

## NATIONAL ENERGY CONSERVATION AWARDS - 2005

### Introduction

The Indian economy uses a variety of energy sources both commercial and non-commercial. The energy supply system that has developed over the years depends more and more on fossil fuel, the availability of which is limited. With rapid increase in demand for petroleum products, the country has become a heavy importer of oil. Development of some of these energy resources is beset with serious environmental implications.

All these factors have raised questions about the long-term sustainability of such an energy development system. The adverse impacts of energy consumption and production can be mitigated either by reducing consumption or shifting energy supplies options better able to support sustainable development objectives. The greatest and most cost effective way for sustainable energy development is by improving end-use efficiency. This option provides cheaper solution to bridge demand - supply gap than increasing supply.

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. As one of the policy initiative, the Ministry of Power have launched a scheme to encourage, motivate as well as give recognition through "National Energy Conservation Awards" to industrial units 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. From the year 2005, the following new schemes are also being included in the Award Scheme:-

- i) National Energy Conservation Awards for Government buildings; and
- ii) National Energy Conservation Awards for Commercial buildings (Private Sector)

In the Awards Scheme 2005, for Large and Medium Scale Industry, applications were called from 33 sub-sectors of industrial units in the automobile, aluminium, cement, chemicals, ceramics, chlor-alkali, dairy, distillery & brewery, drug & pharmaceutical, edible oil/vanaspati, fertilizers, foundriys, forging, glass, general category, integrated steel, mini steel, mining, paper & pulp, petrochemicals, petroleum pipeline, refractory, refineries, steel re-rolling, sugar, tea, textile and tyre plants including the following new 5 sub-sectors, which have been included in the Award Scheme from this year:-

- (i) Plastic Industry
- (ii) Jute Industry
- (iii) Paints & Allied Product Industry
- (iv) Consumer Goods
- (v) Food Processing (food & vegetable, marine products, package & food products, drinks & beverages)

For the Small Scale Sector, applications are invited from foundry, rolling mills and forging industry (3 sub-sectors).

### **Response**

The response from the industries to the year 2005 scheme has been encouraging. In total, three hundred eleven (311) industrial units belonging to the above sub-sectors responded to the above Award Scheme, which is an all time record for the Award Scheme since its inception.

Response from the Government Buildings and Commercial Buildings (Private Sector) was also encouraging. In total, 32 building establishments responded (16 each in both types of establishments).

### **Award Scheme**

An Energy Conservation Award Committee is set up under the Chairmanship of Secretary (Power) for deciding on the award winners. The members of the Committee are drawn from the Ministry of Power, Central Electricity Authority (CEA), National Productivity Council (NPC), Bureau of Indian Standards (BIS), Confederation of Indian Industry (CII), and Bureau of Energy Efficiency (BEE) provides the administrative and technical support to the committee. The Ministry of Power (MOP) also sets up a Technical Sub-Committee to assist Award Committee in the finalization of Awards

### **The Awards**

The Award Committee considered and evaluated the 343 nominations received for the year 2005 from Industries, Government Buildings and Commercial Buildings.

The Award Committee this year has selected one industrial unit for Special Prize, 13 units for the First Prize, 16 industrial units for the Second Prize and 25 industrial units for Certificate of Merit in the Industries Sector.

In the Government Buildings Sector, 3 buildings have been selected for the First Prize, Second Prize and Certificate of Merit, whereas in the Commercial Buildings ( Private Sector), 2 buildings have been selected for the First Prize and Certificate of Merit.

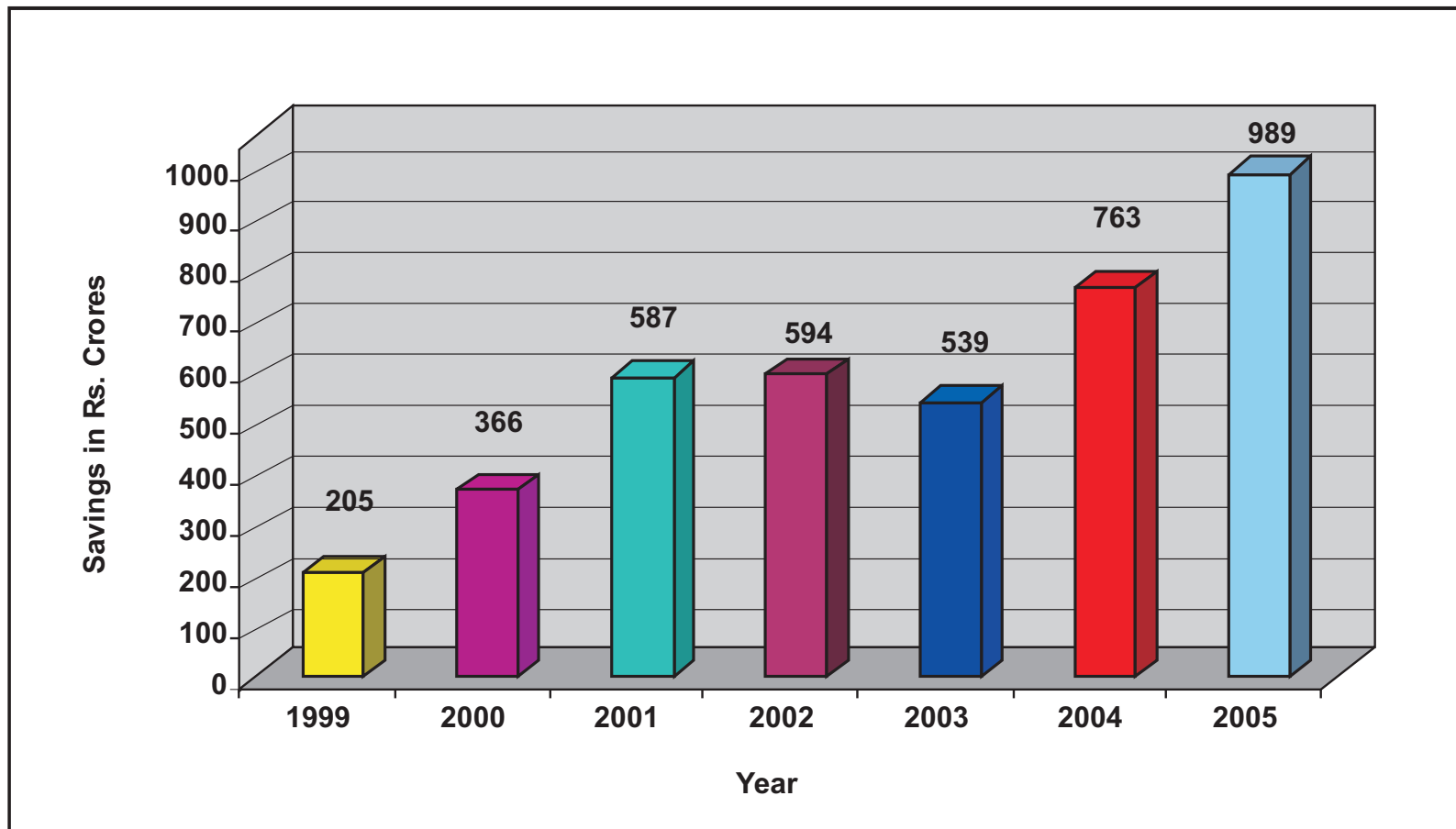
### **Performance indicator of Award Scheme**

The Award Scheme has motivated the participating units to undertake serious efforts in saving energy and environment. The data pertaining to 311 industrial units indicated that these units have been able to collectively avoid generation of 1316 million kWh of Electrical Energy, which is equivalent to the energy generated from a 250 MW thermal power station in 2004-2005 at a PLF of 60%. In other terms, these participating units have avoided the installation of power generating capacity equivalent to 250 MW thermal power station in 2004-2005, which otherwise was required to meet the existing power demand of these industrial units. In the monetary terms, these units have been able to save Rs.989 Crores per year with an average payback period of 1.33 years.

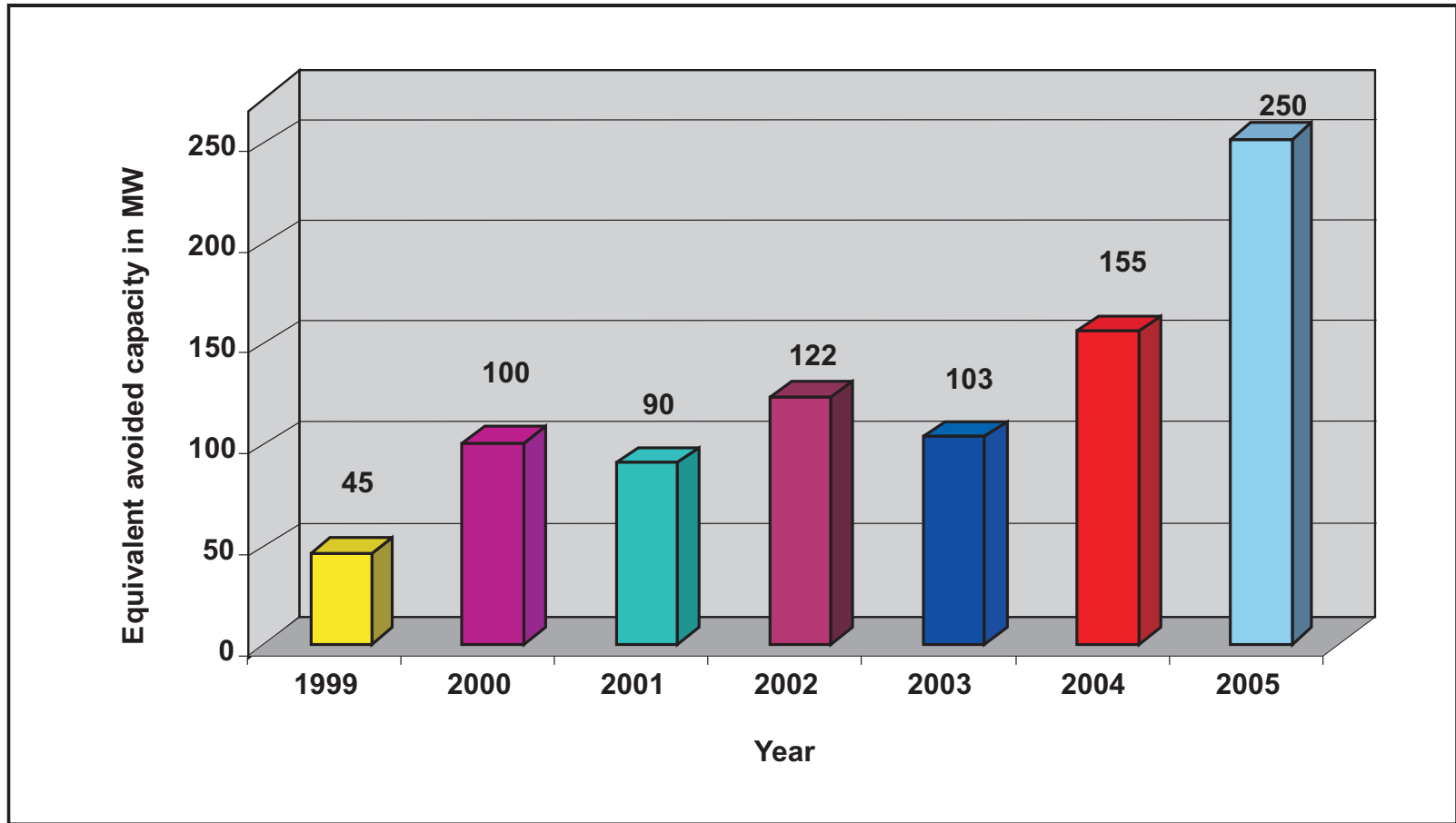
The monetary savings of Rs.3.6 crores achieved in first time introduced Award scheme in Government Buildings and Commercial Buildings (Private Sector) have also laid a strong foundation on which future energy savings will build-up.

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

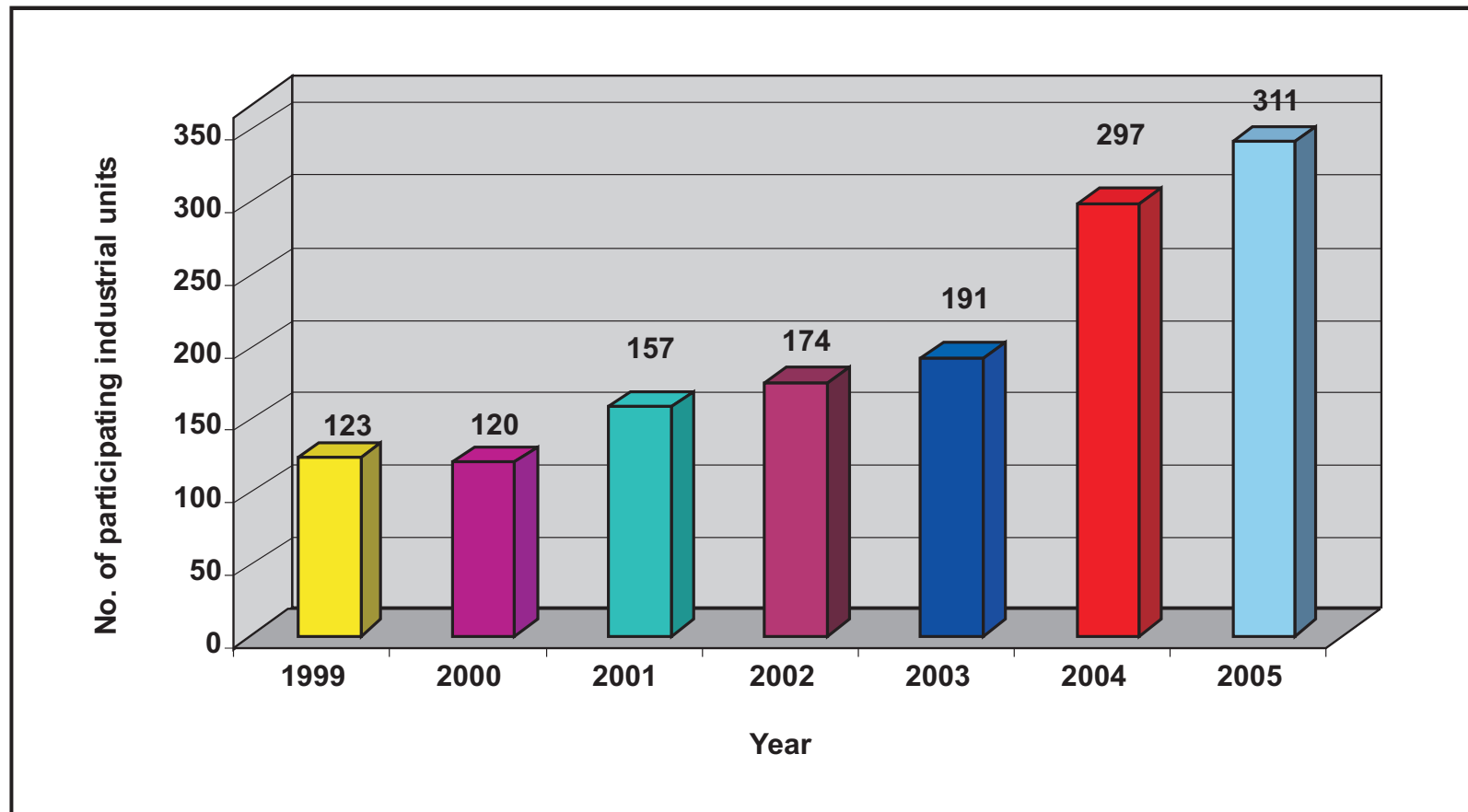
# Money savings achieved by participating units in EC Award Scheme (1999-2005)



# Electrical Energy Savings (Equivalent Avoided Capacity in MW)



# Encouraging response from Indian Industry in the EC Awards Scheme (1999-2005)



## **SALIENT FEATURES OF NATIONAL ENERGY CONSERVATION AWARDS - 2005**

### **ANNUAL ACHIEVEMENT BY AWARD PARTICIPATING INDUSTRIAL UNITS IN THE YEAR 2004-2005**

#### **1. MONETARY SAVINGS**

Savings : Rs.98914 lakhs (Rs.989.14 Crores)  
 Investment : Rs.131617 lakhs (Rs.1316.17 Crores)  
 Average payback period : 1.33 years.

#### **2. ENERGY SAVINGS**

Electricity : 13167 lakhs kWh (or Avoided Capacity equivalent to a 250 MW Thermal Power Station)  
 Furnace Oil : 2.40 lakhs Kilo Litres (KL)  
 Gas : 13122 lakhs cubic metres.  
 Coal : 7.58 lakhs Metric Tonnes (MT)



### **ANNUAL ACHIEVEMENT BY AWARD PARTICIPATING GOVERNMENT BUILDINGS IN THE YEAR 2004-2005**

#### **1. MONETARY SAVINGS**

Savings : Rs.158 lakhs (Rs.1.58 Crores)  
 Investment : Rs.234 lakhs (Rs.2.34 Crores)  
 Average payback period : 1.5 years.

#### **2. ENERGY SAVINGS**

Electricity : 20 lakhs kWh (or Avoided Capacity equivalent to a 0.4 MW Thermal Power Station)

### **ANNUAL ACHIEVEMENT BY AWARD PARTICIPATING COMMERCIAL BUILDINGS (Private Sector) IN THE YEAR 2004-2005**

#### **1. MONETARY SAVINGS**

Savings : Rs.203 lakhs (Rs.2.03 Crores)  
 Investment : Rs.115 lakhs (Rs.1.15 Crores)

#### **2. ENERGY SAVINGS**

Electricity : 91 lakhs kWh (or Avoided Capacity equivalent to a 1.73 MW Thermal Power Station)

**SUMMARY OF ENERGY SAVINGS ACHIEVED  
BY INDUSTRIAL UNITS PARTICIPATING IN  
MINISTRY OF POWER'S  
ENERGY CONSERVATION AWARD SCHEME  
(1999, 2000, 2001, 2002, 2003, 2004 & 2005)**



Year	No. of participating units	Savings in Rs. Crores	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			
2005	311	989	1316	1316	250	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 7 years</b>		<b>4,043</b>	<b>6,671</b>	<b>4,527</b>	<b>865</b>	<b>13.957</b>	<b>40.58</b>	<b>1475,56</b>

## NATIONAL ENERGY CONSERVATION AWARD WINNERS - 2005 INDUSTRY

### ALUMINIUM

- 1<sup>st</sup> Prize : Hindalco Industries Limited, Renukoot, Sonbhadra (Uttar Pradesh)  
2<sup>nd</sup> Prize : Hindalco Industries Limited, Hirakud Smelter, Hirakud (Orissa)

### AUTOMOBILE

- Special Prize** : **Mahindra & Mahindra Ltd., Kandivli (East), Mumbai (Maharashtra)**  
2<sup>nd</sup> Prize : Tata Motors Limited (Passenger Car Business Unit), Chikhali, Pune (Maharashtra)  
Certificate of Merit : 1. Tata Motors Limited, Jamshedpur (Jharkhand)  
2. Tata Johnson Controls Automotive Limited, Hinjewadi, Distt. Pune (Maharashtra)

### CEMENT

- 1<sup>st</sup> Prize : Jaypee Rewa Plant - Jai Prakash Associates Limited, Rewa (Madhya Pradesh)  
2<sup>nd</sup> Prize : Madras Cements Limited, Alathiyur Works, Perambalur (Tamil Nadu)  
Certificate of Merit : 1. Shree Cement Limited, Bangur Nagar, Beawar (Rajasthan)  
2. Shree Digvijay Cement Co. Limited, Digvijaygram, Jamnagar (Gujarat)

### CHEMICALS

- 1<sup>st</sup> Prize : Manganese Ore (India) Limited, Electrolytic Manganese Di-Oxide Plant, Nagpur (Maharashtra)  
2<sup>nd</sup> Prize : Industrial Organics Limited, Mansa Road, Barnala (Punjab)  
Certificate of Merit : 1. United Phosphorus Limited, Vapi (Gujarat)  
2. Heavy Water Plant, Manuguru, District Khammam (Andhra Pradesh)

### CHLOR-ALKALI

- 1<sup>st</sup> Prize : Gujarat Alkalies and Chemicals Ltd., District Vadodara (Gujarat)  
Certificate of Merit : 1. The Travancore-Cochin Chemicals Limited, Udyogamandal, Kochi (Kerala)  
2. Gujarat Alkalies and Chemicals Limited, Dahej (Gujarat)

### DAIRY

- 1<sup>st</sup> Prize : Hassan Dairy, Hassan Cooperative Societies' Union Limited, Hassan (Karnataka)  
2<sup>nd</sup> Prize : Bangalore Urban & Rural District Co-operative Milk Producers Societies Union Limited, Dharamram College Post, Bangalore (Karnataka)  
Certificate of Merit : Mysore-Chamarajanagar District Cooperative Societies' Union Limited, Mysore (Karnataka)

### FERTILIZER

- 1<sup>st</sup> Prize : Tata Chemicals Limited (Fertilizer SBU), Budaun (Uttar Pradesh)  
2<sup>nd</sup> Prize : Rashtriya Chemicals and Fertilizers Limited, Thal Unit, (Maharashtra)  
Certificate of Merit : 1. Indian Farmers Fertilizer Cooperative Limited, Phulpur Unit-I, Allahabad (Uttar Pradesh)  
2. National Fertilizers Limited, Vijapur Plant-I, Distt. Guna (Madhya Pradesh)

## FOOD PROCESSING

- 1<sup>st</sup> Prize : Perfetti Van Melle India Private Limited, Urapakkam, Chennai (Tamil Nadu)  
2<sup>nd</sup> Prize : GlaxoSmithKline Consumer Healthcare Limited, Dowlaiswaram, District E.G. (Andhra Pradesh)

## FOUNDRY

- 2<sup>nd</sup> Prize : Brakes India Limited, Foundry Division, Solinghur, Vellore (Tamil Nadu)

## INTEGRATED STEEL PLANTS

- 2<sup>nd</sup> Prize : 1. Visakhapatnam Steel Plant – Rashtriya Ispat Nigam Limited, Visakhapatnam (Andhra Pradesh)  
2. Jindal Steel & Power Limited, Raigarh (Chhattisgarh)

## MINING

- 2<sup>nd</sup> Prize : Rampura Agucha Mine – Hindustan Zinc Limited, Agucha Mines, Bhilwara (Rajasthan)

## PAINTS & ALLIED

- 1<sup>st</sup> Prize : Goodlass Nerolac Paints Limited, Jainpur, Kanpur (Dehat) (Uttar Pradesh)  
2<sup>nd</sup> Prize : Asian Paints (India) Limited, Ankleshwar (Gujarat)  
Certificate of Merit : Asian Paints (India) Limited, Patancheru (Andhra Pradesh)

## PETROCHEMICALS

- 1<sup>st</sup> Prize : Indian Petrochemicals Corporation Limited, Gandhar Petrochemicals Complex (Gujarat)  
2<sup>nd</sup> Prize : Haldia Petrochemicals Limited, Haldia (West Bengal)  
Certificate of Merit : 1. Reliance Industries Ltd., Hazira Manufacturing Division, Surat (Gujarat)  
2. GAIL (India) Limited, Pata, Auraiya (Uttar Pradesh)  
3. Castrol India Limited, Patalganga (Maharashtra)

## PETROLEUM PIPELINE

- Certificate of Merit : GAIL (India) Limited, Vijaipur, Guna (Madhya Pradesh)

## PULP & PAPER

- 1<sup>st</sup> Prize : ITC Limited – PSPD, Bhadrachalam Unit, Sarapaka, Khammam District (Andhra Pradesh)  
2<sup>nd</sup> Prize : Ballarpur Industries Limited, Unit: Bhigwan, District Pune (Maharashtra)  
Certificate of Merit : 1. ITC Limited – PSPD, Tribeni Unit, District Hoogly (West Bengal)  
2. Hindustan Newsprint Limited, Newsprint Nagar, Kottayam (Kerala)

## REFINERY

- Certificate of Merit : 1. Mathura Refinery – Indian Oil Corporation Limited, Mathura, (Uttar Pradesh)  
2. Reliance Industries Limited, Refinery Division, Jamnagar (Gujarat)  
3. Haldia Refinery - Indian Oil Corporation Limited, Haldia (West Bengal)

## **SUGAR**

Certificate of Merit : KCP Sugar & Industries Corporation Ltd., Vuyyuru, District Krishna (Andhra Pradesh)

## **TEXTILE**

1<sup>st</sup> Prize : Indian Rayon and Industries Limited (Rayon Division), Veraval (Gujarat)

2<sup>nd</sup> Prize : Kanco Overseas, Tal: Dholka, District Ahmedabad (Gujarat)

Certificate of Merit : Raymond Limited, Textile Division, Chhindwara (Madhya Pradesh)

## **TYRE**

1<sup>st</sup> Prize : TVS Srichakra Limited, Madurai (Tamil Nadu)

Certificate of Merit : Goodyear India Limited, Ballabgarh, Faridabad (Haryana)

## **GENERAL CATEGORY**

1<sup>st</sup> Prize : Larsen & Toubro Limited – Heavy Engineering Division, Mumbai (Maharashtra)

2<sup>nd</sup> Prize : Harita Seating Systems Limited, Belagondapalli, Hosur (Tamil Nadu)

Certificate of Merit : Kirloskar Copeland Limited, Karad, District Satara (Maharashtra)

## **NATIONAL ENERGY CONSERVATION AWARD WINNERS – 2005 GOVERNMENT BUILDINGS**

1<sup>st</sup> Prize : Chhatrapati Shiwaji Maharaj Hospital and Rajiv Gandhi Medical College, Kalwa, Thane (Maharashtra)

2<sup>nd</sup> Prize : Dak Bhawan, Ministry of Communication & IT, Department of Post, New Delhi

Certificate of Merit : Digital Tax – Building, Bharat Sanchar Nigam Limited, Ernakulam (Kerala)

## **NATIONAL ENERGY CONSERVATION AWARD WINNERS – 2005 COMMERCIAL BUILDINGS (PRIVATE SECTOR)**

1<sup>st</sup> Prize : Dhirubhai Ambani Knowledge City Complex, Reliance Infocomm, Navi Mumbai (Maharashtra)

Certificate of Merit : Marriott WelcomHotel, New Delhi