

**ENERGY CONSERVATION EFFORTS  
AND  
ACHIEVEMENTS OF THE  
NATIONAL ENERGY CONSERVATION AWARDS 2008  
WINNING UNITS**

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## NATIONAL ENERGY CONSERVATION AWARDS - 2008

### *Introduction*

The Industrial sector in India is a major energy user, accounting for about 48% of commercial energy consumption. The sector has become increasingly energy-intensive over time, which is partly due to investments made in basic and energy intensive industries due to the emphasis laid in the past development plans on achieving self-reliance. There are wide variations in energy consumption among different units within the same industrial sector using comparable technology. The energy savings potential in this sector is estimated to be upto 20%. Despite the large potential for energy efficiency investments having financially attractive returns, only a small fraction is actually being tapped. There is thus a need for concerted efforts, whether voluntary or otherwise to promote energy efficiency in the industrial sector.

Recognizing the importance and benefits of energy efficiency, the Government of India has enacted the Energy Conservation Act, 2001 which has come into force from 1<sup>st</sup> March, 2002. Under the provisions of the Act, Bureau of Energy Efficiency has been established with effect from 1<sup>st</sup> March 2002. The Bureau is responsible for spearheading the improvement of energy efficiency of the economy through various regulatory and promotional instruments. The mission of Bureau of Energy Efficiency (BEE) is to institutionalize energy efficiency services, promote energy efficiency delivery mechanisms, and provide leadership to improvement of energy efficiency in all sectors of the economy.

Ministry of Power and the Bureau of Energy Efficiency have been engaged in identifying policies, programmes for ensuring the efficient use of energy in all sectors of the economy. One of the policy initiatives launched by the Ministry of Power is the scheme to encourage, motivate as well as give recognition through "National Energy Conservation Awards" to industrial units buildings and zonal railways who have taken extra efforts to reduce energy intensities while maintaining the production levels. The scheme is aimed to create an environment that would spur industries in achieving excellence in efficient use of energy conservation. The Awards were given away for the first time in December 14 1991, which is celebrated as 'National Energy Conservation Day' throughout the country.

The Awards Scheme recognizes best practice in 33 sub-sectors from large and medium scale industries, 3 sub-sectors from small scale industries, 4 sub-sectors from the building sector and in zonal railways

For the current award scheme 2008, two separate categories for State Designated Agencies (SDAs) and Municipalities have been included.

### *Response*

The response from the industries, buildings, hotels & hospitals, shopping malls, zonal railways, state designated agencies and municipality to the EC Award has been encouraging. The EC Award has become very popular among the industrial and commercial units as is evident from increasing participation level (from 123 in 1999 to 368 in 2008).

## **Award Scheme**

An Energy Conservation Award Committee was set up under the Chairmanship of Secretary (Power) for deciding the award winners. The members of the Committee were drawn from the Ministry of Power, Central Electricity Authority (CEA), National Productivity Council (NPC), Confederation of Indian Industry (CII), 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) had also set up a Technical Sub-Committee to assist Award Committee in the finalization of Awards.

## **The Awards**

The Award Committee considered and evaluated the nominations received for the year 2008 from industries, office buildings, hospitals, hotels, shopping malls, zonal railways, state designated agencies and municipalities. The Award Committee this year has selected 1 unit for the Excellence Award, 2 units for Top Rank Award, 19 units for First prize, 22 units for Second Prize and 23 units for Certificate of Merit. The awards are recognition of their demonstrated commitment to energy conservation and efficiency.

## **Performance indicator of Award Scheme**

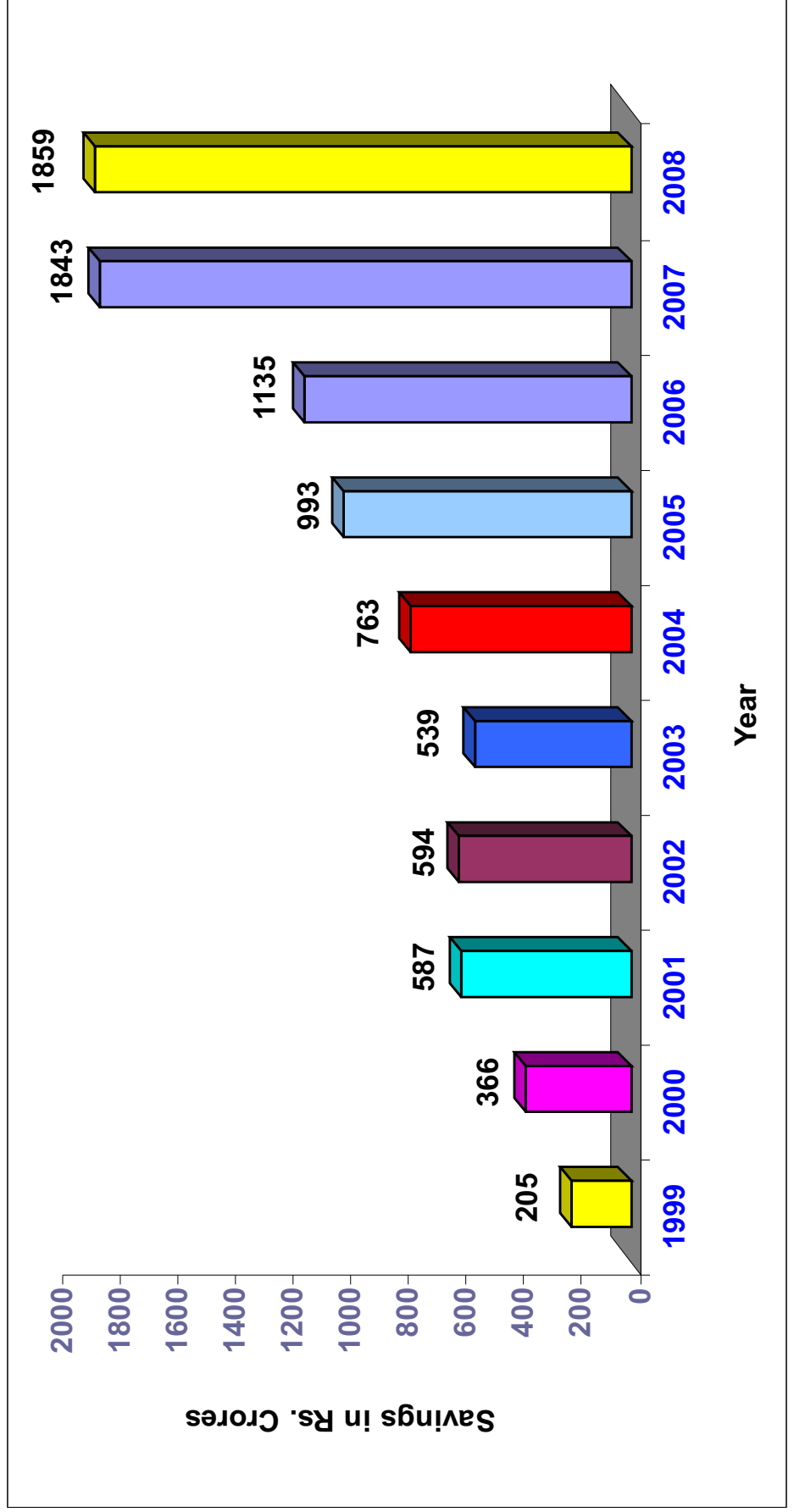
The Award Scheme has motivated the participating units to undertake serious efforts in saving energy and environment. The participating units of 2008 Awards have collectively invested Rs. 2493 Crores in energy conservation measures, and achieved a monetary savings of Rs. 1859 Crores every year, implying 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 2216 Million kWh of electrical energy, which is equivalent to the energy generated from a 325 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 325 MW thermal power station in 2007-08, which would otherwise have been required to meet the power demand of these units.

In the last 10 years of Award Scheme of the period 1999-2008, the participating units have collectively saved Rs.8884 Crores per year and the investment made on energy efficiency projects was recovered back in 18 months. In energy terms, 9662 Million kWh of electrical power, 18.3 lakhs kilolitre of oil, 55.08 lakhs metric tonne of coal and 20.7 Billion cubic metre of gas was saved, through the energy conservation measures of the participating units.

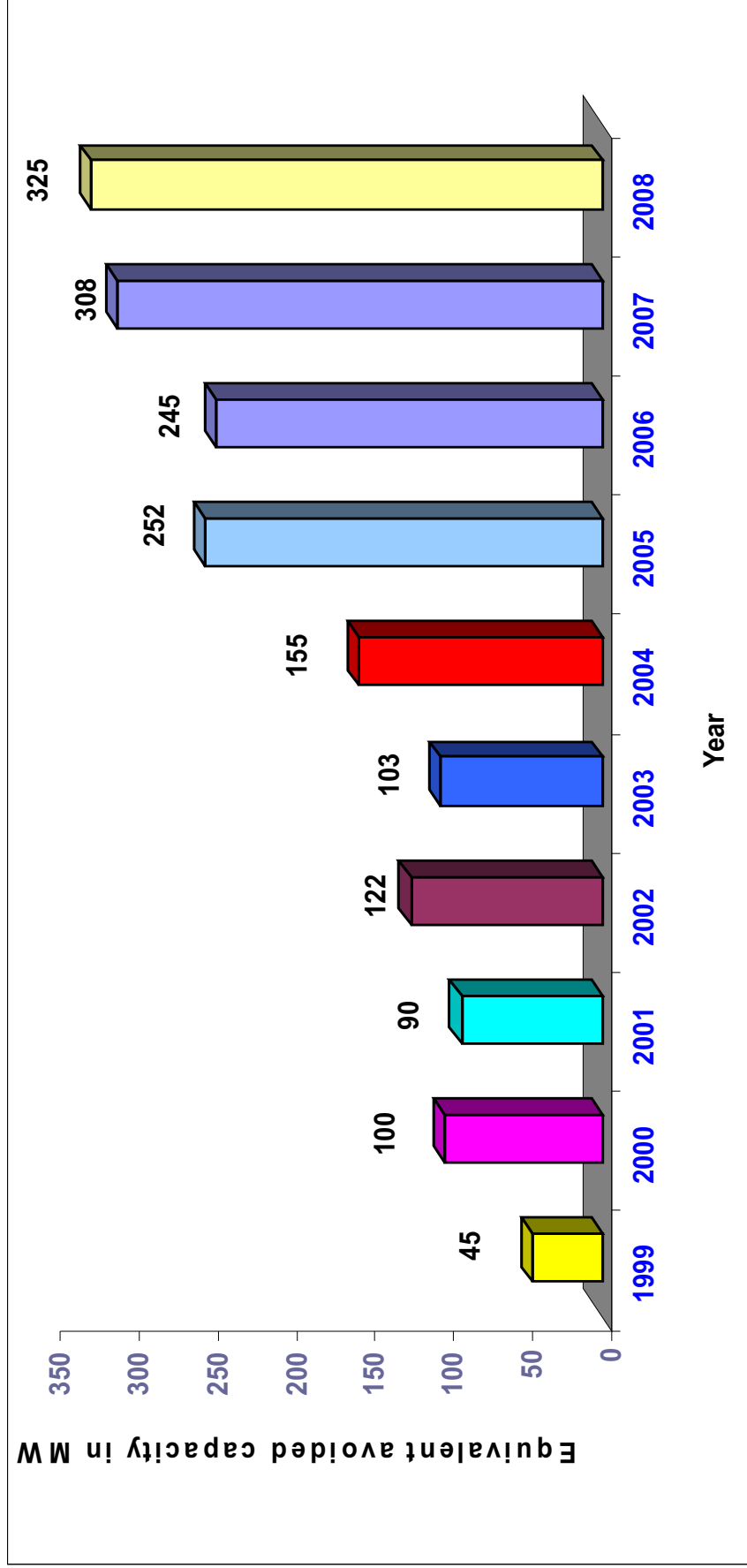
The progressive industrial units and other establishments have already realized the cost effectiveness of energy conservation measures and honouring their efforts on National Energy Conservation Day, gives a message to thousands of other industrial units and establishments who may have not yet fully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

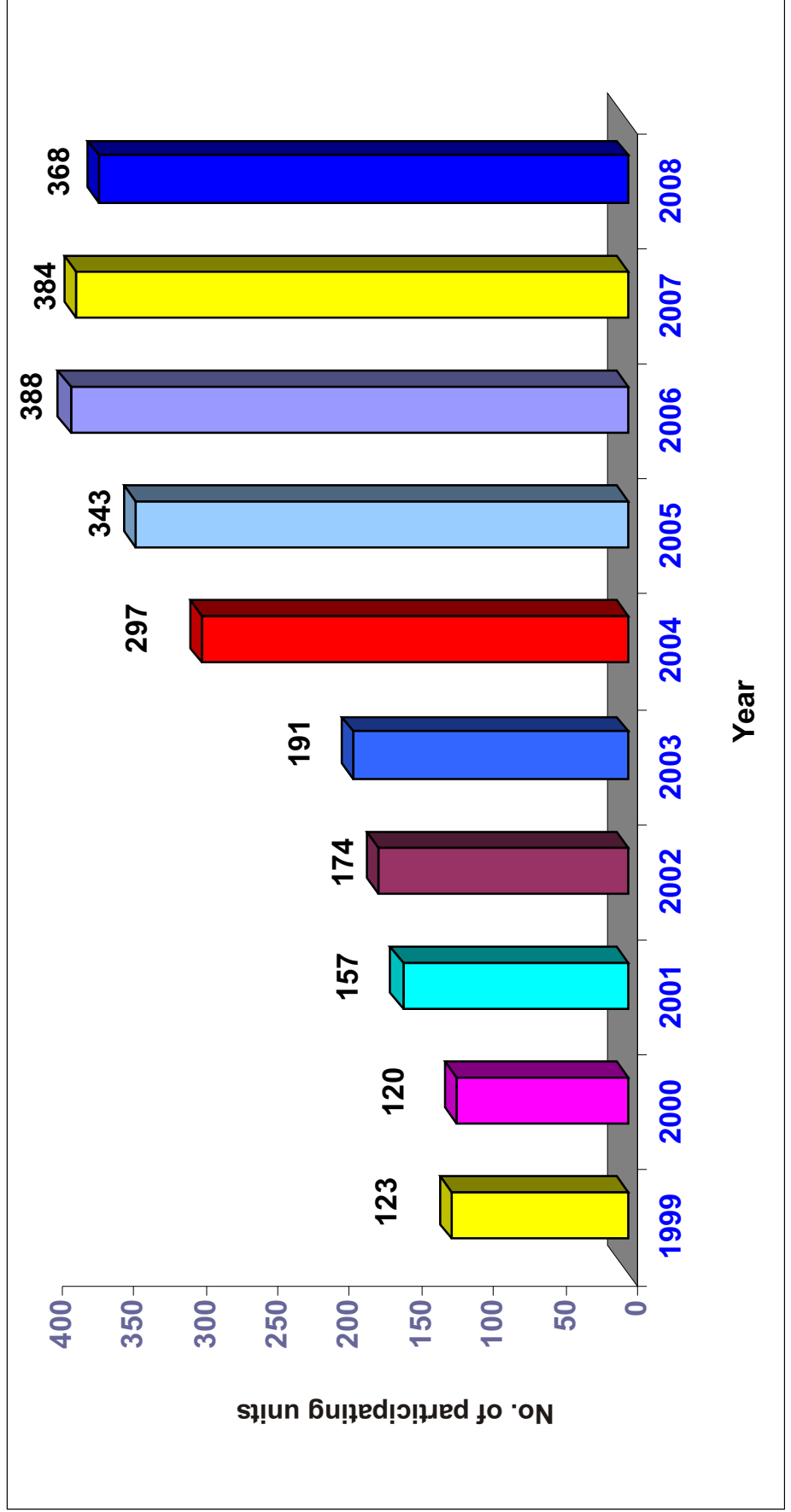
# MONEY SAVINGS ACHIEVED PER YEAR BY PARTICIPATING UNITS IN THE NATIONAL ENERGY CONSERVATION AWARD SCHEME (1999-2008)



# 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 (1999-2008)



## SALIENT FEATURES OF NATIONAL ENERGY CONSERVATION AWARDS - 2008

ANNUAL ACHIEVEMENT BY AWARD PARTICIPATING UNITS FROM INDUSTRIAL SECTOR, OFFICE BUILDINGS, HOSPITALS, SHOPPING MALLS, ZONAL RAILWAYS, STATE DESIGNATED AGENCIES AND MUNICIPALITIES IN THE YEAR 2007-2008

### 1. MONETARY SAVINGS

Annual Savings	:	Rs. 1859 Crores
One time Investment	:	Rs. 2493 Crores
Average Payback Period	:	16 months



### 2. ANNUAL ENERGY SAVINGS

Electricity	:	2216 Million kWh (or Avoided Capacity Equivalent to a 325 MW Thermal Power Station)
Furnace Oil	:	1.85 lakhs Kilo Litres (KL)
Gas	:	15728 lakhs cubic metres
Coal	:	3.47 lakhs Metric Tonnes (MT)

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

Year	No. of participating units	Annual Savings in Rs. Crores	One time Investment in Rs. Crores	Electrical Energy Saving		Furnace Oil Savings in Lakhs KL	Coal Savings in Lakh Metric tonnes	Gas savings in Lakh Cubic Metres
				Million kWh	Equivalent Avoided Capacity in MW			
2008	368**	1859	2493	2216	325	1.85	3.47	15728
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	2.40	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
<b>Total 10 years</b>		<b>8,884</b>	<b>13,356</b>	<b>9,662</b>	<b>1,745</b>	<b>18.247</b>	<b>55.08</b>	<b>2,07,707</b>

\* Participating units include Industrial units, Buildings and Zonal Railways

\*\* Participating units include Industrial units, Buildings, Zonal Railways, State Designated Agencies and Municipalities