

## **Small and Medium Enterprises (SME) Program**

The SME Program is targeted towards improving the productivity and lowering the specific energy costs of small and medium enterprises (SMEs) in partnership with relevant stakeholders in the State of Maharashtra.

### ***Background***

The State's industrial production is estimated to have grown by 8.7 percent during 2003-04. This sector plays a crucial role in the rapid and balanced development of the State. The organized industrial sector of Maharashtra alone contributes to more than a fifth of the total net value added to the industrial sector at the national level. This sector represents a large potential for energy efficiency improvement, but the implementation of energy efficiency projects in this sector has been very limited.

MEDA has been actively pursuing energy efficiency goals in the different economic sectors by supporting energy audits in about 400 industrial establishments over the last 15 years and achieved approx. Rs.30 crores energy saving.

### ***Rationale***

To tackle the rapidly rising cost of energy, large and organized industries have adopted energy conservation and efficiency measures through the enhancement of technology as well as management to the extent that some industries have attained energy performance standards comparable to the international leaders. However, because of the lack of skilled technical and management personnel, poor access to relevant information and capital limitations, similar improvements have not been achieved by the SMEs. Many of these industries suffer from lower productivity due to outdated technologies, improper production management and poor operation and maintenance practices. Without adequate support, these enterprises are likely to perish in the face of the falling trade barriers, creating considerable social problems with the rapid loss of employment.

### ***Program Objectives***

- Focus on SMEs in targeted sub-sectors to find generic solutions to the constraints of lower productivity and higher specific energy consumption
- Ensure implementation of the identified generic solutions across a wide range of enterprises

Facilitate the development of a market for energy efficiency products and processes

### ***Program Design***

*Emphasis on Productivity Improvement* - The program will emphasize improving the productivity of the SMEs, by promoting better management of production process, improved operation and maintenance practices and adoption of simple and cost-effective generic technological solutions. SMEs are likely to respond better to this approach which, while focusing on increasing revenues and ensuring employment of their personnel, helps to improve the efficiency of resource use (raw material, energy, etc.) and lower the generation of waste and the adverse impact on the environment.

*Approach* - With the help of the sub-sectoral data available, MEDA will retain 2-3 important sub-sectors for extending support in the pilot phase. Using these data, MEDA will identify a sample of 4-6 enterprises representing various sizes, with relatively high or low specific energy consumptions. MEDA will then engage competent and experienced energy auditors to undertake comparative studies in these sample industries to identify the technical and non-technical reasons

for the variations in performances and to retain feasible and generic solutions on the basis of cost-benefit analyses. MEDA will interact with manufacturers and vendors of energy efficient products and processes, ESCOs and financial intermediaries to help set up demonstration of suitable technologies and best practices that have considerable replication potential in the selected sub-sectors. The relevant stakeholders will be supported to widely disseminate the results of the pilot phase of activity to the targeted industrial sub-sectors, mainly through practical training workshops.

### ***Target Market Segments***

Target market segments will be selected from the following major industrial sub-sectors:

- Chemical and chemical products
- Food products
- Refined petroleum products
- Machinery and equipment
- Textiles
- Basic metals
- Motor vehicles, trailers
- Furniture

### ***End Uses Targeted***

The end uses targeted will include both generic end uses common to various industries such as motors, lighting, boilers, heat recovery, refrigeration, fans and pumps, etc. as well as process-specific applications such as process integration, heat recovery, process technology and equipment upgrades, cogeneration, etc.

### ***Key Barriers Addressed***

- Lack of skilled technical and management personnel in the SMEs
- Poor access to technical information, industrial benchmarks and best practices
- Investment bias towards expanding production capacity and over sizing equipment at the cost of efficiency
- Focus on first costs and reluctance to adopt efficiency due to the general perception that efficiency adds to costs, risks and delays

### ***Technologies to be Employed***

Wide range of generic as well as process-specific technologies that are cost-effective and have large-scale reliability across the selected industrial sub-sectors.

### ***Financing Approach –***

State Energy conservation fund may be utilized to provide some financial incentives for carrying out energy audit as well as for implementation of energy conservation measures in SMEs. It is also proposed to provide incentive to the energy efficient product manufacturers to reduce the cost of energy efficient product.

### ***Anticipated Results***

It is estimated that 10% energy could be saved in next three years.

### ***Key Action Steps***

- Data collection and database development
- Undertaking comparative studies in selected enterprises
- Setting up database of energy efficient products and processes

- Developing demonstration projects and technological fact-sheets
- Undertaking sensitization training of SME personnel to ensure replication of pilot initiatives