Uttar Pradesh State Energy Conservation Award 2018

Check-lists

<mark>Sr. No</mark>	Requirement of Supporting Documents	Yes	No	Remark
1	Is Award questionnaire proforma-I filled in all aspects?			
2	Is Award questionnaire proforma-II filled in all aspects ?			
3	Copy of Certificate of ISO 50001 is attached			
4	Write-UP as desired is attached			
5	Month wise summarised details for Electricity & Thermal Consumption is attached			
6	Copy of Certificate received from Supplier or any reputed test lab for Calorific Value of Fuel is attached			
7	Copy of electricity bill is attached			
8	List of officials working in the Energy Efficiency Cell attached			
9	Other Innovative measures implemented for reducing energy consumption is attached			
10	Have you registered on UPSDA website www.upsavesenergy.com & filled relevant details			
11	Whether details of Renewable Energy used ia attached (Solar PV System, Solar Thermal System, Bio Energy System etc.)			

I ______, do hereby declare that the information given in the Award Questionnaire (Uttar Pradesh State Energy Conservation Award-2018) and in the enclosed documents is true to the best of my knowledge & belief and nothing has been concealed therein. I am well aware of the fact that if the information given by us is proved false / not true at any point of time, our application shall be rejected.

Prepared By:

(Signature)		
Name	 	
Designation	 	
Mobile No.		

Organization Seal

Approved By:

(Signature) Name
Designation
Mobile No.
Organization Seal

UTTAR PRADESH STATE ENERGY CONSERVATION AWARD - 2018

"Fertilizer"

"Award Questionnaire : Proforma- I"

Secto	or Name:	Fertilizer		Sector Code: FZ		
1	Name of	the Unit				
2	The Sect	tor* to which unit's nomination should be considered			Fertilizer	
3	(including with mob	e address of Unit's location g Chief Executive's name & designation) ile,telephone,fax nos. & e-mail Is to be submitted)				
4	Year of E	Establishment				
5		esignation, address, mobile, telephone, fax nos. & e-mail of responsible person who could cted in connection with the application for Award (All details to be submitted)				
6		esignation, address, mobile, telephone,fax nos. & e-mail of Certified Energy Manager who a designated as Energy Manager of the plant				
		ISO 50001 Certified			Yes / No	
7		lease indicate certification date and attached a copy of certificate				
	Whether Establishment / Unit having Energy Efficiency Cell If Yes; Please provide the list of officials working in the Cell				Yes / No	
	í í	ion and capacity utilization details				
8	Year	Products manufactured (Please list all the major products)	Units (Please specify)	Installed Capacity (a)	Actual Production (b)	% Capacity Utilisation (b/a) x 100
	2016-17					
	2017-18					
	Energy (Consumption details	2016-17		2017-18	
	9.1	Electrical Energy Consumption Units (Lakhs kWh/ year)				
	9.1.1	Purchased Electricity (Lakhs kWh/ year)				
	9.1.2	Own Generation (Lakhs kWh/ year)				
	9.1.2.1	Through DG sets (Lakhs kWh/ year)				
9	9.1.2.2	Through Solar PV System (Lakhs kWh/ year)				
	9.1.2.3	Through Steam and/or gas turbine route (please specify)(Lakhs kWh/ year)				
	9.1.2.4	Electricity supplied to the grid/ others (specify) (Lakhs kWh/ year)				
	9.1.3	Own generated electricity consumption within the plant (Lakhs kWh/ year) [Sr. no. 9.1.2.1 + Sr. no. 9.1.2.2 + Sr. no. 9.1.2.3 - Sr. no. 9.1.2.4]				

	9.1.4	Total consumption of electricity (purchased + own generated electricity consumption within the plant) (Lakhs kWh/ year) (Sr. no. 9.1.1 + Sr. no. 9.1.3)		
	9.1.5	Total Electricity Consumption in MTOE(Metric tonne of oil equivalent) [{(Sr. No 9.1.4)*860} / 100]		
	being use	should not include fuel used for self power generation of electricity. 2. Also it should not inc ed from a cogeneration plant , the following relation may be used: Fuel consumption for pro d water enthalpy, kcal/kg)) / (Boiler efficiency xGCV of fuel, kcal/kg). For different steam pre	cess heating, kg/year= (steam quantity	used for process heating, kg/year(enthalpy of steam, kcal/kg -
9.2 Thermal 9.2.1 Coal		Thermal Energy Consumption for process heating	2016-17	2017-18
		Coal		
	9.2.1.1	Quantity used for process heating (tonnes/ year)		
	9.2.1.2	Weighted Av. Gross Calorific value (GCV) (kCal/ kg)		
	9.2.1.3	Total heat value of coal used (Million kCal/year) [(Sr. no. 9.2.1.1) x (Sr. no. 9.2.1.2)]/1000		
	9.2.2	Other purchased solid fuels (pl. specify)provide data on similar lines as indicated under 'Coal'		
	9.2.3	Furnace Oil (FO)	2016-17	2017-18
9	9.2.3.1	Quantity used for process heating (kL/ year)		
	9.2.3.2	Av. GCV (kCal/ kg)		
		Av. Heat value (kCal/ litre) 0.95 x (Sr. no. 9.2.3.2)		
	9.2.3.4	Total heat value of furnace oil (Million kCal/year) [(Sr. no. 9.2.3.1) x (Sr.no. 9.2.3.3)]/1000		
		Diesel/ Other oils (Purchased) (if any)Provide data on similar lines as indicated under 'Furnace Oil'		
	9.2.5	Natural Gas		
		Pressure of Gas		
		Quantity used for process heating (Lakh m ³ / year)		
		Av. GCV (k Cal/ m ³) at supplied pressure		
		GCV (k Cal/ m ³) at STP/NTP Quantity of Gas at STP/NTP		
		Total heat value (Million kCal/year) [Sr. no. 9.2.5.2 x Sr. no. 9.2.5.3]/10		
	9.2.6	Any other purchased gas (Say LPG etc.) used as fuel Provide data on similar lines as indicated under 'natural gas'		
		Gas generated as byproduct/ waste in the plant and used as fuel		
	9.2.7.1			
		Quantity (Lakh m ³ / year)		
	9.2.7.3	Av. GCV (kCal/ m ³)		
	9.2.7.4	Total heat value (Million kCal/year) [Sr. no.9.2.7.2 x Sr. no. 9.2.7.3]/10		

	9.2.8	Solid waste generated in the plant and used as fuel					
	9.2.8.1	Name					
	9.2.8.2	Quantity (tonnes/ year)					
	9.2.8.3	Weighted Av. Gross Calorific value (GCV) (kCal/ kg)					
	9.2.8.4 Total heat value used (Million kCal/year) [Sr. no. 9.2.8.2 x Sr. no. 9.2.8.3]/1000						
	9.2.9 Liquid effluent / waste generated in the plant and used as fuel						
9	9.2.9.1						
		Quantity (kL/ year)					
		Av. GCV (kCal/ kg)					
		Av. Heat value (kCal/ litre) {Sp. gravity x l(iii)}					
		Total heat value MkCal/year (Million kCal/year)					
	9.2.9.5	[Sr. no 9.2.9.2 x Sr. no 9.2.9.3]/1000					
		[31. 10 3.2.3.2 X 31. 10 3.2.3.3]/1000					
	Total the	ermal energy consumption in Million kCal/ year)		
10	10.1 Sr. no 9.2[9.2.1.3 +9.2.3.4+9.2.4.6+9.2.5.6+9.2.7.4+9.2.8.4+ etc.]						
	10.2 Total Thermal energy consumption in MTOE per year [(Sr.no 10.1)/10]						
	Achiever	ment of energy savings from implementation of new Energy	ergy Efficiency Projects.	·			
	Year Savin		Annual Electrical Energy		Annual Thermal Energy Savings		
			Saving (Lakh kWh)	Coal (Metric Tonnes)	FO/LSHS/HSD/RFO (kL)	Gas (Lakh m³)	Total (MkCal)
11	2017-18						
			Annual Energy Savings		•		•
			(Rs. Lakhs)				
			One time investment				
			One time investment				
	Energy c	consumption per unit production of 'major energy consu	One time investment (Rs. Lakhs)	nting of energy consum	nption		
	Energy c	consumption per unit production of 'major energy consu	One time investment (Rs. Lakhs)	• •	nption		
	Energy c		One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million	Specific Energy Consumption In MToE/tonne**	Specific Electrical Energy	Specific Thermal Energy	
12		Specific Electrical Energy Consumption In	One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million kCal/tonne**	Specific Energy Consumption In MToE/tonne** [Total Electrical &	Specific Electrical Energy Consumption	Energy Consumption	Specific Energy Consumption
12	Energy c Year	Specific Electrical Energy Consumption In kWh/tonne**	One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million kCal/tonne** [Total Thermal Energy	Specific Energy Consumption In MToE/tonne** [Total Electrical & Thermal Energy	Specific Electrical Energy Consumption Reduction over	Energy Consumption Reduction over	Reduction over 2016-17
12		Specific Electrical Energy Consumption In kWh/tonne** [Total Electrical Energy Consumption in kWh/Actual	One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million kCal/tonne** [Total Thermal Energy Consumption in Million	Specific Energy Consumption In MToE/tonne** [Total Electrical & Thermal Energy Consumption in	Specific Electrical Energy Consumption Reduction over 2016-17	Energy Consumption Reduction over 2016-17	
12		Specific Electrical Energy Consumption In kWh/tonne**	One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million kCal/tonne** [Total Thermal Energy	Specific Energy Consumption In MToE/tonne** [Total Electrical & Thermal Energy	Specific Electrical Energy Consumption Reduction over 2016-17	Energy Consumption Reduction over	Reduction over 2016-17
12		Specific Electrical Energy Consumption In kWh/tonne** [Total Electrical Energy Consumption in kWh/Actual	One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million kCal/tonne** [Total Thermal Energy Consumption in Million	Specific Energy Consumption In MToE/tonne** [Total Electrical & Thermal Energy Consumption in	Specific Electrical Energy Consumption Reduction over 2016-17	Energy Consumption Reduction over 2016-17	Reduction over 2016-17
12		Specific Electrical Energy Consumption In kWh/tonne** [Total Electrical Energy Consumption in kWh/Actual	One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million kCal/tonne** [Total Thermal Energy Consumption in Million kcal/Actual Production in	Specific Energy Consumption In MToE/tonne** [Total Electrical & Thermal Energy Consumption in MToE/Actual	Specific Electrical Energy Consumption Reduction over 2016-17 [(a) (i) - (b) (i)]/ (a)	Energy Consumption Reduction over 2016-17 [(a) (ii) - (b) (ii)]/ (a)	Reduction over 2016-17
12 (a)		Specific Electrical Energy Consumption In kWh/tonne** [Total Electrical Energy Consumption in kWh/Actual Production in tonne] (i)	One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million kCal/tonne** [Total Thermal Energy Consumption in Million kcal/Actual Production in	Specific Energy Consumption In MToE/tonne** [Total Electrical & Thermal Energy Consumption in MToE/Actual Production in	Specific Electrical Energy Consumption Reduction over 2016-17 [(a) (i) - (b) (i)]/ (a)	Energy Consumption Reduction over 2016-17 [(a) (ii) - (b) (ii)]/ (a)	Reduction over 2016-17
	Year	Specific Electrical Energy Consumption In kWh/tonne** [Total Electrical Energy Consumption in kWh/Actual Production in tonne] (i)	One time investment (Rs. Lakhs) ming product(s)' and accour Specific Thermal Energy Consumption In Million kCal/tonne** [Total Thermal Energy Consumption in Million kcal/Actual Production in	Specific Energy Consumption In MToE/tonne** [Total Electrical & Thermal Energy Consumption in MToE/Actual Production in	Specific Electrical Energy Consumption Reduction over 2016-17 [(a) (i) - (b) (i)]/ (a)	Energy Consumption Reduction over 2016-17 [(a) (ii) - (b) (ii)]/ (a)	Reduction over 2016-17

1 kWh = 860 kCal

1 MTOE =10⁷ kCal

1 Mkcal = 10⁶ kCal

Remark Fertilizer Plants should also report Specific Energy Consumption in Million kCal/tonne of Ammonia and Urea

Year	*Million kCal/tonne of Ammonia	*Million kCal/tonne of Urea
2016-17		
2017-18		

SUMMARY SHEET

	S	Sector Name: Fert	tilizer		Sector Code: FZ					
		Specific Energy Co	onsumption(SEC) r	eduction during the						
13	13.1	Year	Product	Specific Electrical Energy Consumption In kWh/tonne** [Total Electrical Energy Consumption in kWh/Actual Production in tonne]	Specific Therman Energy Consumption In Million kCal/tonne** [Total Thermal Energy Consumption in Million kcal/Actual Production in tonnel	Specific Energy Consumption In MToE/tonne** [Total Electrical & Thermal Energy Consumption in MToE/Actual Production in tonne**]	Consumption Reduction over	Specific Thermal Energy Consumption Reduction over 2016-17 (%)	Specific Energy Consumption Reduction over 2016-17 (%)	
		2016-17								
		2017-18								
		Absolute saving and its percentage over previous year energy consumption								
	13.2	Elect. Saving (Lakh kWh) in 2017-18	Thermal (Fuel) Saving (Million kCal) in 2017-18	Elect.Consumption (lakh kWh) in 2016-17	Thermal (Fuel) Consumption (Million kCal) in 2016-17	% Elect.Saving (savings achieved/ electricity consumption of previous year) % Thermal (Fuel) \$ achieved/ ther consumption of		hermal energy		
	-	(i)	(ii)	(iii)	(iv)	(i) / (iii) x 100	(ii)/ (iv	/) x 100	
	Details	of Innovative From	ny Concentration /	ficional magazina a	dented of envi					
ŀ	Details	or innovative Energ	gy Conservation/E	fficiency measures a	uopted; if any					
14										
Ľ	Details	of Renewable Ener	rgy used (Solar PV	System, Solar Thern	nal System, Bio En	ergy System etc.); if	fany			
15										
ſ	Have y	ou registered on UF	SDA website www	v.upsavesenergy.com	n & filled relevant o	letails; if YES then p	olease provide User	ID along with detai	ils	
16		-						-		

I ______, do hereby declare that the information given in the Award Questionnaire (Uttar Pradesh State Energy Conservation Award-2018) and in the enclosed documents is true to the best of my knowledge & belief and nothing has been concealed therein. I am well aware of the fact that if the information given by us is proved false / not true at any point of time, our application shall be rejected.

Prepared By:

Approved By:

(Signature)		
Name		
Designation.		
Mobile No.		
Organization	Seal	

(Signature)	
Name	
Designation	
Mobile No.	
Organization Seal	

Place:

Detailed Information of Energy Efficiency Projects UTTAR PRADESH STATE ENERGY CONSERVATION AWARD - 2018 " Award Questionnaire : Proforma-II "

_								
1	Name of the Establishment							
2	Please provide details in the following format on major ener year 2017-2018 giving energy savings achieved.	gy efficiency improvement projects/ measur	es including in-house	R&D efforts, technol	ogy innovation, energy	substitution and ren	ewable energy system	s commissioned during the
		Achievement of Annual energy savings in 2017-18						
			Electrical Energy		Thermal Energy			Investment incurred on the
		Energy Conservation Project description	(Lakh kWh)	FO/HSD (KL)	Gas (lakhs Nm³)	Total Thermal Energy (M kCal)	Total savings (Rs. Lakhs)	project (Rs. Lakhs)
		(i) Please list of Energy Efficiency the projects (ii) Please mention the achievement of energy						
	Energy Conservation projects							

* Delete or add Thermal Energy as the case may be

I ______, do hereby declare that the information given in the Award Questionnaire (Uttar Pradesh State Energy Conservation Award-2018) and in the enclosed documents is true to the best of my knowledge & belief and nothing has been concealed therein. I am well aware of the fact that if the information given by us is proved false / not true at any point of time, our application shall be rejected.

Prepared By:

Approved By:

(Signature) Name Designation Mobile No.	(Signature) Name Designation Mobile No.
Organization Seal	Organization Seal
Date: DOCUMENTS ATTACHED:	Place:

** Mandatory Supporting documents

1. For Electricity & Thermal Consumption: Month wise summarised details to be attached

2. Copy of ISO 50001 Certificate.

3. Copy of Certificate received from Supplier or any reputed test lab for Calorific Value of Fuel is attached

4. Relevant documents (other then above mentioned documents; if any) needs to submit.

5.Short falling of any documents create the causes of disqualification from award 2018.

6. Details given in Proforma-I (under section Achievement of energy savings from implementation of new Energy Efficiency Projects.) should be same in proforma-II.

UTTAR PRADESH STATE ENERGY CONSERVATION AWARD - 2018 "Write-up"

Dear Participants,

We request you to submit us the following as additional information:

A brief write-up of the unit / establishment in MS Word (not in PDF) in a pen drive/ CD containing the soft copy of the same. The write up can also be sent on <u>upseca.upsda@gmail.com</u>. The write-up to contain the information on Unit Profile, Energy Consumption year wise and Energy Conservation Achievements (highlighting the projects implemented during the year 2017-18), Environment and Safety. Please include the **specific mention** of **other Innovative measures implemented for reducing energy consumption**. Please also Include Energy management policy declared by the top management of your organization.

Evaluation Strategy

Evaluation methodology

Sr. No.	Evaluation Criterion	Max.100 Marks
1.	Specific Energy Consumption Reduction (% Reduction during 2017-18 Over 2016-17)	55 marks
2.	ISO 50001 Certification	10 marks
3.	Energy Efficiency Cell	10 marks
	a)One number of Certified Energy Auditor(EA) / Energy Manager(EM)	5 marks
	b)Two professional (including EM/EA)	7 marks
	c)More than two professional (including EM/EA)	10 marks
4.	Use of Renewable Energy (Solar PV System, Solar Thermal System, Bio Energy System etc.)	20 marks
I)	Solar PV System	10 marks
	a) Solar PV System capacity in between 75% to 100% of Total connected load	10 marks
	 b) Solar PV System capacity in between 50% to 75% of Total connected load 	08 marks
	c) Solar PV System capacity in between 25% to 50% of Total connected load	05 marks
	d) Solar PV System capacity less than 25% of Total connected load	02 marks
II)	Solar Thermal System	05 marks
III)	Bio Energy System	05 marks
5.	Registration ID on <u>www.upsavesenergy.com</u> & relevant details	05 marks

Note: The above evaluation and weightage criterion is common for all the entities. However, in case of any peculiarity found in the application of above evaluation criteria, the Awards Committee reserves the right to modify the criteria, which shall be uniformly applied to all the entities