

**ENERGY CONSERVATION EFFORTS
AND
ACHIEVEMENTS OF THE
NATIONAL ENERGY CONSERVATION AWARDS 2009
WINNING UNITS**

NATIONAL ENERGY CONSERVATION AWARDS - 2009

Introduction

Energy is an essential building block of economic development. In an effort to meet the demands of a developing nation, the Indian energy sector has witnessed a rapid growth. Areas like the resource exploration and exploitation, capacity additions, and energy sector reforms have been revolutionized.

However, resource augmentation and growth in energy supply have failed to meet the ever increasing demands exerted by the multiplying population, rapid urbanization and progressing economy. Hence, serious energy shortages continue to plague India, forcing it to rely heavily on imports.

Recognizing the formidable challenges of meeting the energy needs and providing adequate and varied energy of desired quality to users in a sustainable manner and at reasonable costs, improving efficiency of conventional and non-conventional energy and its conservation have become important components of energy policy. The Energy Conservation Act, 2001 integrates these elements as a measure of express legal intent and commitment and came into force with effect from 1st March, 2002.

Under the provisions of the Energy Conservation Act, 2001, Bureau of Energy Efficiency has been established with effect from 1st March, 2002 by merging into it, the erstwhile Energy Management Centre, being a society registered under the Societies Registration Act, 1860, under the Ministry of Power. The mission of the Bureau of Energy Efficiency is to assist in developing policies and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act, 2001 with the primary objective of reducing energy intensity of the Indian economy. This will be achieved with active participation of all stakeholders, resulting in accelerated and sustained adoption of energy efficiency in all sectors.

One of the voluntary innovative schemes, initiated by the Government of India, Ministry of Power, to promote energy conservation has been the Energy Conservation Awards. BEE coordinates the Energy Conservation Award scheme of the Ministry of Power.

These annual awards recognize innovation and achievements in energy conservation by industries, buildings, railways, state designated agencies, aviation sectors; manufacturers of BEE star labeled appliances and municipalities which provide specific examples of best practices which raise awareness about energy conservation potential and implementation. These examples suggest the potential for large scale replication, and of concrete measures which can help mitigate global warming.

The Awards were given away for the first time in December 14th 1991, which is celebrated as 'National Energy Conservation Day' throughout the country.

For the current award scheme 2009: **Aviation Sector** and **Manufacturers of BEE Star labeled appliances** are also included.

Response

The responses among the industrial and commercial units have become very encouraging as is evident from the increasing participation level (from 123 in 1999 to 558 in 2009).

Award Scheme

An Energy Conservation Award Committee has been set up under the Chairmanship of Secretary (Power) for deciding the award winners. The members of the Committee are drawn from the Ministry of Power, Central Electricity Authority (CEA), National Productivity Council (NPC), Ministry of Railways, and from the Bureau of Energy Efficiency (BEE) which also provides the administrative and technical support to the committee. The Ministry of Power (MOP) has also set up a Technical Sub-Committee to assist Award Committee in the finalization of Awards. The Technical Sub-Committee for the year 2009 is headed by the Deputy Director-General (National Productivity Council), with members drawn from Central Electricity Authority, National Productivity Council, Bureau of Indian Standards, Ministry of Railways, GTZ and the Bureau of Energy Efficiency.

The Awards

The Award Committee considered the nominations received for the year 2009 from industries, office buildings, hospitals, hotels, shopping malls, zonal railways, state designated agencies, municipalities, aviation sectors and manufactures of BEE star labeled appliances. The Award Committee this year has selected 3 units for Top Rank Award, 27 units for First prize, 19 units for Second Prize and 28 units for Certificate of Merit. The awards are recognition of their demonstrated commitment to energy conservation and efficiency.

Performance Indicator of Award Scheme

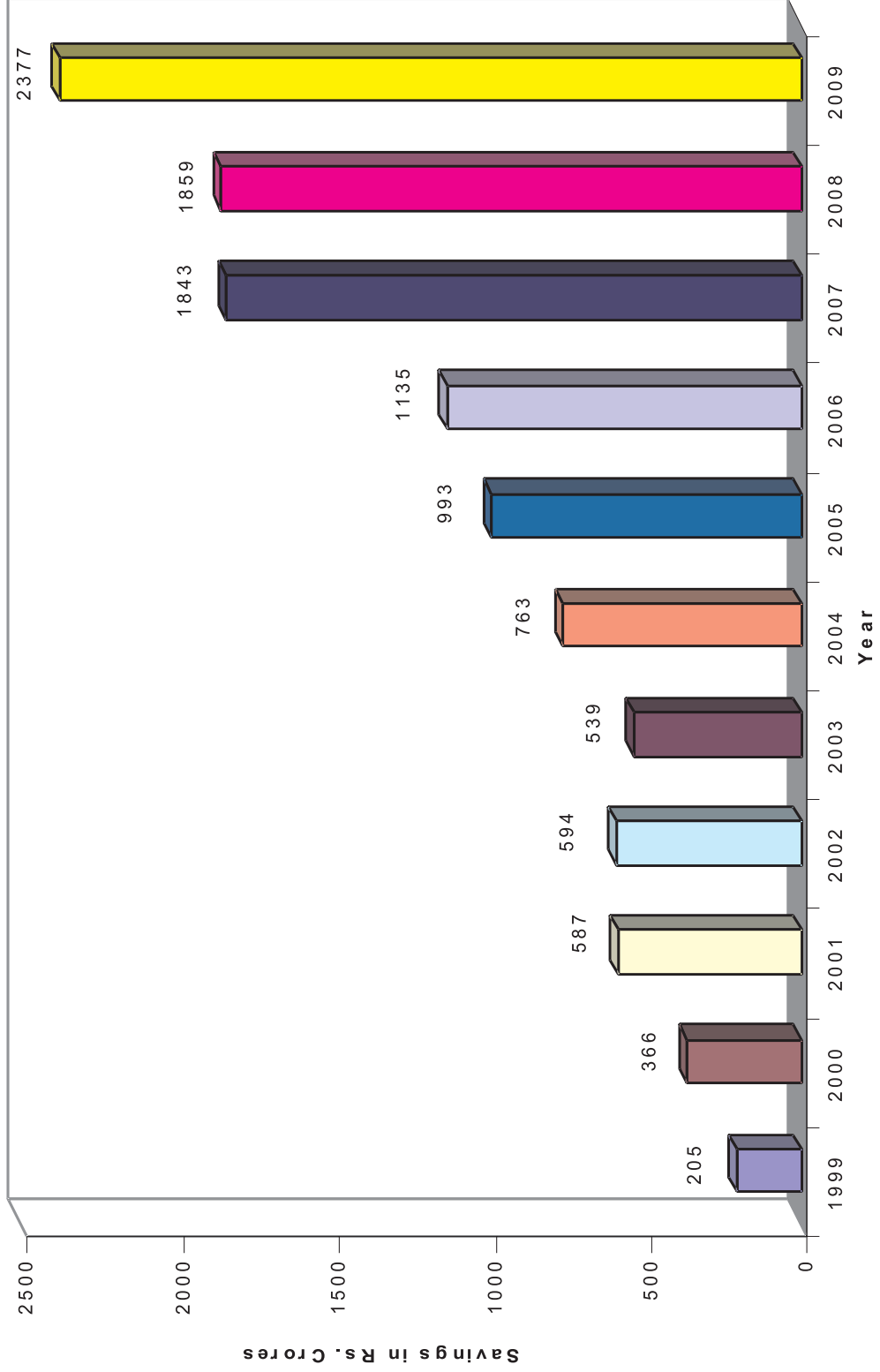
The Award Scheme has motivated the participating units to undertake serious efforts in saving energy and environment. The participating units of 2009 Awards have collectively invested Rs.3180 Crores in energy conservation measures, and achieved a monetary savings of Rs. 2377 Crores every year, implying a very short payback period of 16 Months only, once again proving the fact that energy conservation is a least cost option. The participating units have also saved electrical energy of 2451 Million kWh of electrical energy, which is equivalent to the energy generated from a 359 MW thermal power station at a PLF of 0.78. In other words, these participating units have avoided the installation of power generating capacity equivalent to 359 MW thermal power stations in 2008-09, which would otherwise have been required to meet the power demand of these units.

In the last 11 years of Award Scheme of the period 1999-2009, the participating units have collectively saved Rs11261 Crores and the investment made on energy efficiency projects was recovered back in 17.6 months. In energy terms, 12113 Million kWh of electrical power, 24 lakhs kilolitre of oil, 67 lakhs metric tonne of coal and 21.2 billion cubic metre of gas was saved, through the energy conservation measures of the participating units.

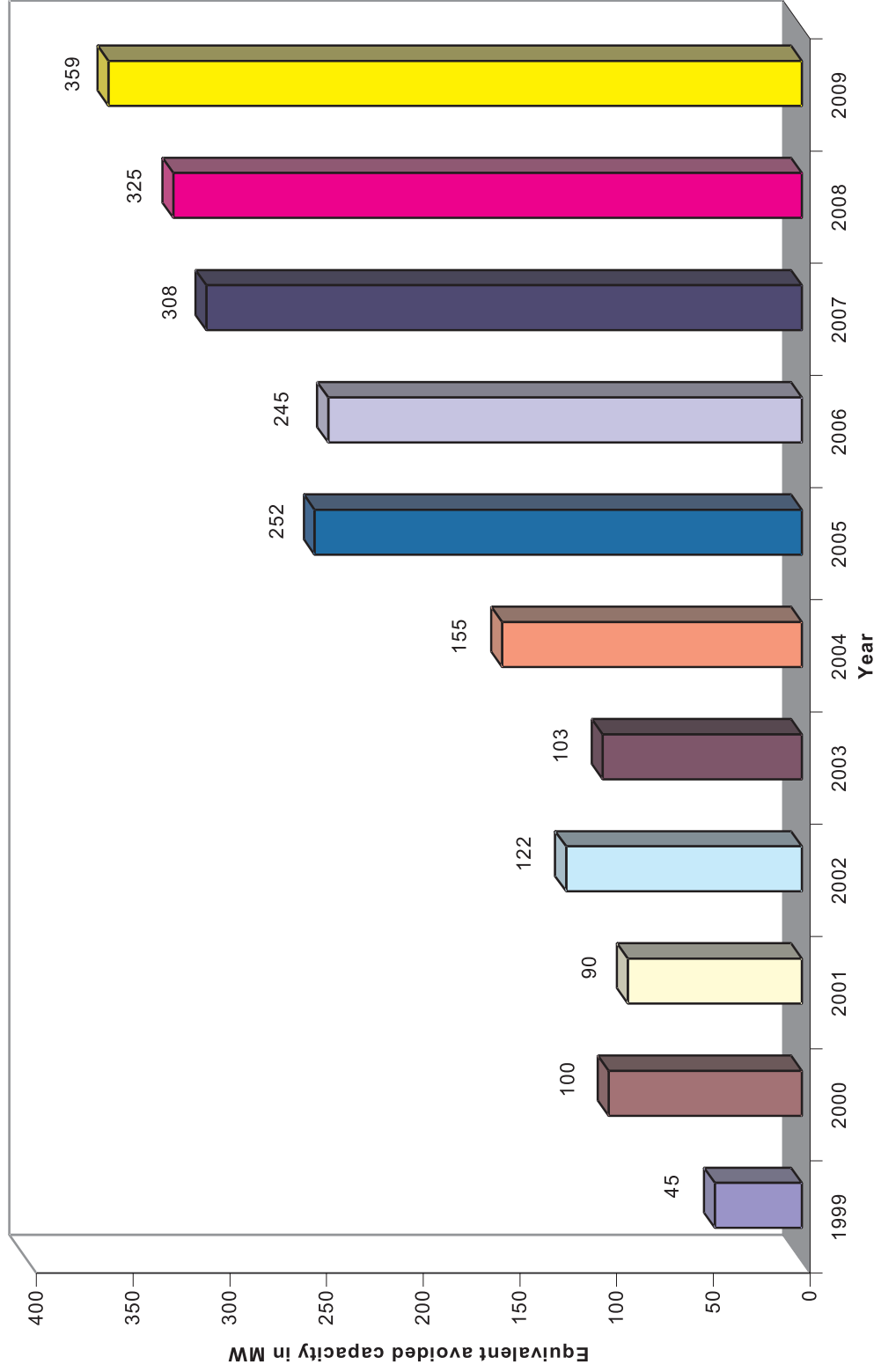
The progressive industrial units and other establishments have already realized the cost effectiveness of energy conservation measures and honouring their efforts on National Energy Conservation Day, gives a message to thousands of other industrial units and establishments who may have not yet fully utilized their cost effective potential through energy conservation.

It is hoped that National Energy Conservation Award Scheme would help in motivating the other energy consumers in joining and promoting of a nation wise energy conservation movement.

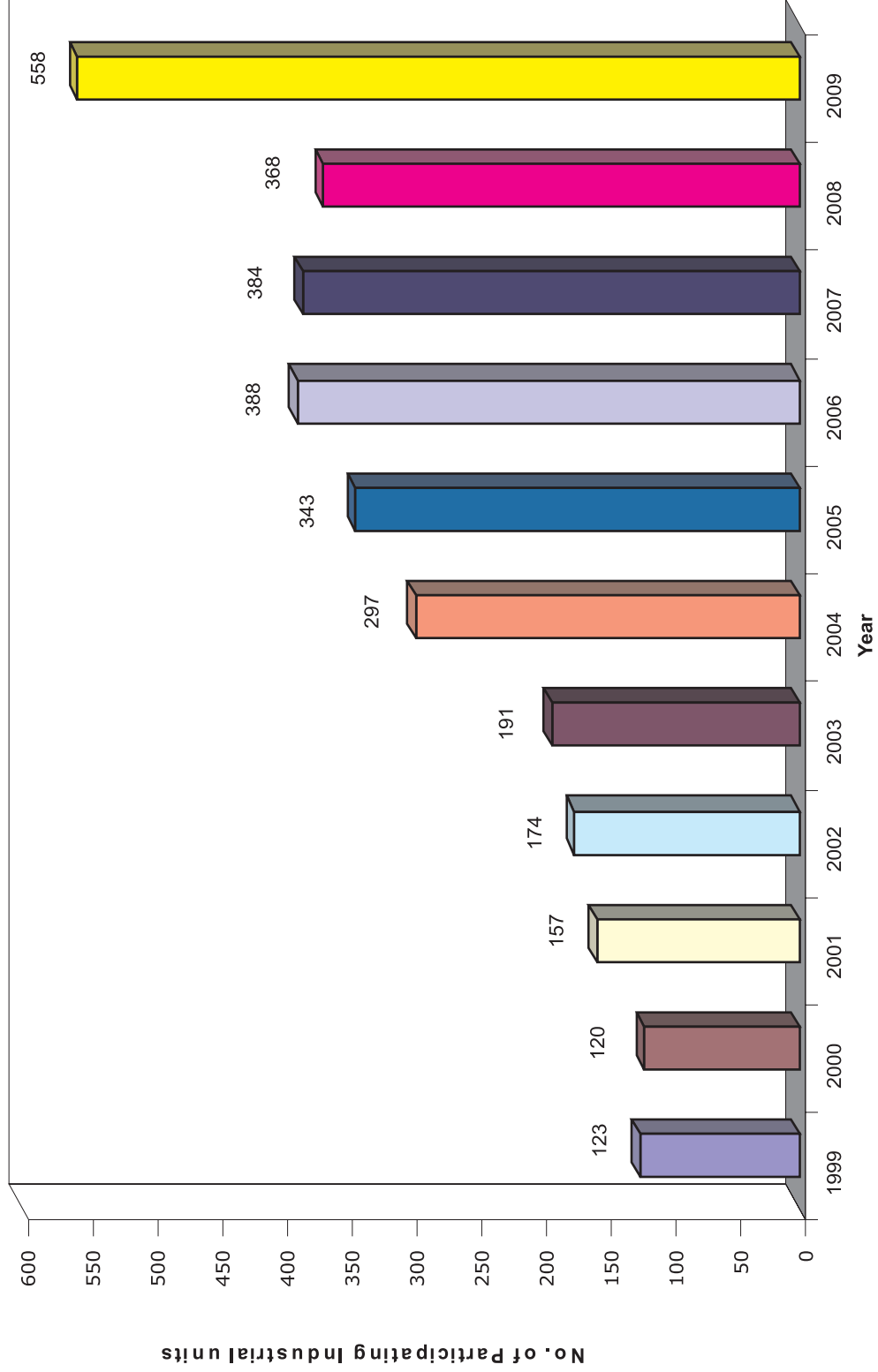
**MONEY SAVINGS ACHIEVED PER YEAR BY PARTICIPATING
UNITS IN THE NATIONAL ENERGY CONSERVATION
AWARD SCHEME (1999-2009)**



ELECTRICAL ENERGY SAVING IN TERMS OF EQUIVALENT AVOIDED CAPACITY IN (MW)



ENCOURAGING RESPONSE FROM INDIAN INDUSTRY AND OTHER ESTABLISHMENTS IN THE NATIONAL ENERGY CONSERVATION AWARD SCHEME (1999-2009)



SALIENT FEATURES OF NATIONAL ENERGY CONSERVATION AWARDS – 2009

ANNUAL ACHIEVEMENT BY AWARD PARTICIPATING UNITS FROM INDUSTRIAL SECTOR, OFFICE BUILDINGS, HOTELS, HOSPITALS, ZONAL RAILWAYS, STATE DESIGNATED AGENCIES, MUNICIPALITIES & MANUFACTURERS OF BEE STAR LABELED APPLIANCES IN THE YEAR 2008-2009

1. MONETARY SAVINGS

Annual Savings	:	Rs. 2377 Crores
One time Investment	:	Rs. 3180 Crores
Average payback Period	:	16 months



2. ANNAUL ENERGY SAVINGS

Electricity	:	2451 Million kWh (or Avoided Capacity Equivalent to a 359 MW Thermal Power Station)
Furnace Oil	:	5.65 Lakhs Kilo Litres (KL)
Gas	:	4275 Lakhs cubic metres
Coal	:	12.4 Lakhs Metric Tonnes (MT)

**YEAR WISE ENERGY SAVINGS ACHIEVED BY PARTICIPATING
UNITS IN MINISTRY OF POWER'S NATIONAL ENERGY
CONSERVATION AWARD SCHEME
(1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 & 2009)**

Year	No. of Participating units	Annual Savings in Rs. Crores	One time investment in Rs. Crores	Electrical Energy Saving		Furnace Oil & Other liquid fuel Savings, in Lakhs kL	Coal Savings in Lakh Metric Tonnes	Gas Savings in Lakh cubic metres
				Million kWh	Equivalent avoided capacity in MW			
2009	558***	2377	3180	2451	359	5.65	12.4	4275
2008	368**	1859	2493	2216	325	1.85	3.47	15729
2007	384*	1843	2923	1620	308	1.25	5.86	15379
2006	388*	1135	1266	1288	245	1.19	5.17	29044
2005	343*	993	1319	1327	252	2.4	7.58	13122
2004	297	763	1364	814	155	2.49	5.37	18585
2003	191	539	1071	542	103	2.21	12.65	73181
2002	174	594	691	641	122	1.7	7.4	35588
2001	157	587	659	485	90	2.21	4.79	3929
2000	120	366	630	524	100	1.327	0.64	707
1999	123	205	940	205	45	1.62	2.15	2444
Total 11 years		11261	16536	12113	2104	24	67	211983

*Participating units include Industrial units, Buildings and Zonal Railways
 ** Participating units include Industrial units, Buildings, Zonal Railways, State Designated Agencies and Municipalities
 *** Participating units include Industrial units, Buildings, Zonal Railways, State Designated Agencies, Municipalities and Manufacturers of Star Labeled Appliances