Up scaling of energy efficiency initiatives in Indian MSME Sector

SAMEEEKSHA

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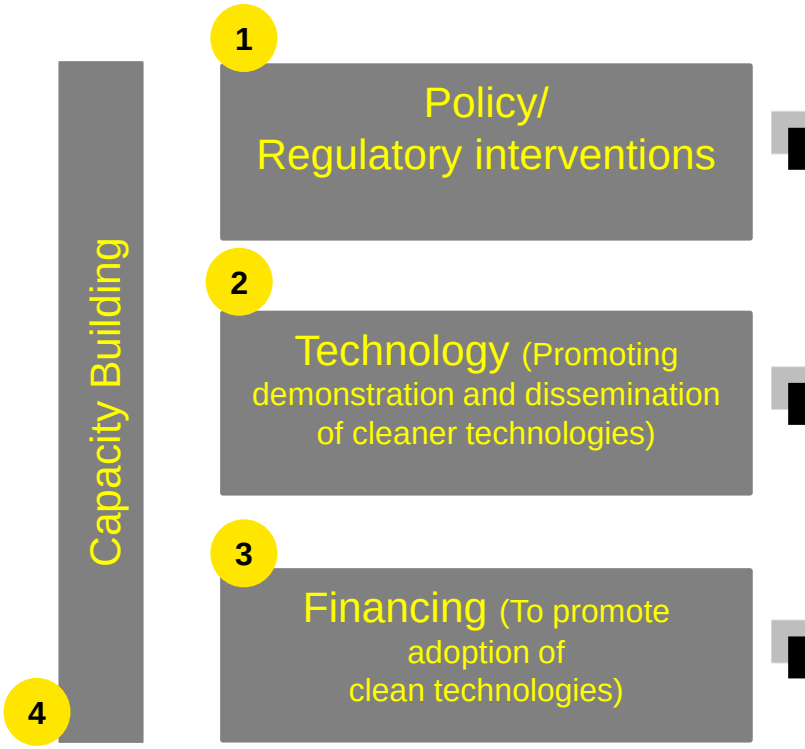
Building a better working world

Four different approaches taken till date towards up-scaling of EE



Examples of each approach

- Fiscal policies to support dissemination of EE technologies
- Building of institutional capacity of cluster associations, labs, technology centers etc.

- Development of cleaner technologies/ cleantech innovations
- Demonstration of cleaner technologies
- Enabling knowledge dissemination and technology transfer about effective demonstration projects

- Credit linked lending schemes
- Soft loan/ subsidy schemes for adoption of EE technologies

Key issues on Policy/regulatory interventions

P1: Lack of holistic EE policy

- Absence of a large, holistic EE policy effort delivered over a longer term.
- No Local level integrator who can:
  - *Support on technology issues*
  - *Finance*
  - *Catalyze innovation*

P2: Information gap on energy consumption

- Limited information is available on the baseline energy consumption currently in the sector due to reluctance on the part of MSMEs to share their energy footprint
- This lack of information becomes a hurdle while developing a comprehensive energy efficiency policy

P3: Lack of innovative policies and information systems

- Limited use of information technology and statistical tools by financial institutions for EE project evaluation
- Limited success of loan guarantee or equity guarantee programs due to lack of technical expertise of the implementing authority

P4: Overlapping of government programs

- Overlap, fragmentation and competition among managing agencies
- Current EE programs do not have monitoring mechanisms and evaluations embedded in their frameworks
- The concept of reduction of energy consumption through various programs often raises doubt since
  - Proper baseline establishment mechanism is absent

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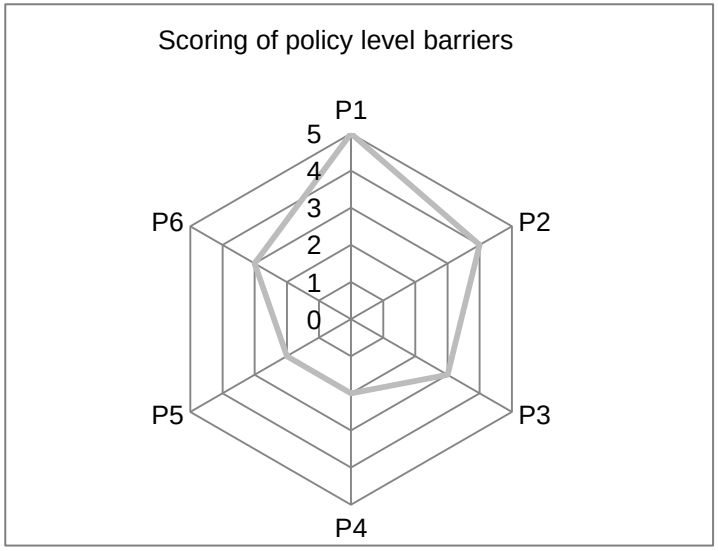
Key issues on Policy/regulatory interventions

P5: Lack of strong industry associations

- Lack of awareness on the part of industry associations on the EE measures
- Lack of co-ordination between industry associations with the efforts of various government and nongovernment agencies

P6: Comprehensiveness of the fiscal policies

- Various tax relief policies are not comprehensive and successful enough since
  - There are free riders who take advantage of the program even though they would have made the investment without the tax relief
  - Absence of accurate baseline information



- The most important policy issue identified is the **lack of holistic policies and local level integrator** which will ensure ground level implementation of EE technologies

Key issues on technology

T1: Lack of innovation

- Approaches of current technology based EE programs for MSMEs do not encourage innovation.
- Most of the current Gov. programs supporting innovations do not focus on EE in MSMEs.
- Very few EE – TA programs involves technology innovators from the early stage of the project.

T2: Limited use of supply chain

- Limited utilization of “hub and spoke” concept. Large industries (hub) are not used appropriately to transfer technology and knowledge to the smaller units clustered around them.
- Limited use of other stakeholders within the supply chain like local service providers to educate MSMEs.

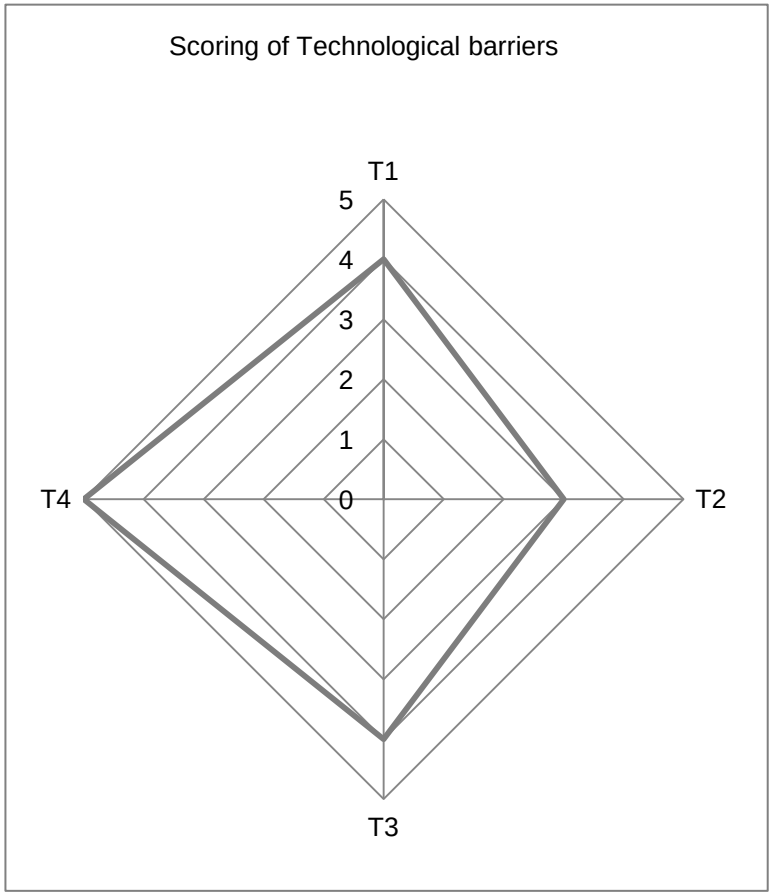
T3:Ignore new upcoming clusters

- Cumulative impact of historical data encourages project designers target “OLD” clusters ONLY
- Limited interventions observed in new industrial zones in terms of adoption of EE technologies

T4: Low replication rate

- In-spite of successful demonstration there have been limited replication due to issues like:
  - Lack of time commitment and handholding
  - Fuel price fluctuations/ subsidy
  - Leniency in enforcing regulations
  - Lack of knowledge transfer and skilled workforce at local level

Key issues on technology



- The most important technology issue has been identified as **low replication rate of successful technologies**

Key issues on Finance

F1:Inherent perception

- MSME sector represents one of the major sectors where banks have substantial quantity of Non-Performing-Assets (NPAs).
- Limited capacity of bankers to assess EE projects
- No simple EE assessment tool for bankers
- Lack of integration of innovative rating systems for EE projects into the existing ones

F2: Underutilization of lines of credit

- The MSMEs generally avoid going through the stringent procedural norms of the banks to obtain credit
- Many micro businesses are far less likely than formal businesses to even have existing deposit relationships with financial institutions
- Low awareness on the part of the MSME entrepreneurs

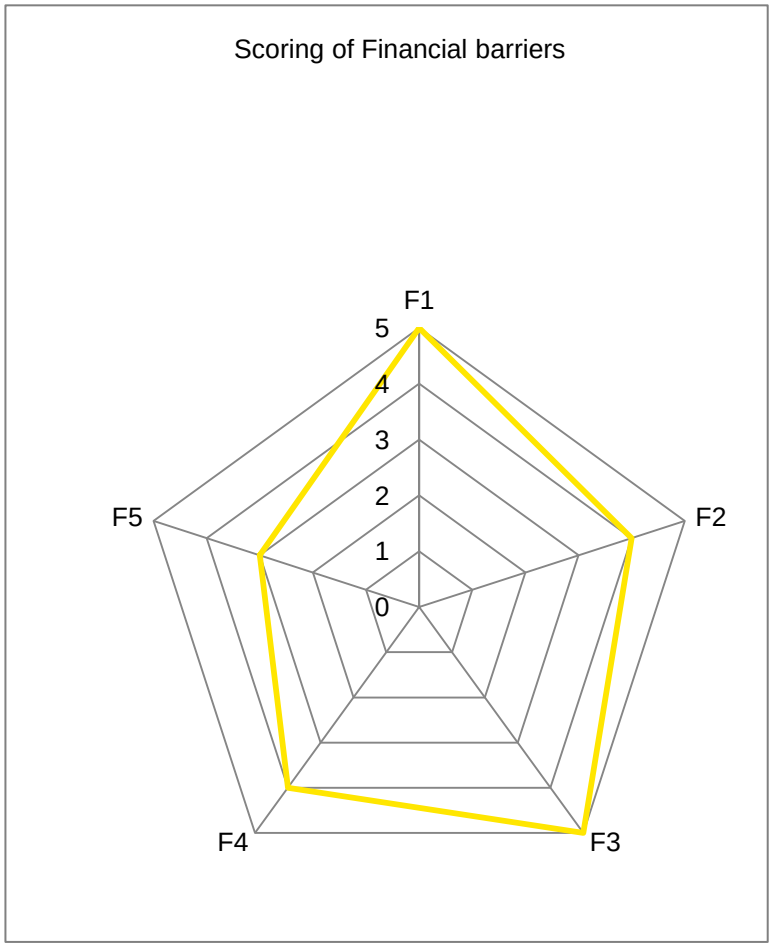
F3: Lack of depth in the financing schemes

- The different government credit lines does not directly promote EE technologies
- Equipment based financing schemes raises questions on the actual energy reduction due to
  - Limited M&V opportunities
  - No regular up-dation of the list. Concerns on real savings compared to the current business as usual (BAU) scenario

F4, F5: Lack of innovative financing model and transaction cost

- Penetration of equity financing have been low
- Lack of activity on group financing (for investing in EE projects/ technology)
- Lack of project based finance schemes
- Higher transaction cost for individual EE loans to MSMEs

Key issues on Finance



- The most important issues of finance are **the inherent perception** towards the sector and lack of innovative financing schemes

Key issues on capacity building

C1:Lack of social engineering

- Most trainings have short term focus and do not follow a holistic / integrated approach.
- No central agency to monitor and assess impact of different training programs:
  - Assess need and existing capacity at cluster level.
  - Ensure that there is limited number of repetition and omission of clusters and stakeholders.

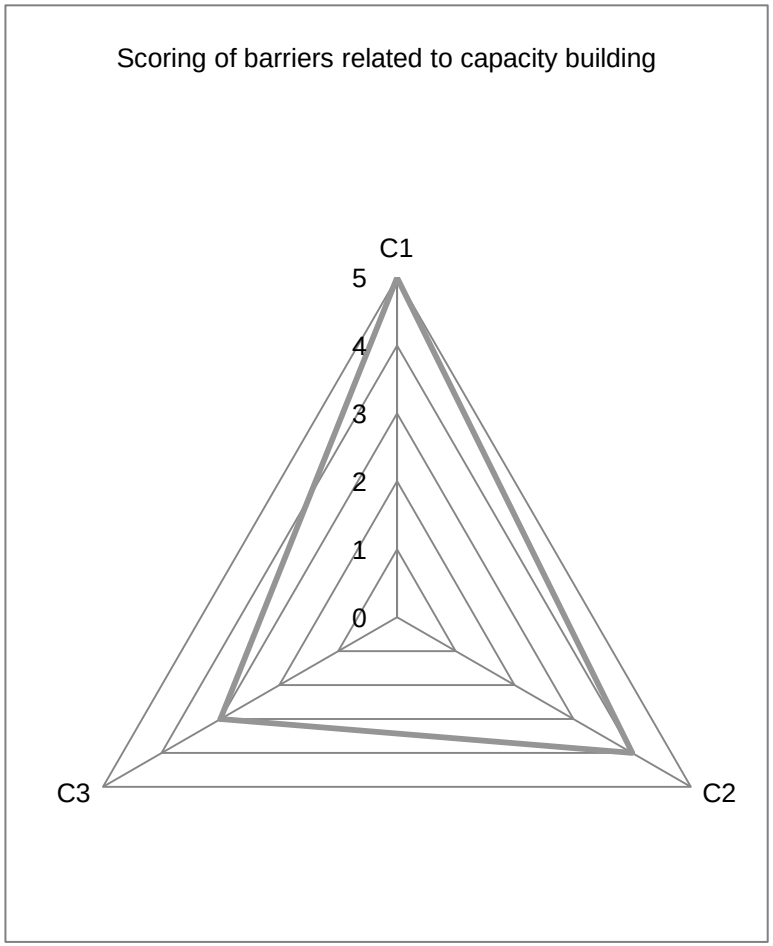
C2: Limited availability of customized training

- Training programs are generic and may not be relevant to local realities.
- Lack of credible and comprehensive information and support mechanisms to different stakeholders working in MSME sector.

C3:No utilization of academic institutions and MSME tool rooms

- Most capacity building programs targeting energy efficiency fails to involve local academic institutes and MSME tool rooms.
- Current design of capacity building programs limits involvement of local experts.
- MSMEs can not access the trainers easily after completion of training programs

Key issues on capacity building



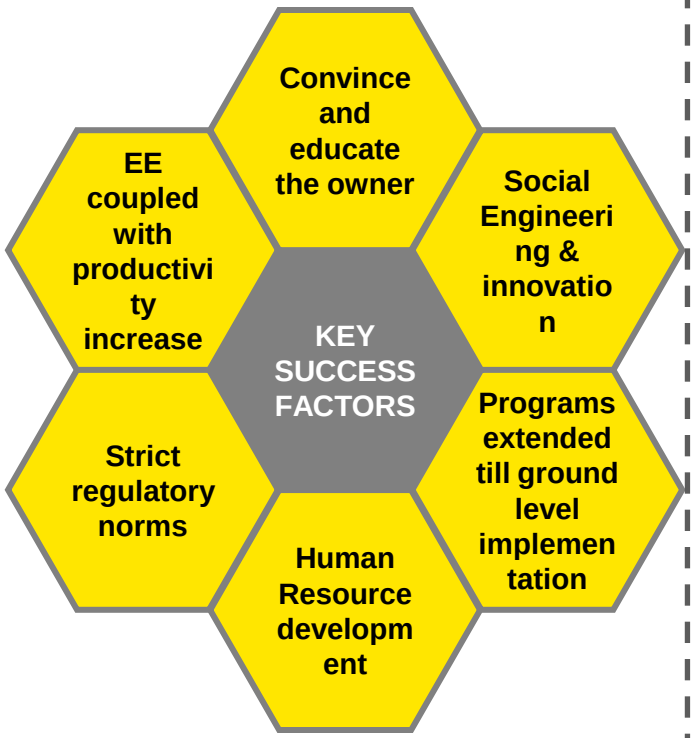
- The most important issue related to capacity building would be **lack of social engineering**

The key lessons and key success factors for the industry

Key lessons Learnt

- Difficulty in Marketing of EE to MSMEs
- EE investments are not typically high on MSMEs' priority lists of capital uses
- Deficit in owner's education and experience
- Limited availability and high turnover of trained workers

Key Success Factors



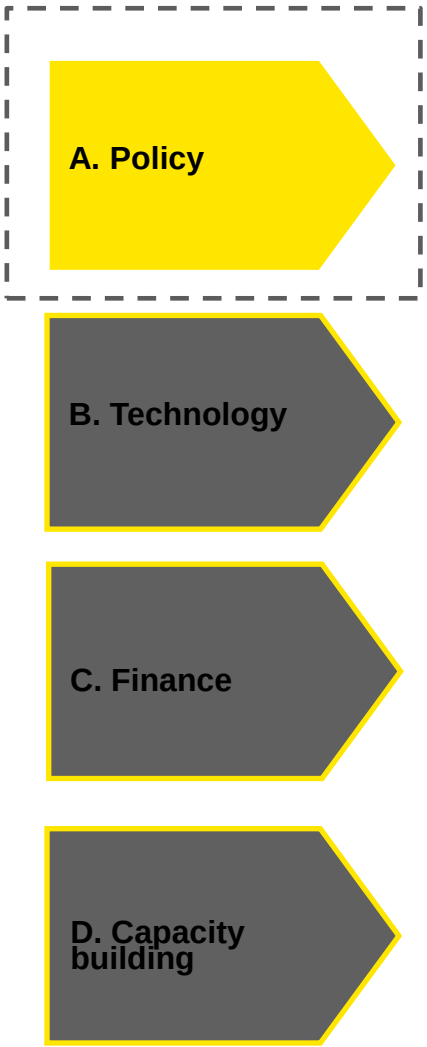
Key lessons learnt

- Deficits in appropriate regulatory and enforcement mechanism
- Lack of a comprehensive and holistic market assessment of MSME sector in India
- Lack of a robust monitoring and evaluation plans should be created upfront, incorporating periodic project review

Current and future plans of key stakeholders

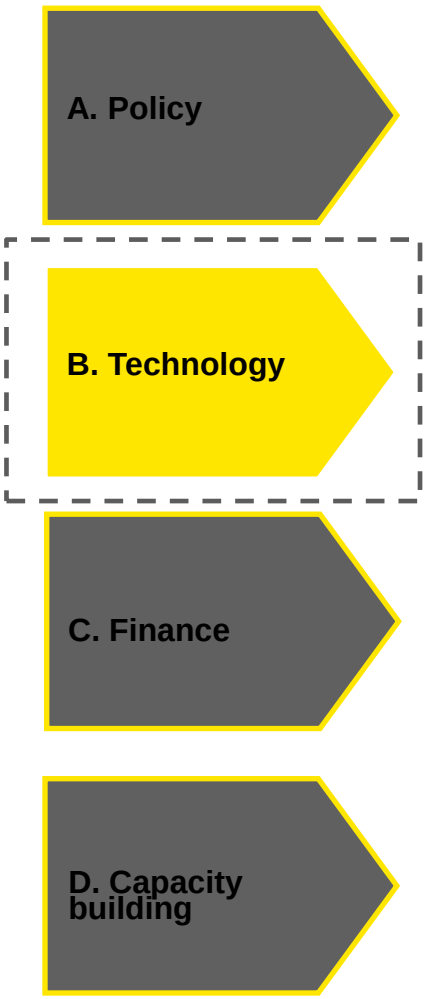
Institutions	Roadmap
Ministry of MSME	• Utilize the annual budget of USD 500 million in developmental activities • Support FIs and state governments on MSME sector development schemes • Develop a collaborative approach so that funds from MoMSME, FIs and state government can be used for a common objective • Widen the reach of schemes like TEQUP and National Manufacturing Competitiveness Programs.
Bureau of Energy Efficiency	• The plan for Bureau of Energy Efficiency (BEE) for 12th five year is to showcase EE technologies through demonstration projects, technical assistance, capacity building, energy mapping and SME product labelling promotion scheme • BEE plans to reduce energy consumption by an equivalent of 131MW of avoided capacity addition
Global Environment Facility	• GEF-UNIDO Global Cleantech Programme- focuses on enhancing emerging clean technology start-ups as well as the local entrepreneurial ecosystem and policy framework • GEF is supporting UNIDO in promoting energy efficiency and renewable energy in selected MSME clusters in India' in collaboration with BEE, Ministry of MSME (MoMSME) and Ministry of New and Renewable Energy (MNRE)

Key recommendations



- Government policy is required to develop a local or cluster level integrator who will support the MSMEs on issues related to technology, finance and capacity building. This agency (integrator) can also act as a catalyst supporting EE innovation in MSMEs.

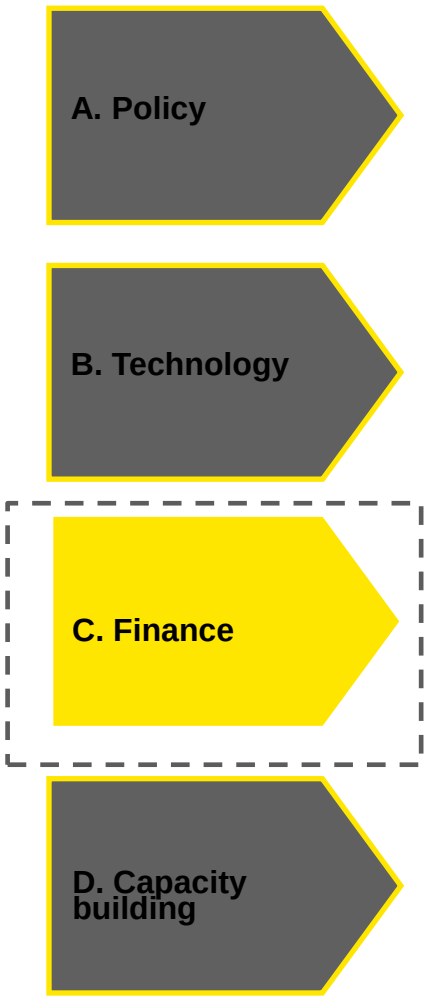
Key recommendations



- Creation of cluster based hub and spoke model for effective EE technology dissemination in new and upcoming clusters

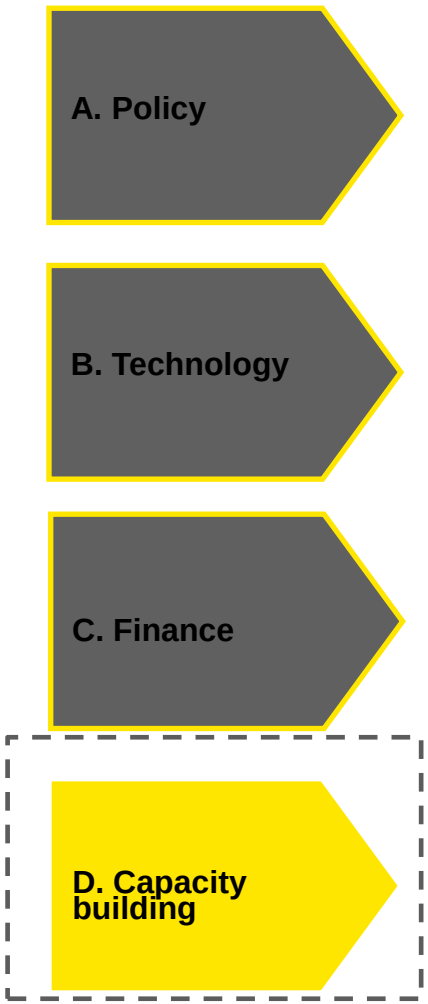
- Since, MSME –DIs have existing network with MSME clusters, technology replication programs should work closely with this agencies and utilize this existing channels

Key recommendations



- The concept of “responsible financing” can be an **effective assessment tool** for evaluating credit worthiness of MSMEs.
- Project based EE credit lines should have simpler checks and controls which will ensure effectiveness and proper utilization of the credit lines
- Promote ESCO financing in MSMEs and establish an authority for “ESCO dispute resolution” for early redress and resolution of disputes between ESCOs and their customers

Key recommendations



- An integrated capacity building model to be developed and should be driven by a central training institution.
- Customized training module based on standardized tool for assessment.

Thank you

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