



भारतीय लघु उद्योग विकास बैंक  
Small Industries Development Bank of India

## **SIDBI's Initiatives for Energy Efficiency in MSMEs**

# About SIDBI

## Constitution and Mandate

Development Financial institution set up in 1990 – under an act of Indian Parliament

Role : Promotion, financing, development of MSMEs

## Organization

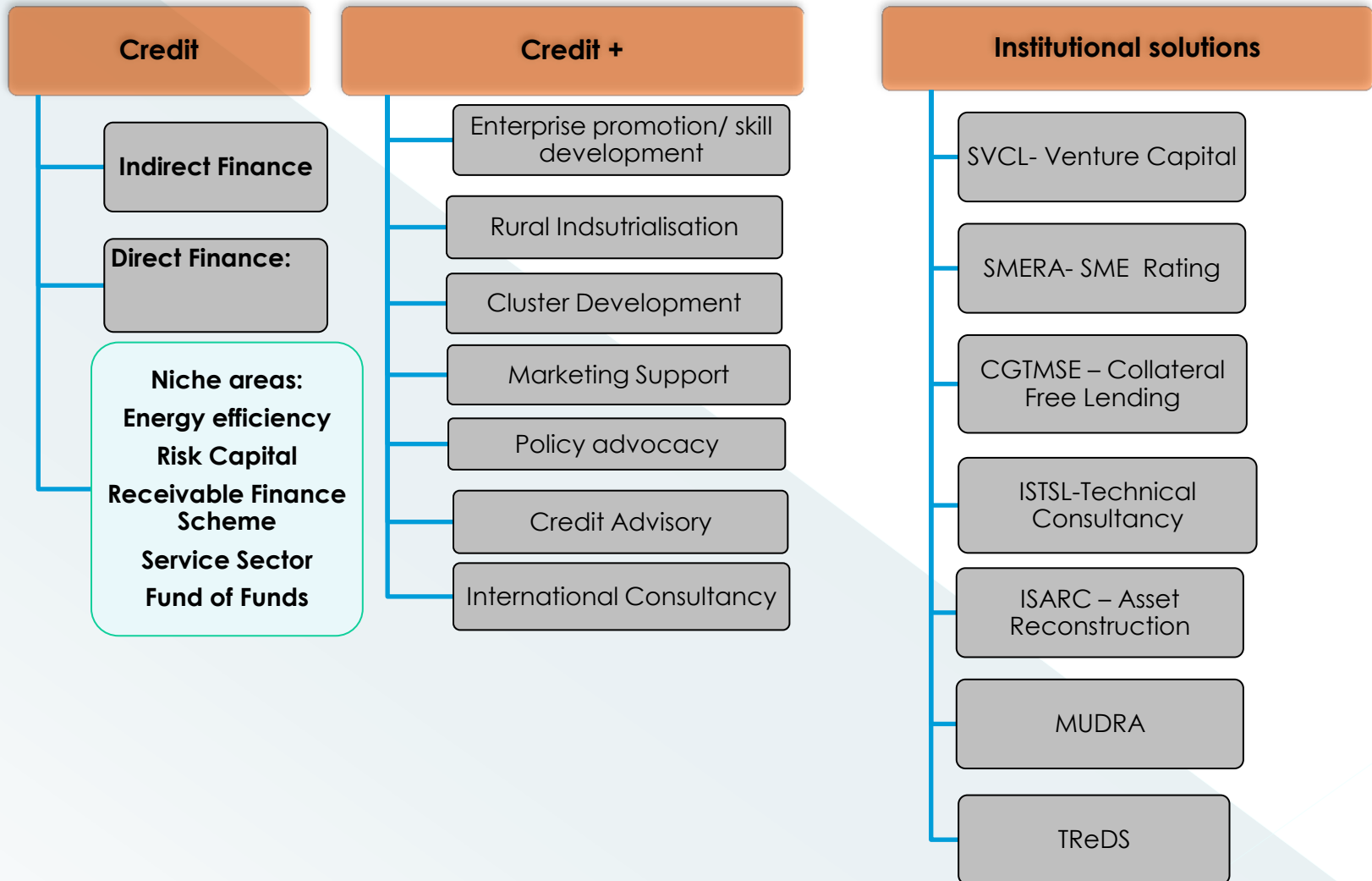
Corporate office at Mumbai. 80 branch offices and 15 regional offices

Staff of around 1100

Continuous Highest Rating AAA by rating agencies like CRISIL and CARE

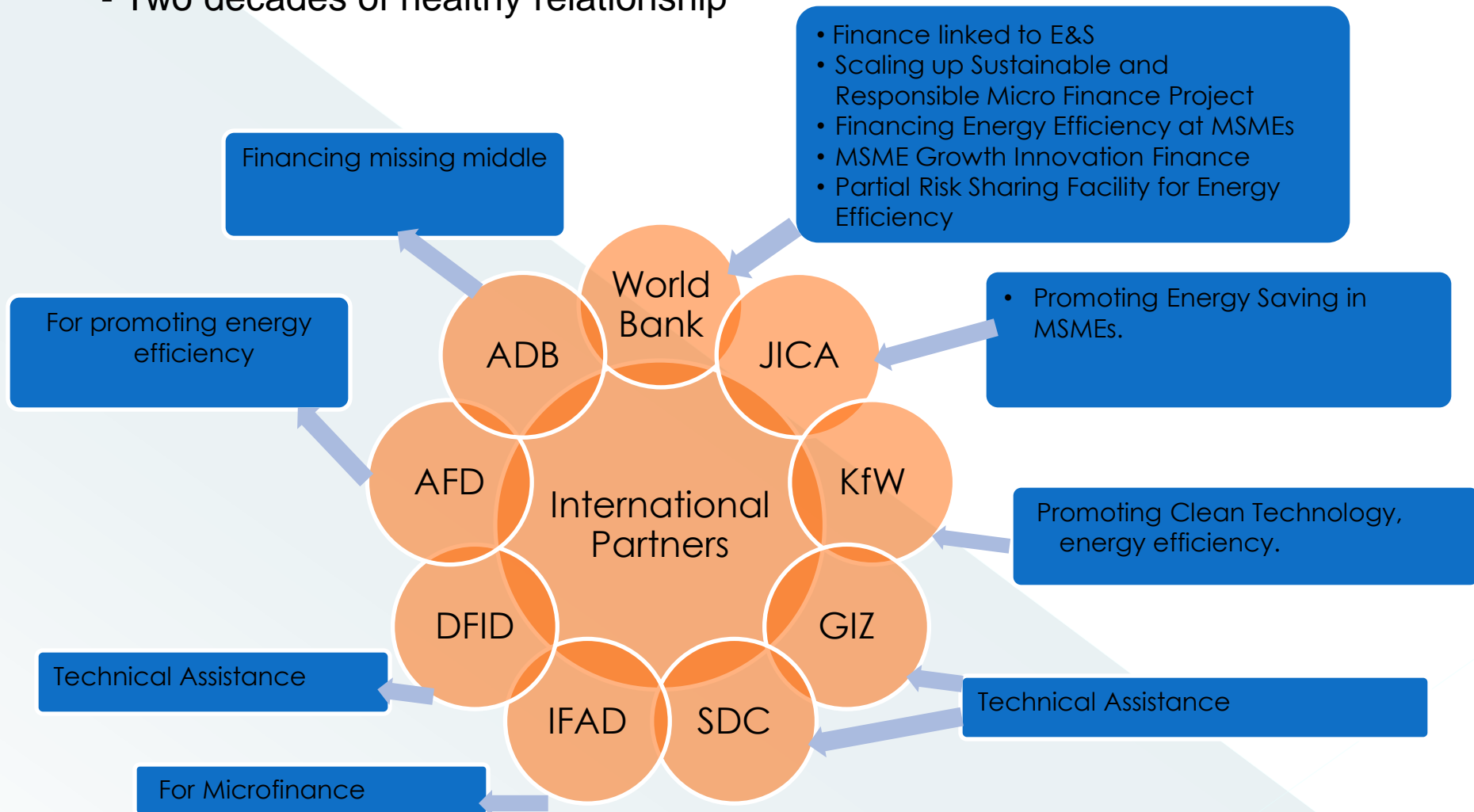
# What We Do?

## SIDBI - Apex institution for MSME in India



# International Partners

- Two decades of healthy relationship



**International Collaboration for Indian MSMEs**

# Importance of MSME sector

- Micro, Small and Medium Enterprises (MSMEs) are vital for development of a country:
  - Enablers of Sustainable and balanced growth
  - employment creator
  - development of entrepreneurial skills and rural industrialization
  - Promotes innovation
- MSME Sector Contribution to Indian Economy
  - 45% of Industrial Production, 40% of shares in exports
  - More than 6000 products
  - Second Largest Sector after agriculture
  - Provides employment to over 100 million

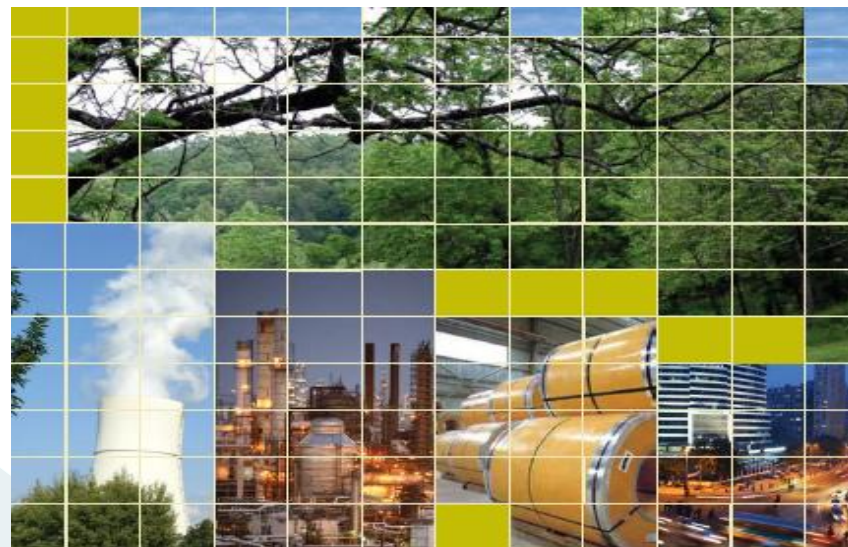
# Emissions by MSME sector

- 59% of the total GHG emissions are from industrial & energy sector.

[www.moef.nic.in/downloads/publicinformation/Report\\_INCCA.pdf](http://www.moef.nic.in/downloads/publicinformation/Report_INCCA.pdf)

- About 48% of the total energy consumed in the industrial sector is from MSMEs

Source: Electricity consumption by Industry Sector, 2012-13, Energy Statistics-2014, Central Statistics Office, Govt. of India



**INCCA Indian Network for Climate Change Assessment**

## India: Greenhouse Gas Emissions 2007



Ministry of Environment and Forests  
Government of India

May 2010

# Energy Efficiency - Potential

- India is the third-largest energy consumer in the world, after the United States and China.
- Indian MSME sector consumes almost half of the total energy consumption by industrial sector.
- Many MSMEs are highly energy inefficient due to obsolete technology/processes.
- Potential for enhancing energy efficiency in MSME : 10- 25%.

# Energy Efficiency - Barriers

- Lack of awareness / information on Energy Efficiency (EE)/ EE best practices/EE technologies amongst MSMEs.
- Energy Efficiency is not a priority for MSMEs.
- Cost of Energy Audits - Handholding support is also required
- Higher cost of energy efficient equipment / technologies
- Inadequate focus on Energy Efficiency financing by the banks
- ESCO market is still underdeveloped in India

# SIDBI's Initiatives in EE

- Entered into strategic partnership with BEE, The World Bank, JICA, KfW, GIZ & AFD for promoting & financing clean & EE investments in MSME sector.
- Created a dedicated team of experts housed at “Energy Efficiency Centre” for focused approach.
- Introduced schemes for financing Energy Efficiency (EE) & Cleaner Production projects in MSME sector.
- Besides financing, also actively pursuing various developmental initiatives including WB-GEF Project, 4E scheme, PRSF project etc.
- Conducted awareness campaigns, focused group meetings, energy audits, pilot interventions in MSME clusters.

# Two-pronged Approach

- **Financial Assistance to MSMEs through focused Lines of Credit:**
  - Concessional schemes for financing sustainable development projects in MSMEs
  - Objective of these lending schemes is to reduce energy consumption, enhance energy efficiency, reduce CO2 emissions and improve the profitability of the Indian MSMEs.
- **Developmental Support to MSMEs**
  - Cluster focused Awareness & Capacity Building Programmes for MSMEs, Industry Associations, Bankers and other stakeholders.
  - Implementation of various developmental projects.

# Activities covered under SIDBI's sustainable financing schemes

- ☐ Energy Efficiency – equipments, green building
- ☐ Cleaner Production -
  - ✓ Waste Management –agro waste, industrial waste
  - ✓ Fuel Switching- diesel/petrol to CNG/LPG, coal to oil/gas based furnace
- ☐ ESCOs – Energy Service Companies
- ☐ Renewable Energy –solar, hydro, bio mass, wind power



# WB GEF Project – Financing EE at MSMEs

- Pilot project in 5 MSME clusters (*extended in another 5 MSME clusters*)
  - Energy Audits completed in more than **2000 MSMEs**
  - Implementation of EE measures in more than **600 MSME units**.
  - Third party M&V through CII reported excellent results (**10% - 25% energy cost savings**).
  - Expected Results from the project are as under:
    - ✓ **EE Investment** : **INR 150 Crore**
    - ✓ **Energy Cost Saving** : **INR 125 Crore**
    - ✓ **Total Energy Saving** : **22500 TOE / Yr**
    - ✓ **CO2 Reduction** : **1.50 Million tCO2**
- ✓ **First project wherein such large scale actual implementations of EE measures by MSMEs have taken place**
  - ✓ **Project mentioned in India's INDC document**

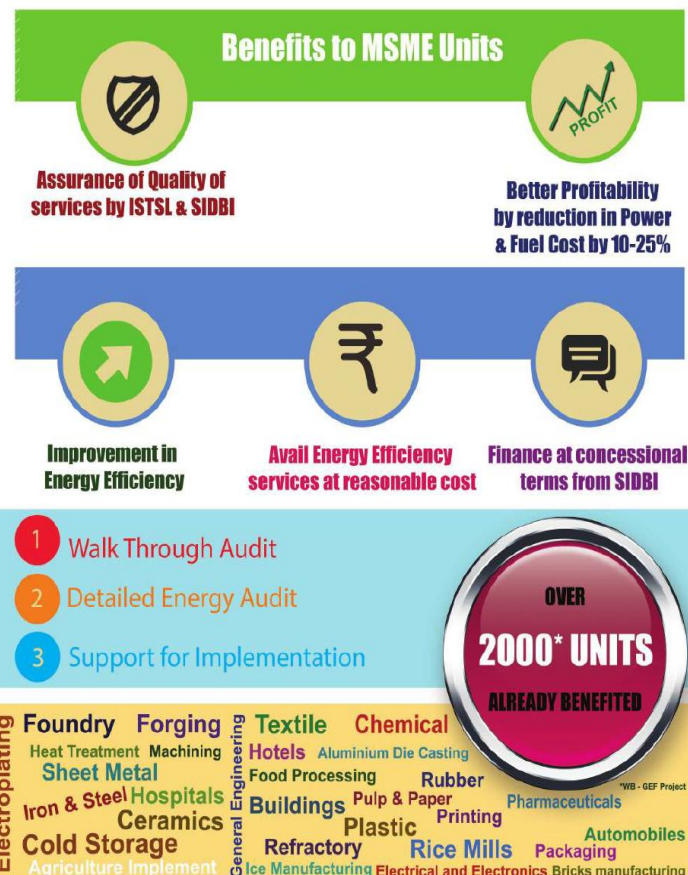
# End to End Energy Efficiency (4E) Programme

- To help the MSME units to adopt RE practices by providing them
  - Technical consultancy / advisory services at reasonable cost with assurance of quality.
    - Detailed Energy Audit (DEA)
    - Support during implementation
    - M&V
  - Financial support at soft terms



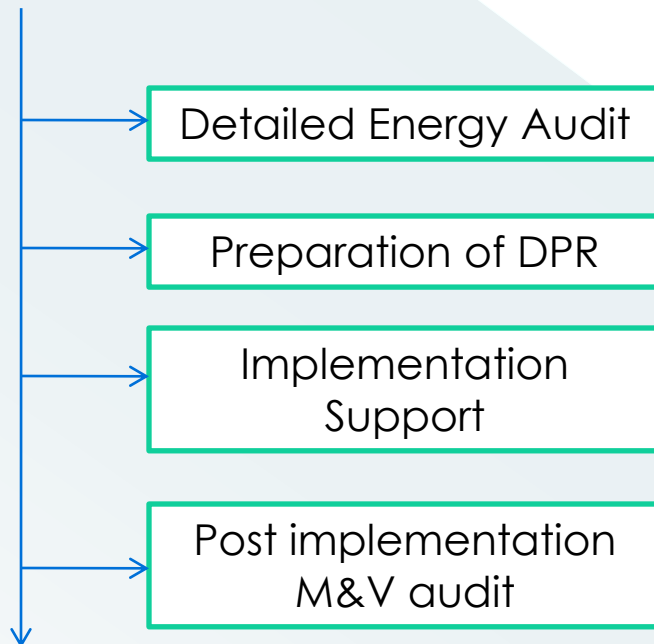
## END TO END ENERGY EFFICIENCY [4E] SOLUTIONS

A Unique Product for MSME Sector

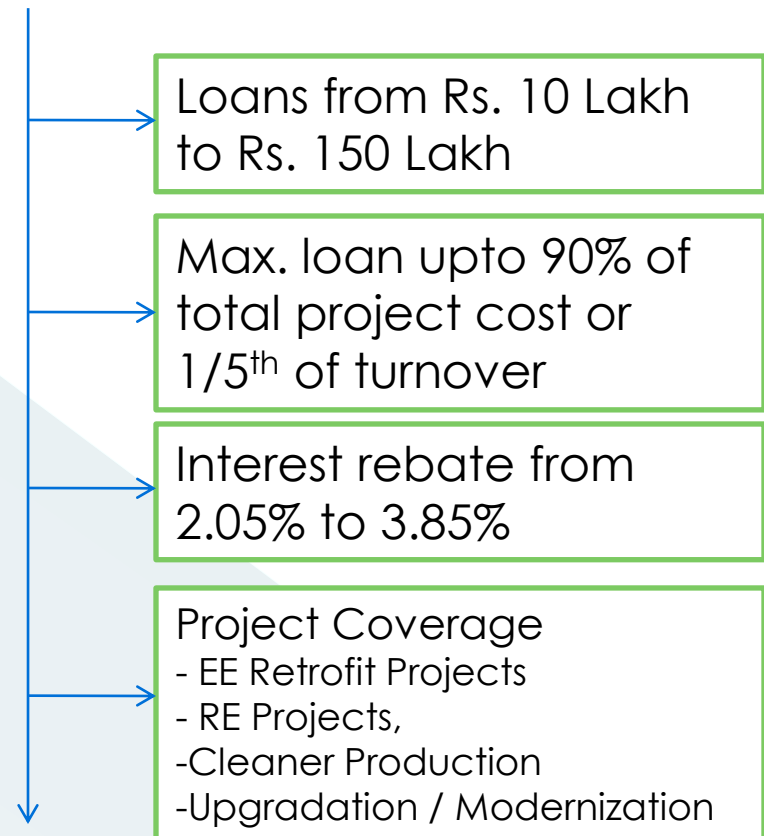


# 4E Programme

## TECHNICAL SUPPORT



## FINANCIAL SUPPORT



## **Benefits of 4E to MSME units**

**Improved profitability through energy savings**

**Quality of technical services is assured**

**Nominal / subsidized cost of technical services**

**Availability of more time for concentrating on production, business development, etc.**

**Availability of finance at attractive terms**

MSMEs are being charged a token fee of INR 30,000 plus taxes for technical services.

# India SME Technology Services Limited (ISTSL)



इंडिया एसएमई टेक्नोलॉजी सर्विसेस लिमिटेड  
INDIA SME TECHNOLOGY SERVICES LIMITED

website: [www.techsmall.com](http://www.techsmall.com)

Joint Venture of



भारतीय लघु उद्योग विकास बैंक  
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# Partial Risk Sharing Facility for Energy Efficiency (PRSF) Project

## Objective:

Empower and promote ESCO-implemented energy efficiency projects  
Encourage banks / FIs to finance ESCO projects through credit enhancement

## Sectors covered:

- (a) Large industries (excluding thermal power plants),
- (b) MSMEs
- (c) Municipalities (including street lighting)
- (d) Buildings.

## Risk Coverage:

- Extent of guarantee - **75% of the loan amount.**
- Minimum loan amount **INR 10 Lakh** and maximum loan amount of **INR 15 Crore** per project.

SIDBI is the Project Execution Agency (PEA).



# SIDBI's EE assistance - Impacts

- Sanctioned Assistance of around Rs. 7000 crore to more than 8000 MSME units.
- Sanctioned more than Rs. 600 crore in RE Projects (both Wind & Solar power projects)
- More than 1043 Million units of electricity saved.
- Thermal energy savings of 650,000 million kCal
- Resulted in reduction of 909 kilo tons (kT) of CO<sub>2</sub> annually.
- Financed Green Buildings/Energy Efficient buildings aggregating to an amount of more than Rs. 100 crore .
- Reached more than 100 industrial clusters & 2500 MSME units and awareness on EE has been created to 4000 participants from the MSMEs.



# Awards & Recognitions

- **ADFIAP Award 2012** - *under the category of Environmental Development for:*
  - ***CNG Taxi Financing Scheme, CNG Auto Rickshaw Financing Scheme and Energy Efficiency Lines of Credit.***
- **ADFIAP Award 2013** - *Under the Environmental Category for*
  - ***World Bank GEF project: Financing Energy Efficiency at MSMEs Project***
  - ***pCDM Project at Jodhpur Stainless Steel Re-rolling Mills Cluster***
- **National Energy Conservation Award** – *First prize under the category of Financial Institutions during 2015 and Certificate of Merit during 2016.*
- *SIDBI, the only Indian Institutional member of International Development Finance Club (IDFC) promoted by KfW . Presently, there are 23 members of IDFC across the world.*



**भारतीय लघु उद्योग विकास बैंक**  
**Small Industries Development Bank of India**

**Thank You !**

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