	
ii	Thermal energy savings in 2015-16	10 marks
	% Saving in Thermal Energy over the previous year 2014-15	
<b>2</b>	<b>SPECIFIC ENERGY CONSUMPTION REDUCTION (Hotel) and ISO 50001</b>	<b>(13 marks)</b>
i	% reduction in Electric energy consumption/Total built-up area during 2015-16 over 2014-15	10 marks
ii	% reduction in Thermal energy consumption/Total built-up area during 2015-16 over 2014-15	3 marks
iii	ISO 50001 EnMs certified units	2 marks
<b>Note</b>	<b>For Hospital buildings, pl see S.No. 6&amp; 7 as given below</b>	

- NOTE:**
- The above evaluation and weightage criteria is common for all the Hotels and Hospitals buildings. If due to some peculiar characteristics of the participating sectors, the application of the above criteria may not be feasible. Therefore, Award Committee reserves the right to modify the criteria, which shall be uniformly applied to all the participating buildings in that particular sector.
  - The distribution of weightage between specific electrical and thermal energy consumption reduction may be modified for a particular sector by the Award Committee
  - The Hotels and Hospitals having negative specific energy consumption reduction shall not be considered for Award
  - For all the evaluation criteria, if the difference between the first and second building in the particular criteria is more than 10% in the percentage score, then the second best building will be awarded 10% less marks than that of the first unit and prorated will start from that building onward. Similarly, if the difference between second and third building is also found to be more than 10% the above methodology will be followed till the completion of the evaluation criteria of all the units
  - If it is found that for a particular building, % SEC reduction is exceptionally high mainly due to increased build up area or for any other reasons and is affecting the weightage of other buildings, Award Committee reserves the right to modify the Evaluation & Weightage criteria for that building ( Hotel and Hospital)
  - For Hospitals less than 10 lakhs kWh/yr consumption , 35 marks will be considered for electrical energy savings and 13 marks for sp.electrical energy consumption reduction per sq.meter and 2 marks for ISO 50001 EnMs certified units
  - For Hospitals equal or more than 10 lakhs kWh/yr consumption , 30 marks will be considered for electrical energy savings, 3 marks for thermal energy savings, 2 marks for ISO 50001 EnMs certified units , 10 marks for sp.electrical energy consumption reduction per sq.m and 5 marks for sp.electrical energy consumption reduction per bed .





(To be submitted along with Part –II after intimation by BEE)

**Energy Conservation Measure implemented in 2015-16**(To be filled up separately for each Energy Conservation Measure implemented and e-mailed at [ecaward2016@beenet.in](mailto:ecaward2016@beenet.in), [ecaward16@gmail.com](mailto:ecaward16@gmail.com) and [ecaward2016@rediffmail.com](mailto:ecaward2016@rediffmail.com) )

ID to be filled by BEE	Title of the measure		Sector... Hotel and Hospital Buildings		
Year: 2015-16			Technology .....		
Description of the energy conservation measure:					
Picture/ sketch/ drawing before modification (if available)			Picture/ sketch/ drawing after modification		
Agency that executed the project (with complete address and email):					
Total investment, Rs.			Year of implementation:		
First year energy cost savings, Rs.					
First year other savings, Rs.					
On annual basis	Electricity (kWh)	Coal (Tonnes)	Gas (Nm <sup>3</sup> )	Oil (kL)	Other
Energy consumption before					
Energy consumption after					
Energy tariff, Rs/ kWh/ Tonnes/ Nm <sup>3</sup> / kL ...					
Plant/ Establishment complete address:				We authorise Bureau to use this information for dissemination	
Contact person who could be contacted for more information:					
				Signature	
				Date	

**Note:** Please submit this sheet separately for each Energy Conservation Measure implemented in 2015-16 and a CD containing the above information may be enclosed.

**Proposed Energy Conversion Factors**

1 kWh	- 860 kilocalories (kCal)
1 kg Coal/Coke	- Gross Calorific Value as per supplier's (coal company's) latest certificate
1 kg Charcoal	- 6,900 kCal or as per supplier's latest certificate
1 kg Furnace Oil/ RFO / LSHS / NAPHTHA	- 10,050 kCal (density = 0.9337 kg/liter) or as per supplier's latest certificate
1 kg HSD	- 11,840 kCal (density = 0.8263 kg/liter) or as per supplier's latest certificate
1 kg Petrol	- 11,200 kCal (density = 0.7087 kg/liter) or as per supplier's latest certificate
1 kg Kerosene	- 11,110 kCal (density of SKO = 0.7782 kg/liter) or as per supplier's latest certificate
1 kg LPG	- 12,500 kCal or as per supplier's latest certificate
1 m <sup>3</sup> Natural Gas	- 8,000-10,500 kCal (Actual calorific value as per supplier's latest certificate may be considered.) In case of non-issue of certificate by the supplier, average of the range 8000 -10,500 kCal/m <sup>3</sup> may be considered)