

Energy Efficiency and Technology Upgradation in Small and Medium Enterprises.

The manufacturing sector in India, constituting 80 per cent of MSMEs, forms an important segment to achieve sustainable growth patterns. In India, MSMEs compliment large-scale industries as ancillary units and contribute enormously to the socio economic development of the country. As observed, the industrial practices and the technology deployed in these units vary widely. Further, MSMEs have their own set of problems including market uncertainty, technological obsolescence, sub-optimal scale of operation, lack of funds, etc.

Cost of energy is considered a vital component for manufacturing units and spiraling power costs, energy efficiency assumes utmost importance for the sector to remain competitive. In line with the international community, India too has been working on the goal of attaining sustainability by encouraging energy efficient practices in the MSME sector.

A large number of MSMEs spread across India offer immense opportunity for transition towards energy conservation by adopting energy efficient technologies. According to a recent release by Ministry of MSME, there are around 36 million MSME units operating in India, contributing significantly to India's GDP numbers and providing jobs to approximately 80 million people. A good number of these MSMEs are energy intensive, where energy cost forms a major part of production cost.

During XI plan activities, Bureau of Energy Efficiency has witnessed that despite huge potential and scope of saving money, the MSMEs are not able to tap this opportunity due to lack of awareness and information asymmetry. The total energy savings, assessed from 988 units of 26 clusters quantifies to Rs.15.58 Crore per annum or 4934.45 toe / annum with voluntary investment of Rs 28.06 crore already made by the units (988 units). Further, huge upfront cost and lack of conducive financing mechanism are some of the reasons for not shifting to efficient technologies. In order to overcome these barriers, BEE focused its activities on demonstrations of energy efficient technologies, technical assistance & capacity buildings during XII plan. This is imperative for wide spread uptake and replication of energy efficient technologies within SME sector.

Activities in XII Plan

Based on the learnings and experiences of XI plan period, Bureau has developed a comprehensive scheme for demonstration of best energy efficiency technologies in selected clusters. During XII plan, it is envisaged that by direct and indirect energy efficiency interventions about 1500 SME units across the country through the support of different executing agencies working for energy efficiency in this sector. BEE undertakes following major interventions in the SME sector during XII plan:

1. Implementation of 100 demonstration projects of 10 best technologies in 5 SME sectors. The identified sectors are Pali (Textile), Varanasi (Brick), Ludhiana (Forging), Indore (Food) and Kochi (Sea food cluster).
2. Mapping of energy intensive clusters on a pan India basis with close coordination with MSME-DIs in the states.
3. Providing subsidy to carry out demonstrations of energy efficient technologies in 5 sectors to showcase the benefits of EE technologies and to encourage other units to implement the same. It is proposed to

provide subsidy upto Rs 10 lakh per demonstration will be released directly to the unit owners post implementation of the projects.

Status of activities:

1. 12 agencies have been empanelled to support BEE-National programme for energy efficiency in SMEs for five clusters.
2. Inception workshops involving stakeholders from cluster associations, units, MSME, regional research and technical institutions and Local Service providers were conducted in selected five clusters.
3. Baseline audits in selected units of Ludhiana and Varanasi cluster is completed and best energy efficiency technologies are identified for implementation.
4. Identification of beneficiary units for implementation of demonstration projects are under progress in Kochi (Seafood), Indore (food) and Pali (Textile) clusters.