Energy Efficiency Programme for Small and Medium Enterprises (SMEs)

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India's MSME Sector: Context

The economic importance

1. The MSME (micro, small and medium enterprise) play a critical role in Indian economy by contributing to:
   - **45% of manufacturing output**,
   - **40% of exports**
   - around **8% of GDP**
2. Largest employer after agriculture employing more than **80 million people**

3. MSMEs are organised in clusters across the country : Around **180 clusters** within **18 energy intensive sectors**

Energy context

1. In the 180 energy intensive MSME clusters, overall energy consumption is estimated to be 22.5 Mtoe per annum.

2. In 25 MSME cluster, studies have estimated potential of 15% reduction in energy consumption. This translates to:

   - **about 0.66 Mtoe annual energy savings**
   - **equivalent to a savings of INR 15.58 Million per annum(2.5 Million USD).**

3. Potential of up-scaling EE measures to all energy intensive MSME clusters.

Status & Potential of Energy Savings in SMEs –A sample

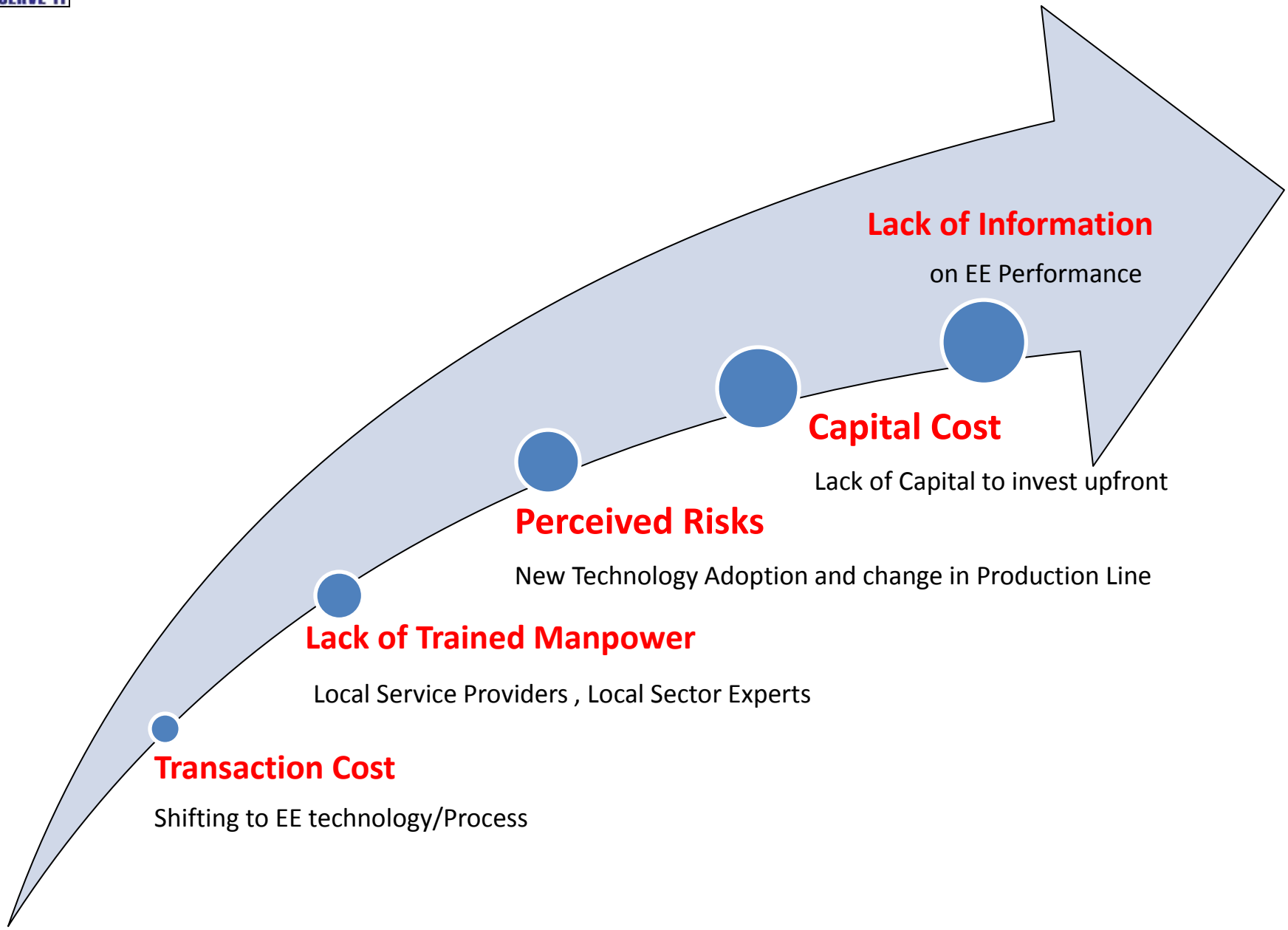
MAJOR ACTIVITIES CARRIED OUT IN XI plan

- Comprehensive energy audits and technology gap assessment completed in 25 SMEs clusters.
- 375 DPRs on energy efficient technologies prepared and peer-reviewed by ISTSL .
- Energy saving potential of 0.66 MTOE identified in 25 SMEs clusters identified.

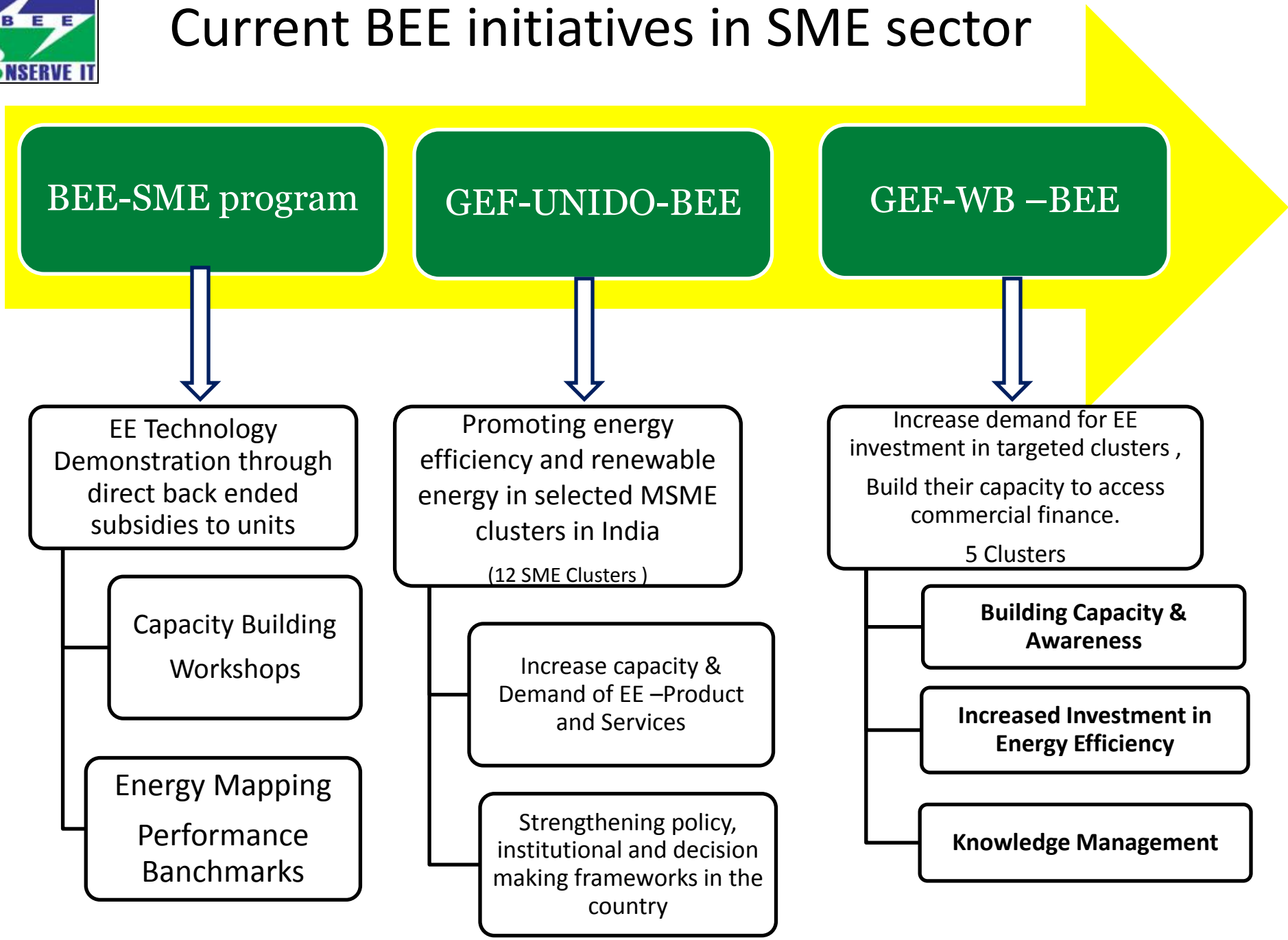
OUTCOMES OF THE XI PLAN

- The total energy savings, in from 988 units of 26 (25 clusters + Firozabad) cluster quantifies to Rs 15.58 Crores per annum (4934.45 toe/ annum) with an investment of Rs 28.06 Crores (4.52 Million USD)already made by the cluster units (988 units)
- Implementations of about 650 EE interventions entirely a voluntary effort on part of SME units .
- Take up of Energy Efficient technologies by SME units in 25 Clusters has been relatively poor .

Inherent Barriers



Current BEE initiatives in SME sector



Project Deliverables

1. **Implementation of Technology demonstration projects**

- Demonstration of 10 best identified technologies of selected 5 energy intensive sectors
- 100 technology demonstration projects to be implemented in 5 sectors .

2. **Technical Assistance and Capacity Building**

- Sharing of the BoP and BAT
- Development of case studies , print materials and audio visual of BATs& BOPs
- Capacity building in clusters through SDAs , National level workshops for stakeholders .

3. **Mapping of the SMEs on pan India basis.**

- Development of Pan India level Sector specific reports and policy plans .
- Launch of National Policy Document on Energy Efficiency in SMEs.

Synergies of BEE SME program MoMSME schemes in

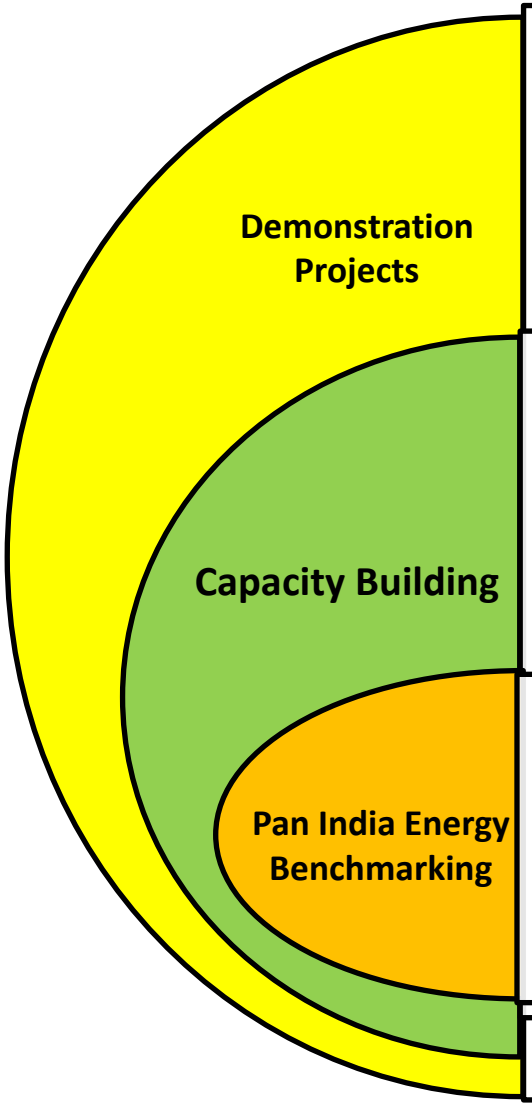
1. There is a two member committee Chaired by AS and DC, MoMSME to explore ways of aligning the activities of BEE with those of MoMSME in the XII plan under its SME scheme.

2. AS &DC suggested BEE to target following clusters :

a. Food (Indore) ,
b. Kochi (Seafood, Kerala)
c. Forging (Ludhiana, Punjab)
d. Brick (Varanasi, UP)
e. Textile (Pali, Rajasthan)

3. MSME-DI to support BEE in its SME initiatives and BEE to promote the TEQUP scheme in its workshops to

BEE SME Program



- Ludhiana: Forging Sector (Auto Parts Clusters)
- Indore :Food Sector (Dal , Wheat , Poha clusters)
- Pali : Textile Cluster (Dying and Printing)
- Kochi : Sea Food Cluster
- Varanasi : Brick Cluster (INP , Zig-Zag Kilns)
- Incentive of 50% cost of the technology or a ceiling amount of Rs10 Lakh.
- Partnering with the MSME-DI s of respective clusters.

- Workshops for unit owners on best practices and technologies.
- Appointment of Implementation Agency : Carry out pre-post energy audits and assist units with implementation .
- Appointment of Sector Expert
- Empanelment for Local service providers .
- Seek assistance of multi and bilateral programs in sharing experiences

- Identify the Energy Intensive clusters in the country
- Benchmark the performance of Energy Intensive clusters in the country .
- Prepare a document on policy /Technology interventions for enhancing EE in these clusters .

Implementation Framework

Step .1

Constitution of cluster level steering committee

a) Director, MSME-DI of the cluster,
b) BEE is (convener)
c) President, cluster Association

Shortlisting of units and oversee implementation of EE Demos

Step.2

Open invite for participation to SME units for the implementation of Demonstration projects

+

Invitation for empanelment of LSP and Technology Providers

Step.3

Physical verification of units by BEE agency to select 20 units on the recommendation of committee

Step.4

Signing of MoU with each of the twenty units of the cluster.

Step. 5

Base line audits in the selected 20 units of the cluster by BEE- IA

Step.6

1. Implement Demos in the 20 units.
2. Preparation of DPRs and audio visual recordings, Case

Step.7

Post Audits steering committee approves release of subsidy to units upon satisfaction of completion

Step. 8

Direct release of subsidy through e-transfer in the account of unit owner on the receipt of original bills from the units and proformas indicating completion of demos from IA .

Status of the BEE-SME scheme

1. **Cluster partners Associations** have been identified in all 5 SME clusters.
2. MSME –DI at **Ludhiana , Indore ,Pali** are supporting in organising workshops .
3. **Implementation Agencies** have been engaged for carrying out pre and post in all five clusters.
4. Inception workshops organized in **Ludhiana Forging** and **Pali Textile** Cluster.
5. **Identification of 20 beneficiary** units completed in **Ludhiana , Varanasi** and **Pali** clusters .
6. MoUs signed with units in **Varanasi Brick** and **Ludhiana Forging** Clusters
7. **Walk through audits** completed in **Ludhiana ,Pali & Indore** clusters .
8. Baselines in **Varanasi (Brick cluster)** to be initiated in Mid of April, 2015 .
9. **Energy saving process Technologies** identified in **Pali , Ludhiana and Indore** while as in Varanasi retrofitting of FCBTK with energy efficient Zig –Zag Kilns is proposed .
10. Activities in **Kochi (Sea Food Cluster)** are proposed to be initated in May , 2015 .

GEF- UNIDO -BEE PROJECT

Promoting Energy Efficiency And Renewable energy in Selected MSME Clusters In India. Status

Objective

- The aim is to develop and promote an environment for introducing energy efficiencies and enhance use of renewable energy technologies in 12 selected MSME clusters in 5 sectors.

Progress Till date

1. Recruitment of 9 Cluster Leaders completed .
2. Collection of data through questionnaire survey in 9 clusters completed .
3. Preparation of 7 DPRs of which 4 are approved for demonstration support
    1. Biomass gasifier for sand drying in a sand reclaimation plant at Belgaum
    2. Energy Analytics at Belgaum and Coimbatore
    3. Solar Boiler in Gujarat Dairy Cluster
    4. APFC at Indore foundry cluster
4. 3 small demonstrations of energy efficiency (Jalandhar ,Gujarat ,Coimbatore) Allocation of cluster level work on energy audits and capacity building for 10 clusters
5. Formation of the panel to evaluate technology modification projects from 2 IITs and CGCRI Khurja. Initiation of discussions with another IIT.
6. Background work to develop the energy management centres at each cluster is under progress .
7. About 10 demonstration projects are intended to be implemented in the 2015-16

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GEF- WB - BEE PROJECT

FINANCING ENERGY EFFICIENCY AT MSME

- The objective is to increase demand for energy efficiency investment in targeted MSME clusters and to build their capacity to access commercial finance.
- Executed in 5 selected MSME clusters namely Kohlapur (Foundry), Pune (Forging), Tirunelveli (Limekilns), Ankleshwar (Chemicals),Faridabad (Mixed) cluster.

MAJOR ACTIVITIES

i. Building Capacity & Awareness
ii. Increases Investment in Energy Efficiency
iii. Knowledge Management & Sharing
iv. Project Management Unit

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Thank You

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