

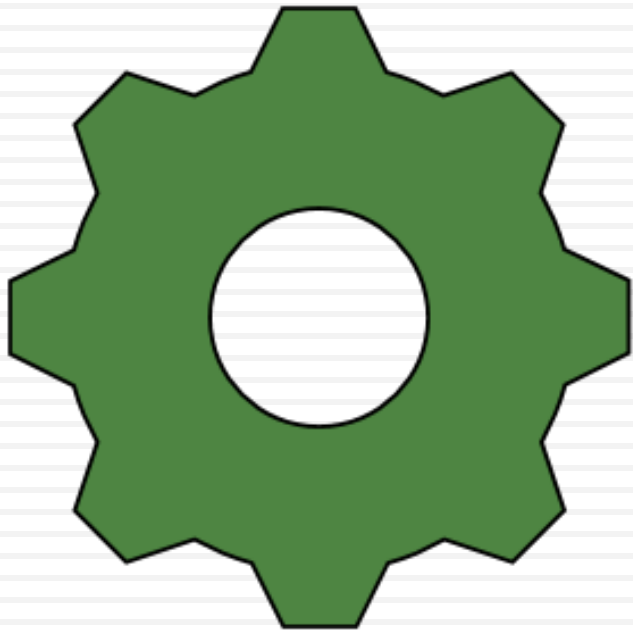
9th May 2018

ENERGY EFFICIENCY IN MSMEs



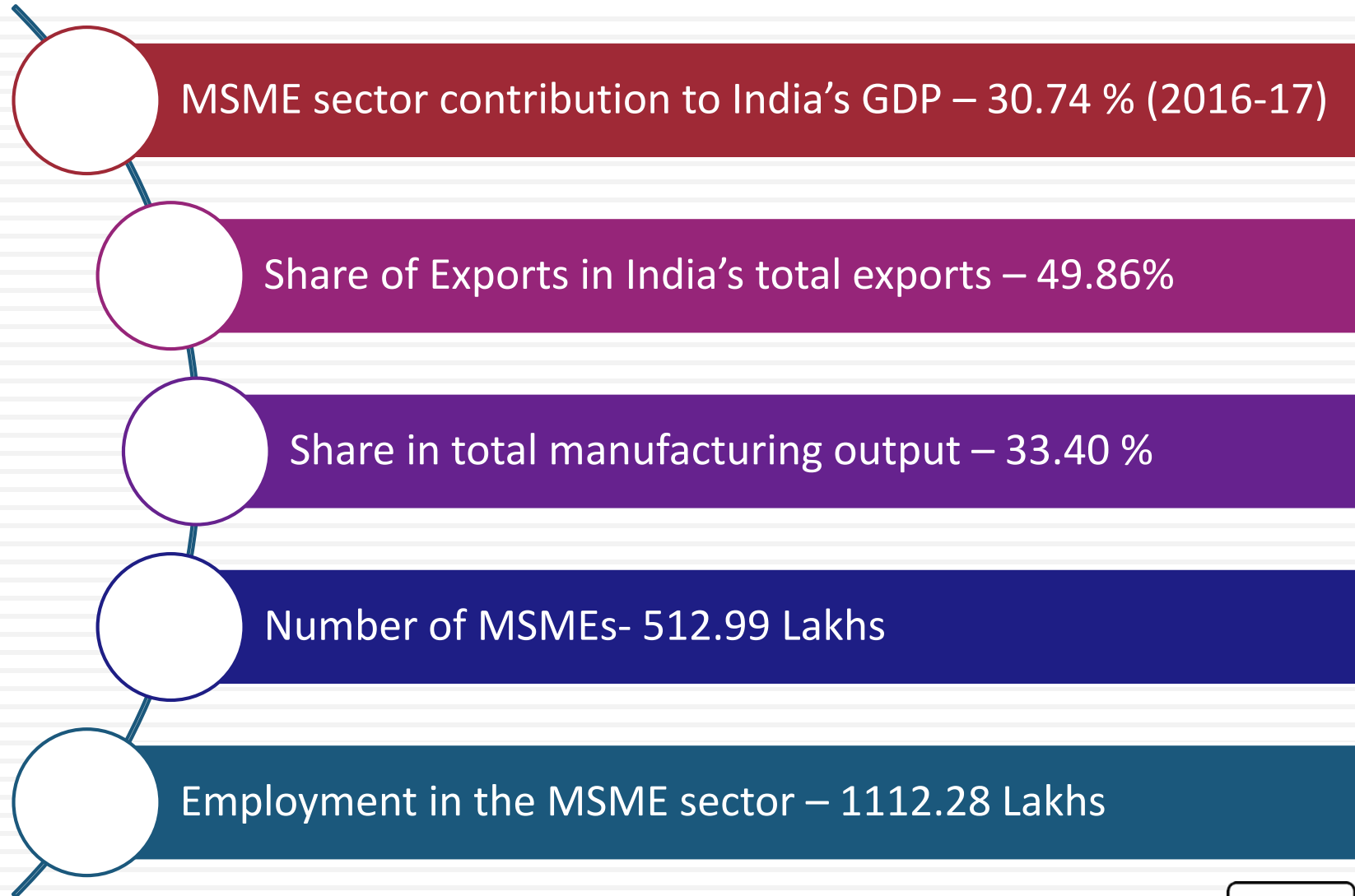
Confederation of Indian Industry

India MSME Sector - Snapshot



MSME

Growth Engine of Indian Economy



MSME – Opportunities for Growth

❖ Opportunities

- ❑ Growing focus on Manufacturing sector
- ❑ Favorable policies
- ❑ Made in India – Synonymous with quality
- ❑ Rationalizing of tax and other systems
 - Business to grow

❖ Challenges

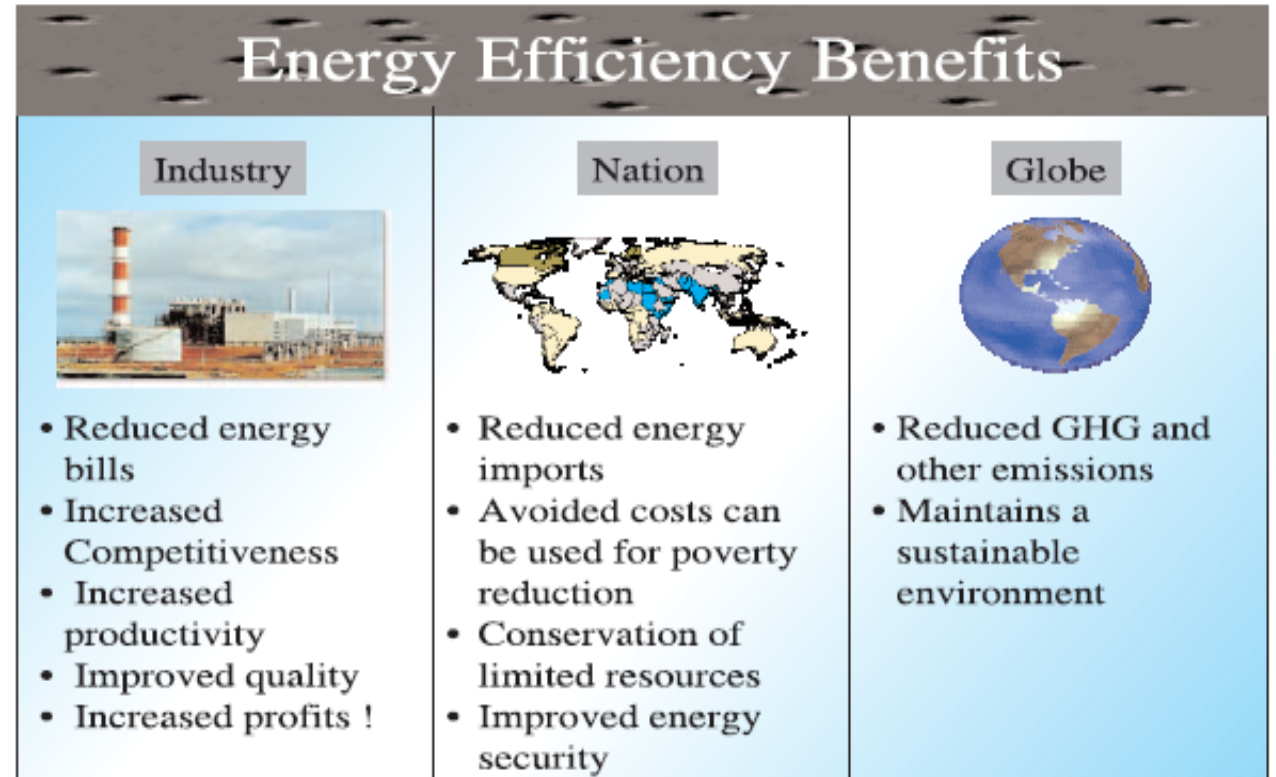
- ❑ Scarce resource leading to price pressure on manufacturing process
- ❑ Stringent environment norms & standards
 - Zero Liquid Discharge
 - SOx/Nox
 - Hazardous Waste
- ❑ Demand for Clean & Green from Customers/Vendors
- ❑ Technology & finance access

MSMEs are rightly poised to tap the opportunities – but need to address these challenges in systematic manner

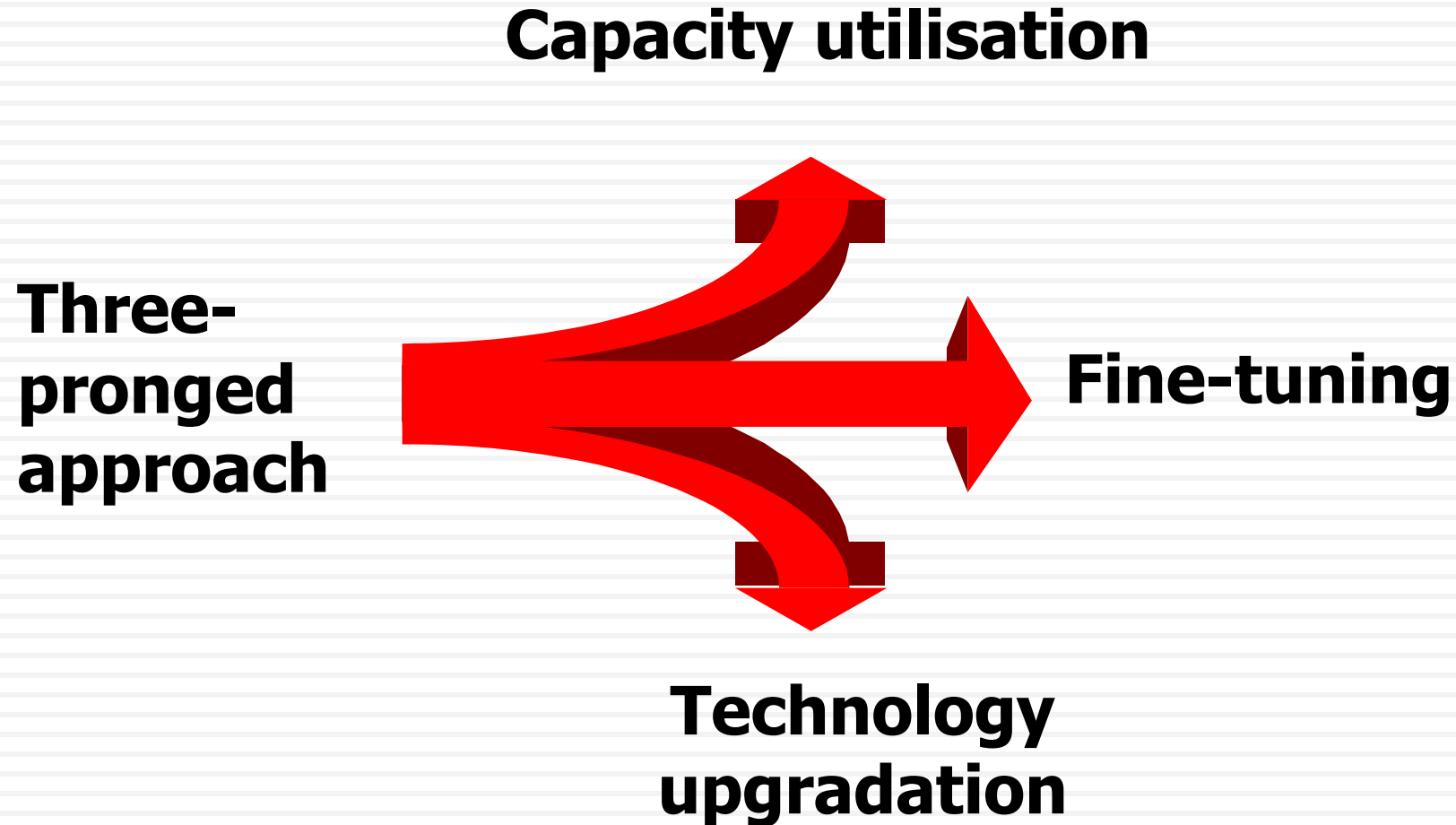
Energy Efficiency and Its Importance

□ Energy Efficiency

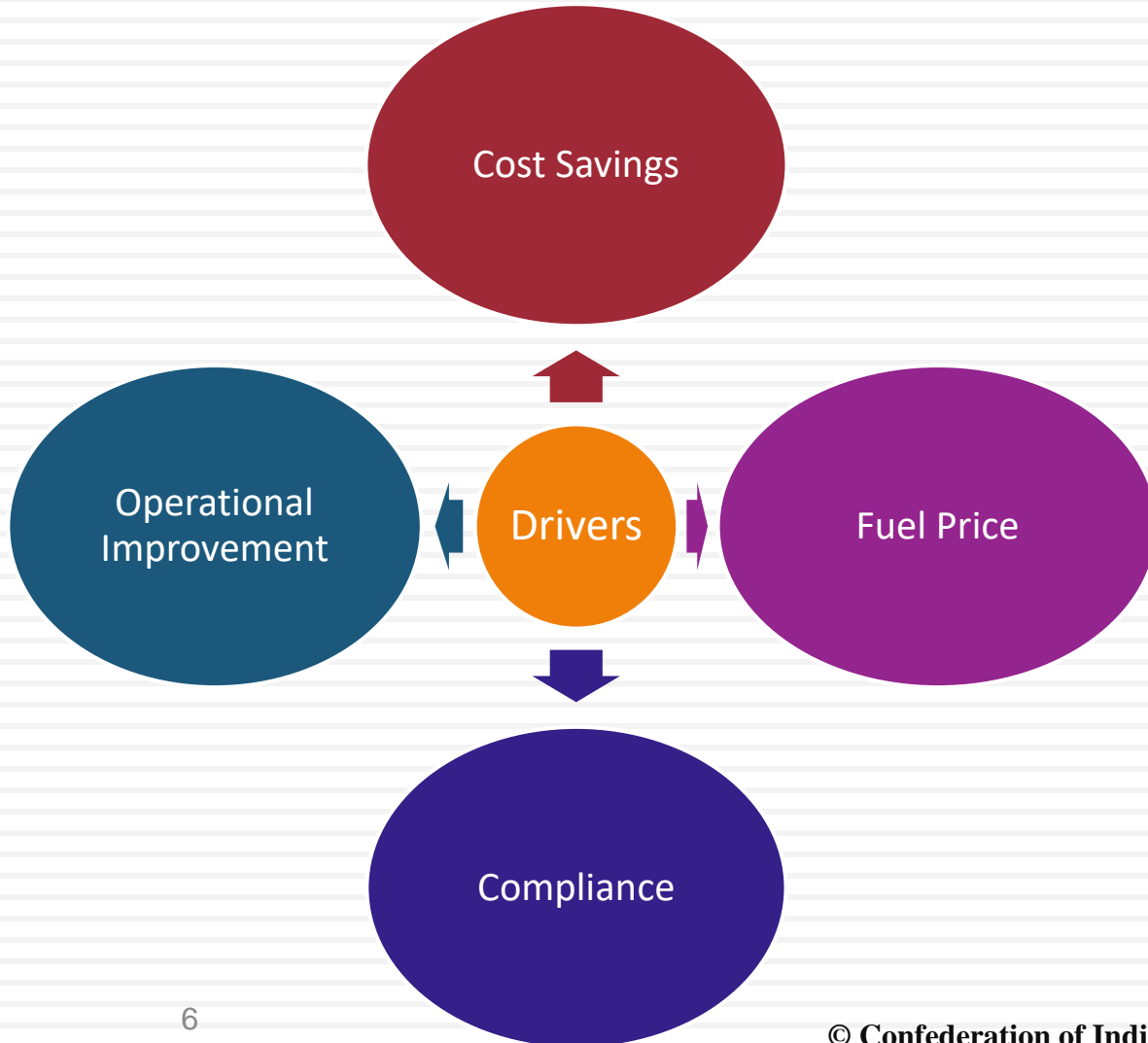
- Achieved when energy intensity in a specific process or area of production is reduced without affecting output or comfort levels
- Energy efficient equipment uses less energy for same output and reduces CO₂ emissions



Energy conservation at macro level



RECP Intervention in SME Sector - Drivers



❖ **EE implementation by industries –**

▣ **Technology upgradation and operation optimization**

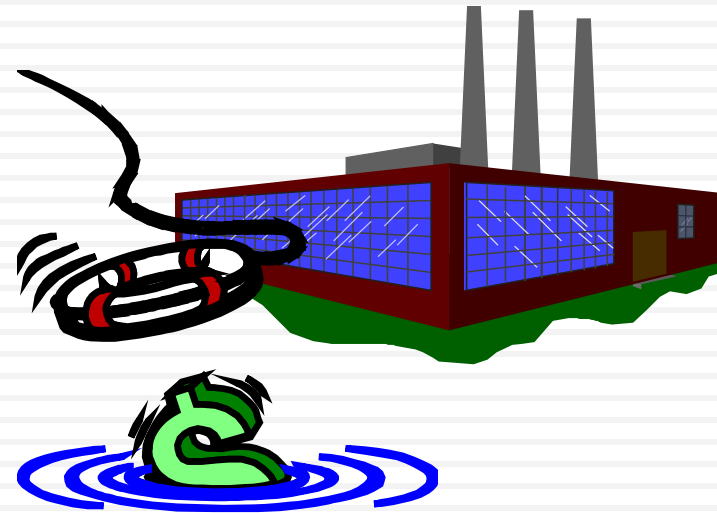
■ **Process**

■ **Utilities**

▣ **Driven by cost savings and improvement in operations**

Energy conservation at macro level ...

**Excellent companies
have tapped all three
opportunities**



**3 separate teams with
common objective**

Energy Audit Methodology

Systematic approach

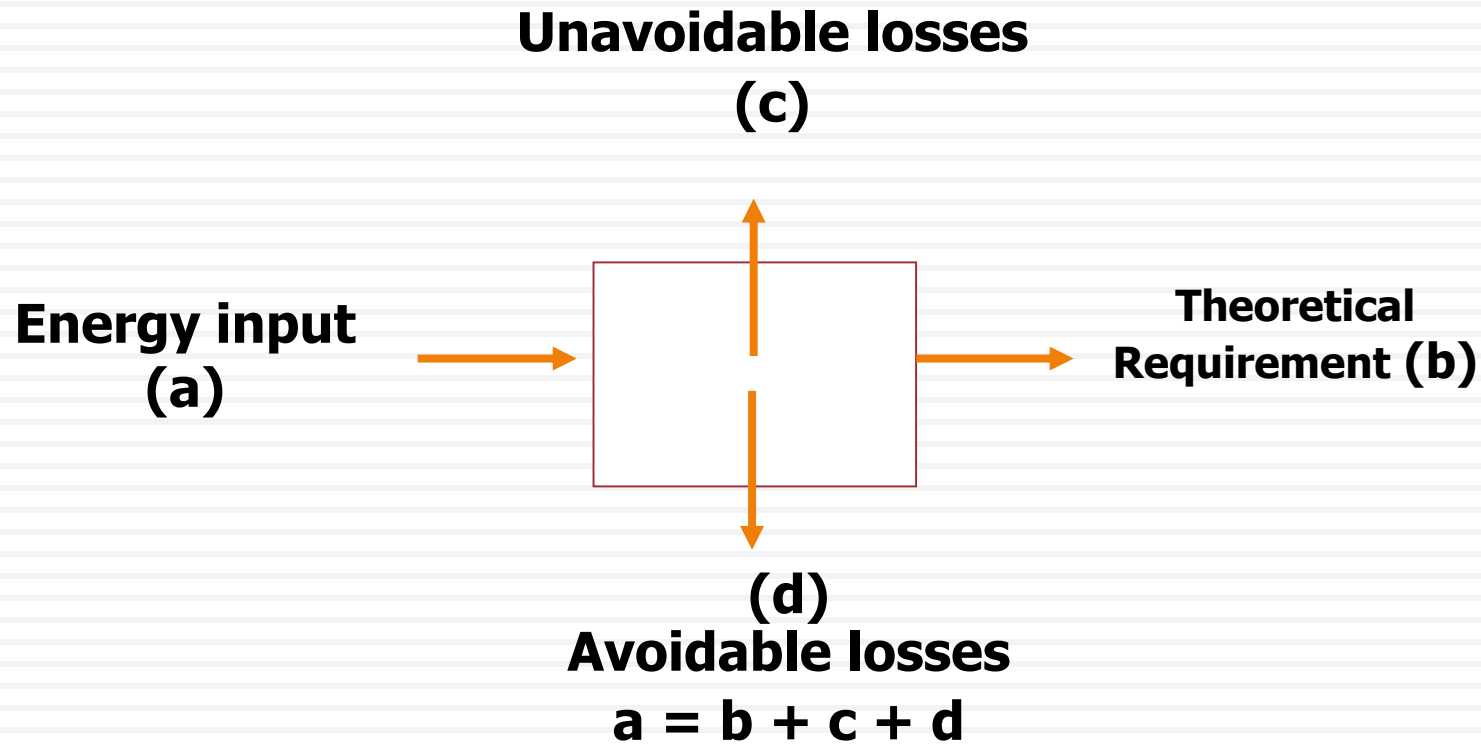
Ask questions like:

- What?
- When?
- Why?
- Where?



Macro Level - Methodology

Any process/unit operation



Focus should be

1. To concentrate on avoidable losses
2. Quantify the losses
3. Identify ways and means for reduction
4. Implementation

Role of Energy Auditors

- Catalyst / Facilitator role
- Supplement in-house activities
- Identify energy saving proposals
- All possible assistance
 - ▣ Monitoring
 - ▣ Vendor identification

Not fault finders !!

Role of Technology & Financing

❖ **Technology & financing are backbone for the MSME Sector**

❖ **Technology**

▣ **Production**

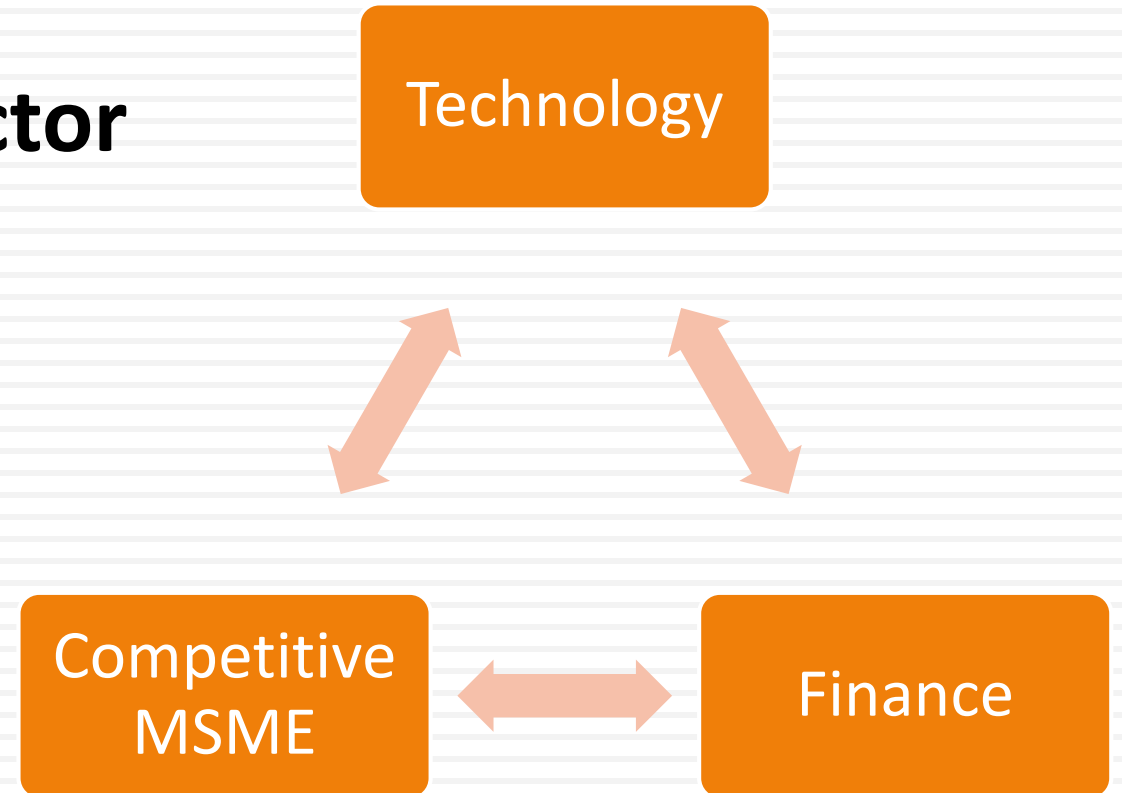
▣ **Cost Improvement**

▣ **Competitiveness**

❖ **Finance**

▣ **Loan/Working Capital**

▣ **Expansion/Upgradation support**



Opportunities

Energy Efficiency presents opportunity for

Technology Upgradation
Increase in Financing

Not only from perspective of energy but also environment impact reduction



Role of Technology & Finance

❖ Many FIs have

- ❑ Separate Department for MSME
- ❑ Appraisal process specific to MSME
- ❑ Most of these are on-balance sheet lending (No Project Finance)
- ❑ Collateral based finance

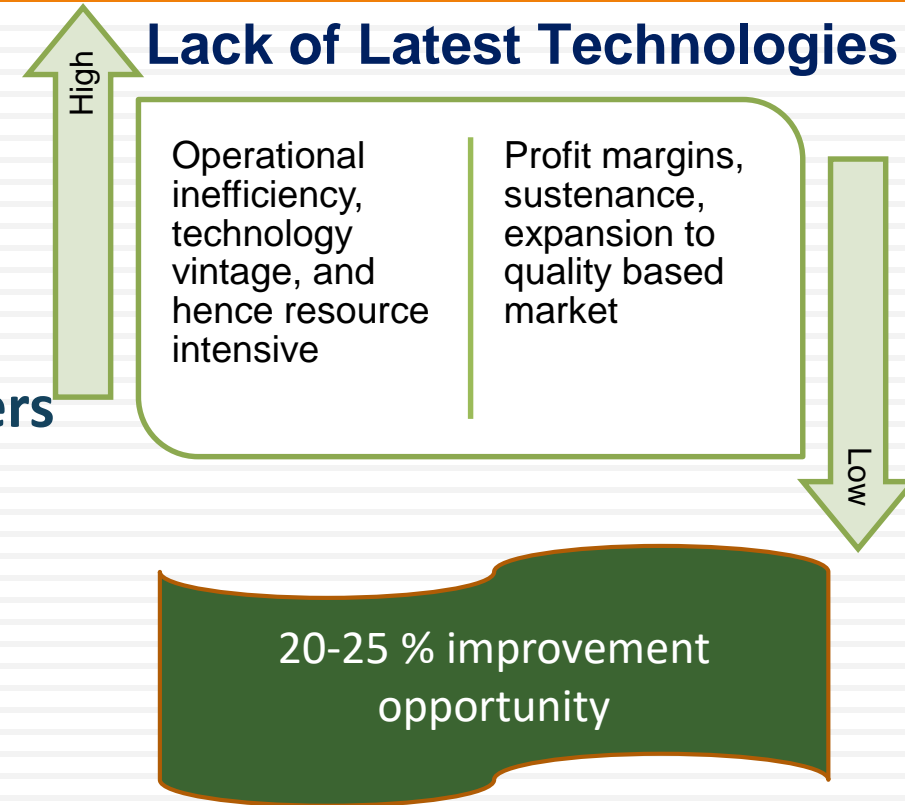
❖ Technology Suppliers

- ❑ Technology Upgradation
- ❑ Environment Norms (Boilers, Pollution control equipment)

- With increasing competitiveness the MSMEs are looking for opportunities to reduce cost and meet compliance at the lesser costs
- Looking for innovative and complete solution

Investment Opportunities in MSME sector – Energy Efficiency

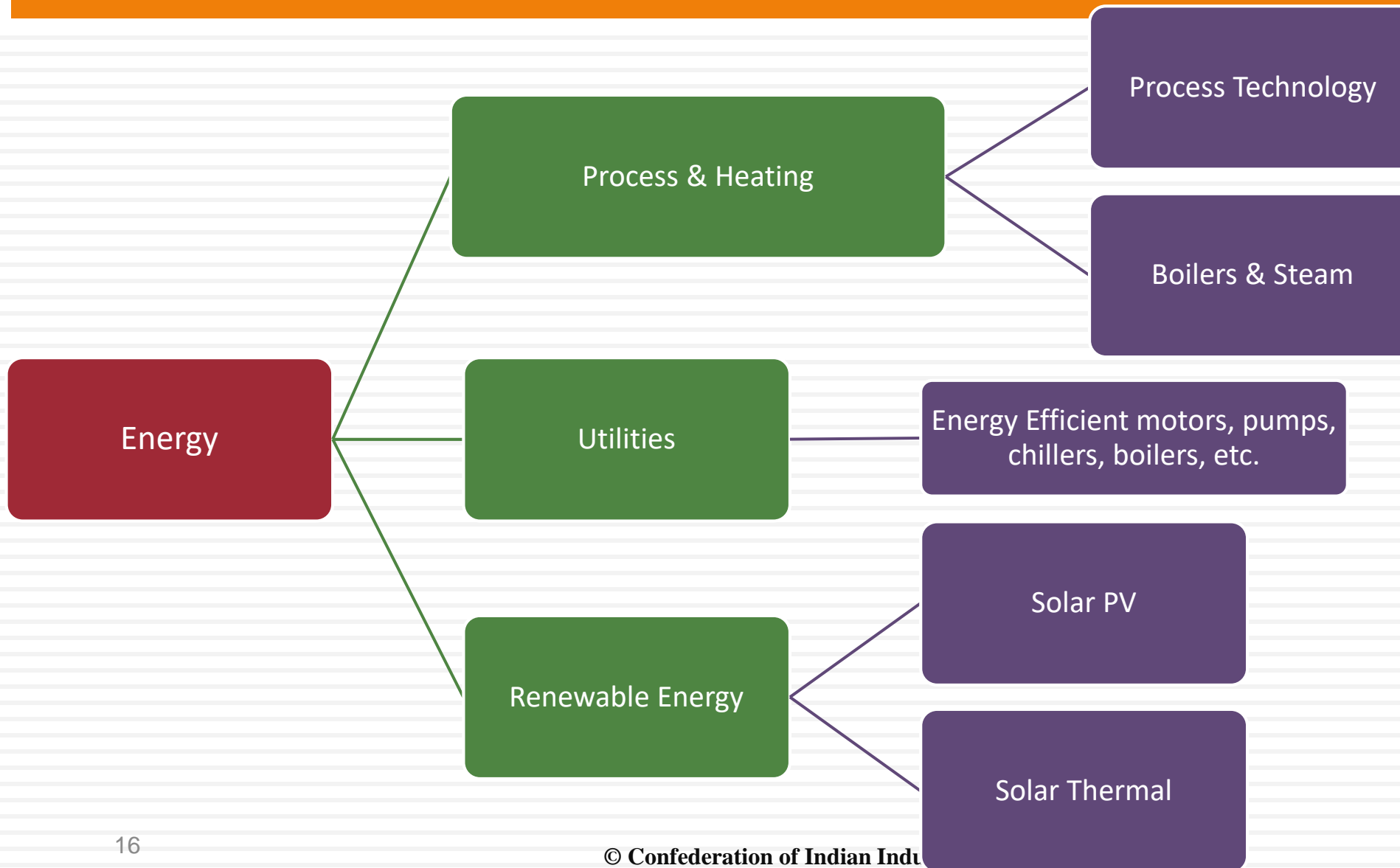
- ❖ MSME sector has been facing a severe problem of technology obsolescence
- ❖ Indicating big market potential for
 - ▣ High Investment opportunity for FIs
 - ▣ Big market for latest technologies for Technology suppliers
- ❖ Many estimates by various organisations indicate huge investment potential in MSME segment
 - ▣ BEE's Estimates (2017) – 12100 Crores as investment opportunities
 - ▣ Opportunities for other aspects like Renewable Energy , Water conservations, Lean Manufacturing, Environment management (control and monitoring) could be much higher



Example: Investment Opportunities in Select MSME sectors

- ❖ **Potential for Energy Efficiency investment**
 - ▣ **Engineering: INR 10,000 million**
 - ▣ **Foundry: INR 3,500 million**
 - ▣ **Pharma: INR 1,800 million**
- ❖ **Number based on a 10-year-old report**
 - ▣ **Greater investment potential at present**

Technology Related Opportunities in MSME sector



Technology Challenges and possible Solutions

| Technology Challenges | Possible Solutions |
|--|---|
| Access to, and limited knowledge of, modern technology | Capacity building programs for MSME sector to fill skill gaps, creating common platforms for interaction between MSMEs and tech suppliers |
| High cost for latest technologies. Lack of subsidies | Shared savings model, instalment schemes |
| Common platform for smooth technology transfer | Workshops, seminars, technology transfer platforms |
| Innovation and R&D | Government to focus on |

Financial Challenges and possible Solutions

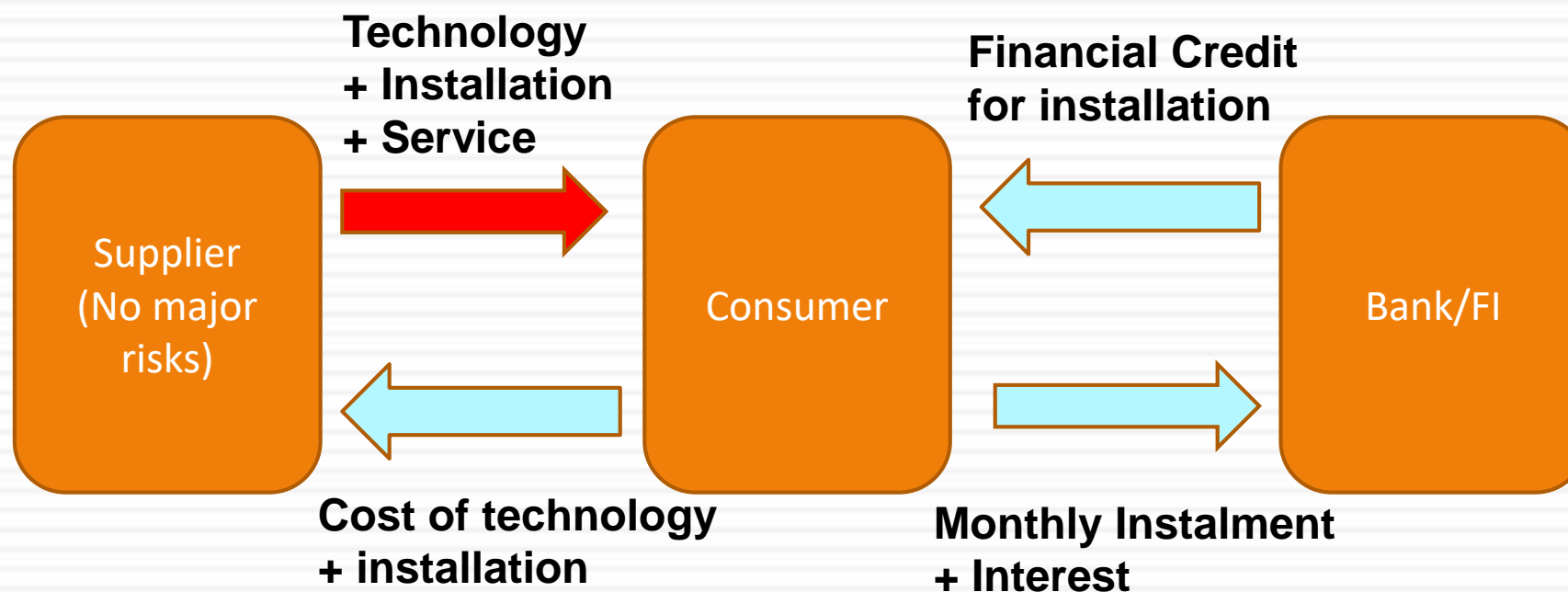
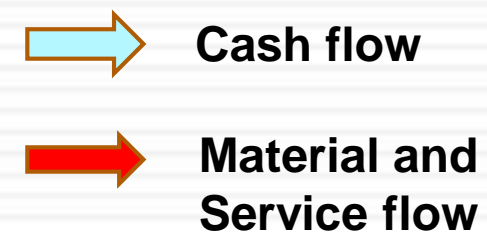
| Financial Challenges | Possible Solutions |
|--|--|
| Lack of adequate and timely finance options , Lack of non recourse financing | Creating a separate fund for green (or clean) projects, mainstreaming RECP project in loans |
| High cost of credit ; Requirement of collateral or strong balance sheets | Standardize project financing; create forum for interaction among banks/FIs and project developers; Different models like shared savings basis can be used to avoid collaterals etc. |
| Cumbersome loan procedures | Creating simple loan procedures |
| Difficulty in appraisal of projects | Develop standard procedures, templates, demonstration projects |

Modalities for Implementation of Projects

❖ Model 1:

▣ Conventional Financing

▣ Approach →

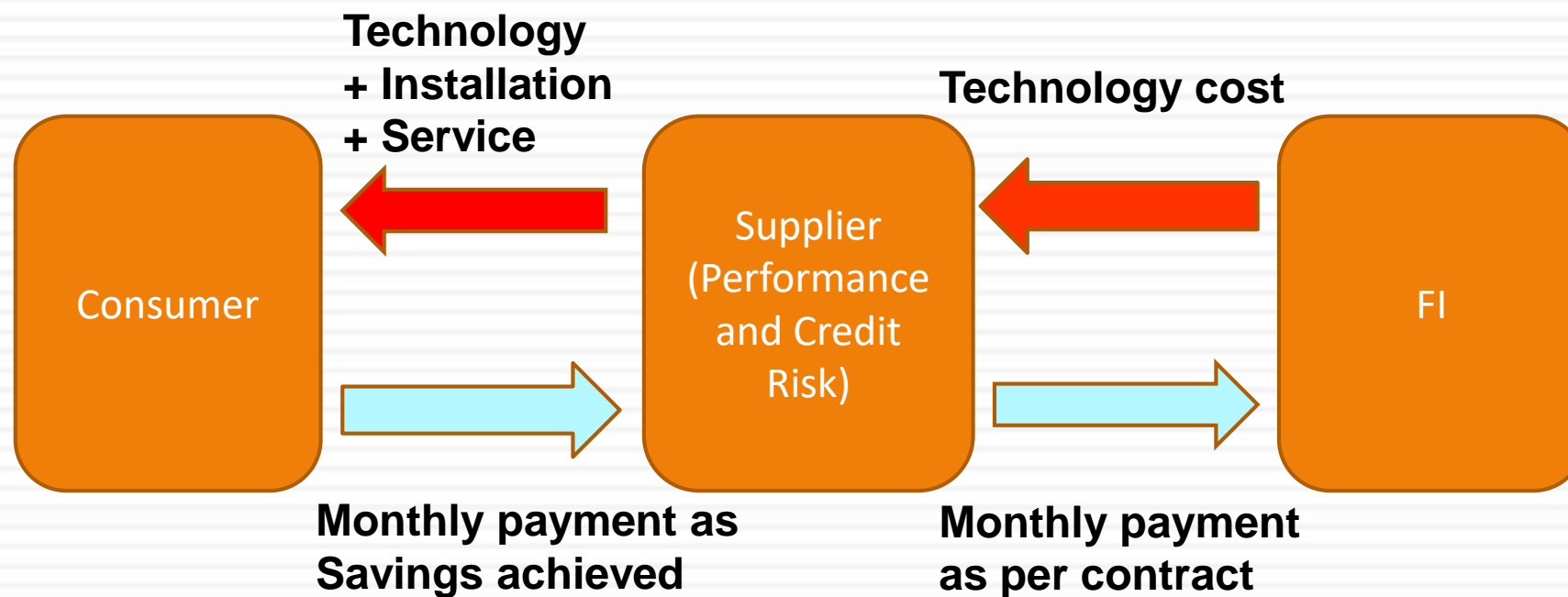
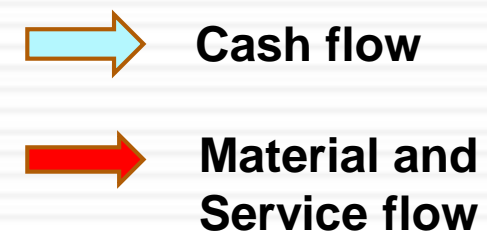


Modalities for Implementation of Projects

❖ Model 2:

▣ ESCO – Supplier implemented project

▣ Approach → Energy Sharing Model



CII's Initiatives for MSMEs in India

❖ CII Technology Facilitation Centre (CII – TFC)

- To enhance the access to technology for Indian MSMEs and create technical literacy

❖ CII Finance Facilitation Centre (CII – FFC)

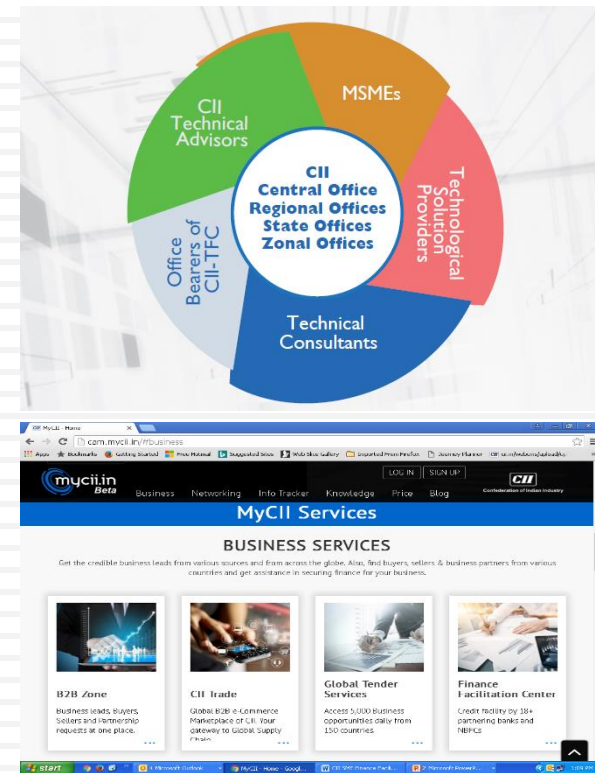
- To facilitate finance for MSME sector and build financial literacy

❖ Building competitiveness through cluster engagements

- 232 clusters formed ; Impacting 2383 MSMEs

❖ Providing technical services on energy, water, cost, corrosion management and lean manufacturing

❖ Promoting extensive capacity building platforms for SMEs



CII - GBC Ongoing Initiatives for MSMEs in India

- ❖ **Fostering the development of Eco Industrial park in India**
 - Objective: Identified and working at park level and unit level at Jeedimetla, Hyderabad; ALEAP, Hyderabad; JNPC, Vizag
 - Partner: UNIDO; SECO
- ❖ **Promoting RECP in MSMES –**
 - World Bank
- ❖ **Capacity building of local service provider in Brass and Dairy cluster**
 - Develop and promote market environment for Energy efficiency and renewable energy products and demonstrate the need for demand side management
 - Partner: GEF; UNIDO; BEE
- ❖ **Develop a unique application to conduct facility energy audit for MSMEs**
 - Partner: SIDBI



Thank you

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