

From The Editor

Today, the concept of energy conservation is more than three decades old. In fact, it had first emerged in 1973 after the oil price shock owing to oil embargo by OPEC. Later the events like Iranian revolution in 1979 and Iraq gulf war in 1991 further increased the need and importance of energy conservation.

USA and Japan were the first countries to initiate the movement for energy conservation. USA came out with a National Energy Conservation Policy Act (NECPA) in 1978 and by late 80s, it was able to save energy worth 160 billion dollars per year. According to Alliance to Save Energy, energy efficiency has met about 40% of US energy needs since 1973. Japan reduced its energy consumption relative to real GDP by 31% during the period of 1973 to 1983.

India has been making efforts to save energy since mid 70s and its efforts started gaining momentum with the joint NPC-IOC-DGTD studies in fuel oil utilization under the aegis of Standing Committee on Furnace Oil, from 1974 to 1976. The success of pilot studies in identifying about 18% fuel oil conservation potential in over 300 industries led to the creation of Petroleum Conservation Research Association (PCRA). In 1981, the Government of India made the first serious attempt by constituting an Inter Ministerial Working Group (IMWG) on energy conservation. IMWG asked the National Productivity Council (NPC) to conduct 200 energy audits covering 12 industrial sectors, which established the fact that an energy saving of Rs. 1925 crores could be achieved by investing Rs. 3600 crores.

In 1989, the Ministry of Power set up an Energy Management Centre (EMC) for the promotion of energy efficiency. EMC also introduced the scheme of National Energy Conservation Awards in 1991, which has become means to institutionalize the energy efficiency movement in the country. In addition, the organizations like PCRA, NPC, NCB and CII have played an important role in promoting energy conservation. Besides, most of the Indian industries have gone in for energy efficient technologies to become cost and energy efficient. In this regard, the cement industry is the best case to cite as it has not only become the most energy efficient industry, but has also set international benchmarks in specific energy consumption.

The Ministry of Power's recent estimates show a huge potential of 23% reduction of energy consumption from the present level in the various sectors without forgoing any of the end-use benefits of energy. It is equivalent to creation of nearly 25,000 MW of power generation capacity. And to give a fresh impetus to energy saving movement, the government has come out with its first legislative initiative - Energy Conservation Act, 2001 with penal provisions for non compliance, particularly for designated consumers. For effective implementation of the EC Act, a Bureau of Energy Efficiency (BEE) is set up, which has been vigorously leading the national movement for energy conservation. Initially, BEE is implementing the EC Act through voluntarily compliance approach but from April 2007, it is likely to implement the Act very strictly. It may also go ahead to penalize units not complying with its instructions.

However, the information about various provisions of EC Act and their implementation status, energy conservation and its potential, benefits of energy audits, implementation of EC projects through ESCOs, energy efficient technologies and units, energy saving tips for industries and buildings, accreditation/certification of energy auditors/energy managers, energy conservation awards etc., is not available in a well structured format at a single place. To fill this void, we have made a maiden attempt through this book, titled: "**Survey of Energy Conservation in India-2006**". This book is a result of our two years' sustained efforts and hope it would meet the information needs of all those interested in energy conservation. It would also serve as a ready reference book.



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