Factors influencing uptake of Energy Efficiency and Renewable Energy in SMEs

Confederation of Indian Industry
Confederation of Indian Industry

- Non-government, not-for-profit, industry led & industry managed apex industry association
  - Founded over 125 years ago
  - Direct membership: >9,000 organizations
  - Indirect membership: 300,000 companies

- CII – Proactive role to go beyond policy advocacy
  - Building competitiveness in the Indian industry

- Presently 11 Centers of Excellence
  - Niche areas of services
  - Adding significant value to the industry
  - Each COE has a unique area/sector of focus
CII – Sohrabji Godrej Green Business Centre, Hyderabad (CII - GBC)

“Centre of Excellence” for Energy, Environment, Green Buildings, Renewable Energy & Climate Change

First Platinum Rated Green Building in India & Net Zero Energy Building
Key Activities – CII GBC

- Green building footprint: 12 billion sq.ft
- 11,500+ projects
- > 1000 companies working on GreenCo rating
- 10,000+ green products certified
- Energy Efficiency
- Renewable Energy
- Decarbonization
- Accelerating cleantech start-ups
EE, RE & Decarbonization – Ongoing Activities...

• 14 State Energy Efficiency Roadmaps (>60% of India’s Energy)
• 26 Corporate Decarbonization Studies (Among top 500 Cos)
• 88 Cleantech Innovations – Pilots & M&V underway
• 325 Buildings – signed up for Net Zero Carbon
• Electrification of Indian Primary Energy Mix
• Sectoral engagements – Cement, Steel, Power Plants …

• 300+ SMEs in Foundry & Dairy sectors
Factors influencing uptake of Energy Efficiency and Renewable Energy in SMEs

Confederation of Indian Industry
MSME Engagement

- Industrial Areas: 17 (Ceramic, Dairy, Foundry)
- Units involved: 784
- Investment Facilitated: USD 10.2 million
- Annual emission reduction potential: 30,083 tCO₂
Aggregation Works!

Thangarh Ceramic Cluster

• 40+ businesses submitted letter of intent for rooftop solar needs
• Total 1.5 MWp of solar installation
• Aggregation helped in 5% reduction in cost
• 1-1.5% reduction in interest rates from financial institutions
• Standardization of design
• Service engineer made locally available for the period
Breakthrough Technologies

Dairy MSMEs
  Falling Film Chillers
  • 10-15% reduction in chiller SEC
  Instant milk cooler system
  • Improves milk quality

Ahmedabad Ceramic MSMEs
  Ball mill to High speed blunger
  (energy savings upto 50%)

Quick and rapid replication throughout the sector

©Confederation of Indian Industry
Common Facilities

Belgaum Foundry Cluster

• Common Facilities:

Sand reclamation facility

❖ Common need for all industries
❖ Industries came together to set up a common facility
❖ Industries pay per use
❖ Common facility now running as a separate profit center

Similar model now replicated for other facilities

Sand/shot blasting facility
Casting simulation facility
Testing Laboratory
What worked?

- Majority of the projects were self financed
- Technology compendium prepared for each sector
- Communication done in local language (Flyers & other communication materials)
- Direct communication with owners
- Peer implementation led to faster replication
Thank You