

NATIONAL ENERGY CONSERVATION AWARD – 2016

AVIATION SECTOR

Award for Excellence in Energy Conservation and Management

OBJECTIVE

The objective of the scheme is to give national recognition to the management of aviation companies 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 aviation company in the form of a trophy with appropriate citation as may be decided by the Ministry of Power. The performance of the nominated aviation company would be judged through a questionnaire (format enclosed) which would be evaluated by an Award Committee.

ELIGIBILITY

- a) The scheme is open to all **Aviation Companies**.

Criteria for Judging Merit

- a) The Award Committee will decide the recipient of the awards on the basis of outstanding achievements and contribution in the field of energy conservation and management.
- b) The Award may not necessarily be decided on the basis of only quantitative achievements but also taking into account the various other factors such as innovative techniques adopted for undertaking the activities of Energy Conservation etc.
- c) **The members of the Award Committee or their nominees may visit Aviation Companies for verification of data supplied, if felt necessary, and it will be obligatory on the part of the management to provide necessary co-operation. The Aviation Companies has to bear all the expenditure in this connection.**
- d) The Committee's decision would be final and no appeal would be entertained.

Submission of nomination

The filled in questionnaire should reach the office of

**Director General
Bureau of Energy Efficiency
4th 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 **28th 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.
3. The filled in application can also be e-mailed at ecaward2016@beenet.in, ecaward16@gmail.com and ecaward2016@rediffmail.com followed by submission of duly signed hard copy by post at BEE office address.

NATIONAL ENERGY CONSERVATION AWARD - 2016
AVIATION SECTOR
“AWARD QUESTIONNAIRE”

1	Name of the Aviation Company	
2	Year of commencement	
3	Complete Address of Aviation Company (including Chief Executive's name & designation) with telephone no., fax no. & E-mail Address	
4	Name, Designation, Address, Telephone, mobile, fax nos. & E-mail of responsible person who could be contacted in connection with the application for award	

FUEL SAVINGS PROFORMA
OPERATIONS & FLIGHT DESPATCH

1

Aircraft Types	Number of Aircraft	Available Seats per Aircraft	Total Flt Hrs per Fleet/Yr	Flt Burn Kg/Hr	A/C Speed kt/hr	A/C Speed km/hr	Annual Burn per Fleet Kg/Yr
TOTALS							

2

APU Single Pack for optimized time	Savings 1 Pack Kg	Tgt APU Hrs	Total Savings	% Improvement achieved
Total				

3

APU No Pack Optimized utilization	Savings No Pack Kg	Opt APU Hrs	Total Savings
Total			

4

Engine Out Taxi out	Number Cycles	Taxi Out Avg Min	Min Start Time min.	Fuel Flow Saving Kg/Hr Eng Out	Kg/Yr	Pot Eng Out Taxi Out Sav.	Total Taxi Out Savings	% Improvement achieved
Total								

5

Reduced Flap Take off	Number Cycles	Saving per takeoff	Kg/Yr	Total Savings	% Improvement achieved
Total					

6

Reduced Acceleration Altitude	Number Cycles	Saving per takeoff	Kg/Yr	Total Savings	% Improvement achieved
Total					

7

Pilot Technique Flight Management	Burn Kg/Yr	Total Savings	Savings per flight in kg	% Improvement achieved
Total				

13	Flt Plan Optimization LATERAL	Number Cycles	Avg Burn Extra	Extra cost	Target Improvement	Total Savings	% Improvement achieved
	Total						

14	Flt Plan Optimization VERTICAL	Number cycles	Avg Burn Extra	Extra cost	Target Improvement	Total Savings	% Improvement achieved
	Total						

15	Contingency Fuel	C of W 1 kg	Percentage reduction Contingency Fuel	Avg Wt Extra	Target Improvement	Total Savings	% Improvement achieved
	Total						

16	Pilot Additional Fuel	C of W 1 kg	Avg Wt Extra	Target Improvement	Total Savings	% Improvement achieved
	Total					

17	Over Fuelling Above Requested	C of W 1 kg	Avg Wt Extra	Target Improvement	Total Savings	% Improvement achieved
	Total					

18

Alternate Selection (closest)	C of W 1 kg	Avg Wt Extra	Target Improvement	Total Savings	% Improvement achieved
Total					

19

C of G Management	Burn Kg/Yr	Target Improvement	Total Savings	% Improvement achieved
Total				

20

Zero Fuel Weight Error	C of W 1 kg	Avg Cycle Hrs	Avg Diff PZFW & AZFW	Fuel added for over-estimate	Target Improvement	Total Savings	% Improvement achieved
Total							

MAINTENANCE & ENGINEERING

1

Engine Core Water Wash	Burn Kg/Yr	Improved perf	Total Savings	% Improvement achieved
Total				

2

(Engine) DRAG Fuel Bias	Burn Kg/Yr	Improved perf	Total Savings	% Improvement achieved
Total				

3	(Airframe) DRAG Fuel Bias	Burn Kg/Yr	Reduced Drag	Total Savings	% Improvement achieved
	Total				

4	Aerodynamic Deterioration	Burn Kg/Yr	Reduced Drag	Total Savings	% Improvement achieved
	Total				

5	Aircraft Wash Program	Burn Kg/Yr	Reduced Drag	Total Savings	% Improvement achieved
	Total				

6	Aircraft Weight Issues M&E	C of W 1 kg	Avg Wt Extra	Cost to carry Weight	Total Savings	% Improvement achieved
	Total					

7	Engine SFC Build Standard	Burn Kg/Yr	Reduced Drag	Total Savings	% Improvement achieved
	Total				

8	APU SFC Build Standard	Burn Kg/Yr	Improved perf	Total Savings	% Improvement achieved
	Total				

9	APU Potential Maint. Savings	Potential APU Fuel Savings	Potential APU Mtc Savings	Total APU Maint. Savings	% Improvement achieved
	Total				

CABIN - INFLIGHT SERVICES

1	Galley & Cabin Equipment Weight Reduction	C of W 1 kg	Avg Wt Extra	Total Savings	% Improvement achieved
	Total				

2	Catering Weight Reduction	C of W 1 kg	Avg Wt Extra	Cost to carry Catering	Weight Reduction in kg	Total Savings	% Improvement achieved
	Total						

3	Duty Free Weight Reduction	C of W 1 kg	Avg Wt Extra	Cost to carry Duty Free	Weight Reduction in kg	Total Savings	% Improvement achieved
	Total						

4	Magazines Weight Reduction	C of W 1 kg	Avg Wt Extra	Cost to carry Magazines	Weight Reduction in kg	Total Savings	% Improvement achieved
	Total						

5	Potable Water	C of W 1 kg	Water Uplift in kg	Cost to carry Max Water Uplift	Weight Reduction in kg	Total Savings	% Improvement Achieved
	Total						

SUMMARY OF FUEL SAVINGS

TOTAL NO. OF KGS OF FUEL SAVED

TOTAL % OF FUEL SAVED

	Total fuel consumption in kgs.	
Operations and Dispatch	YEAR 2014-15	YEAR 2015-16
APU Fuel Savings		
APU Single Pack after Opt Time		
APU No Pack after Opt Time		
Engine out Taxi out		
Reduced Flap Take Off		
Reduced Accelaration Altitude		
Pilot Technique & Flight Management		
Low Noise Low Drag Approaches		
Reduced Flap Landings		
Idle Reverse on Landing		
Engine out Taxi in		
Optimized Cost Index & Route Specific		
Flight Planning system		
Contingency Fuel		
Pilot Additional Fuel		
Over Fuelling Above Requested		
Alternate Selection		
C of G		
Zero Fuel Weight Error		
Flight Ops Total		
Maintenance & Engineering		
Aircraft Weight Reductions		
Engine Core Water Wash		
Airframe/Engine Drag/Aerodynamics/Wash/Paint		
Engine and APU Build Standard		
APU Maintenance Savings		
Empty Weight Potable Water		
M&E Total		
Commercial		
Empty Weight Cabin Equipment		
Empty Weight Magazines		
Empty Weight Catering Services		
Empty Weight Duty Free Material		
Com Total		