



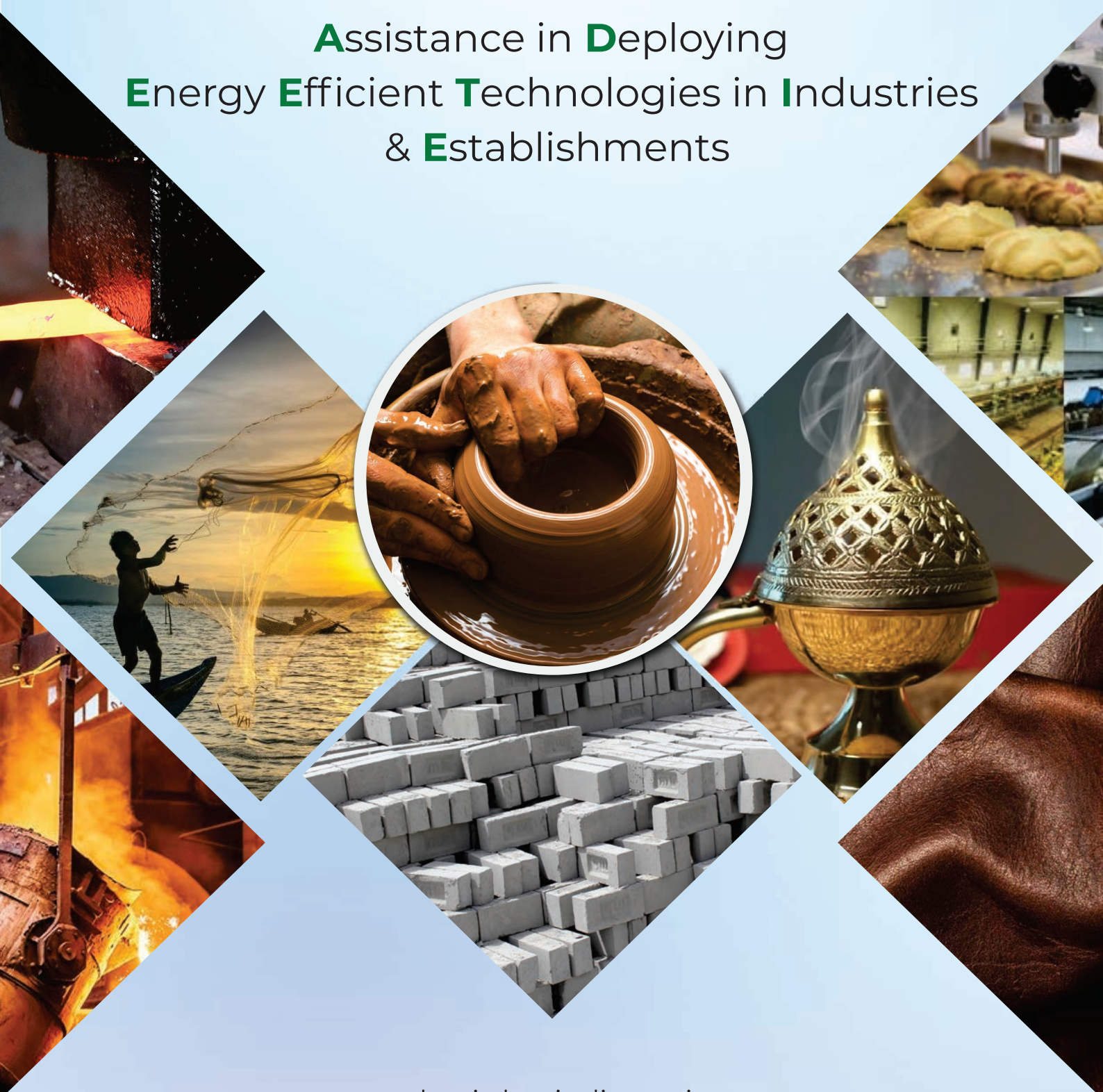
विद्युत मंत्रालय  
MINISTRY OF  
POWER



BUREAU OF ENERGY EFFICIENCY

# ADEETIE

Assistance in Deploying  
Energy Efficient Technologies in Industries  
& Establishments



[adeetie.beeindia.gov.in](http://adeetie.beeindia.gov.in)



# ASSISTANCE IN DEPLOYING ENERGY EFFICIENT TECHNOLOGIES IN INDUSTRIES & ESTABLISHMENTS (ADEETIE)

The Assistance in Deploying Energy Efficient Technologies in Industries & Establishments (ADEETIE) is a flagship initiative of the Ministry of Power, implemented by the Bureau of Energy Efficiency (BEE), designed to accelerate the adoption of energy-efficient technologies across India's MSME sector. The scheme provides end-to-end support—ranging from technical guidance to financial incentives such as interest subvention—to help enterprises reduce energy consumption, cut operational costs, and boost overall competitiveness. The Scheme is operational across 60 industrial clusters in 14 key energy-intensive sectors, adopting a phased and structured approach encompassing energy audits, project planning, implementation, and monitoring. The scheme is a key step towards fostering sustainable industrial growth and supporting India's transition to a cleaner energy future.

## Objective

Facilitate MSMEs in adopting energy-efficient technologies to improve productivity and reduce energy costs.

Supporting MSMEs in conducting Investment Grade Energy Audits (IGEA) and preparing Detailed Project Reports (DPRs).

Enable MSMEs to access concessional financing through interest subvention on loans for technology upgrades.

Assist MSMEs throughout the project lifecycle—from audit to implementation and monitoring—to ensure sustainable outcomes.

## Scheme components

### Interest Subvention

The scheme provides a 5% (Micro and Small) and 3% (Medium) interest subvention on loans for technology adoption, covering debt funding up to 75% of the project cost related to energy efficiency.

### Streamlined Project Implementation

Widespread promotion and awareness, support for energy audits, DPR preparation, and end-to-end assistance up to monitoring and verification of the implementation.

### Implementation Period

Three years, spanning from FY 2025–26 to FY 2027–28.

## **Eligibility criteria for the scheme**

Micro, Small, and Medium Enterprises (MSMEs) that avail loans from Banks and Financial Institutions are eligible for an interest subvention, which provides financial relief by reducing the interest burden on their loans. This initiative is aimed at encouraging credit flow to the MSME sector, improving their access to affordable finance, and supporting business growth and sustainability.

### **Eligibility**

Micro Small and Medium Enterprises (MSMEs) registered under Udyam portal of Ministry of Micro Small and Medium Enterprises (MoMSME), operational in identified 60 clusters in energy-intensive sectors of Brass, Bricks, Ceramics, Chemicals, Fisheries, Food Processing, Forging, Foundry, Glass & Refractory, Leather, Paper, Pharmaceutical, Steel Re-Rolling, and Textiles will be eligible for the scheme.

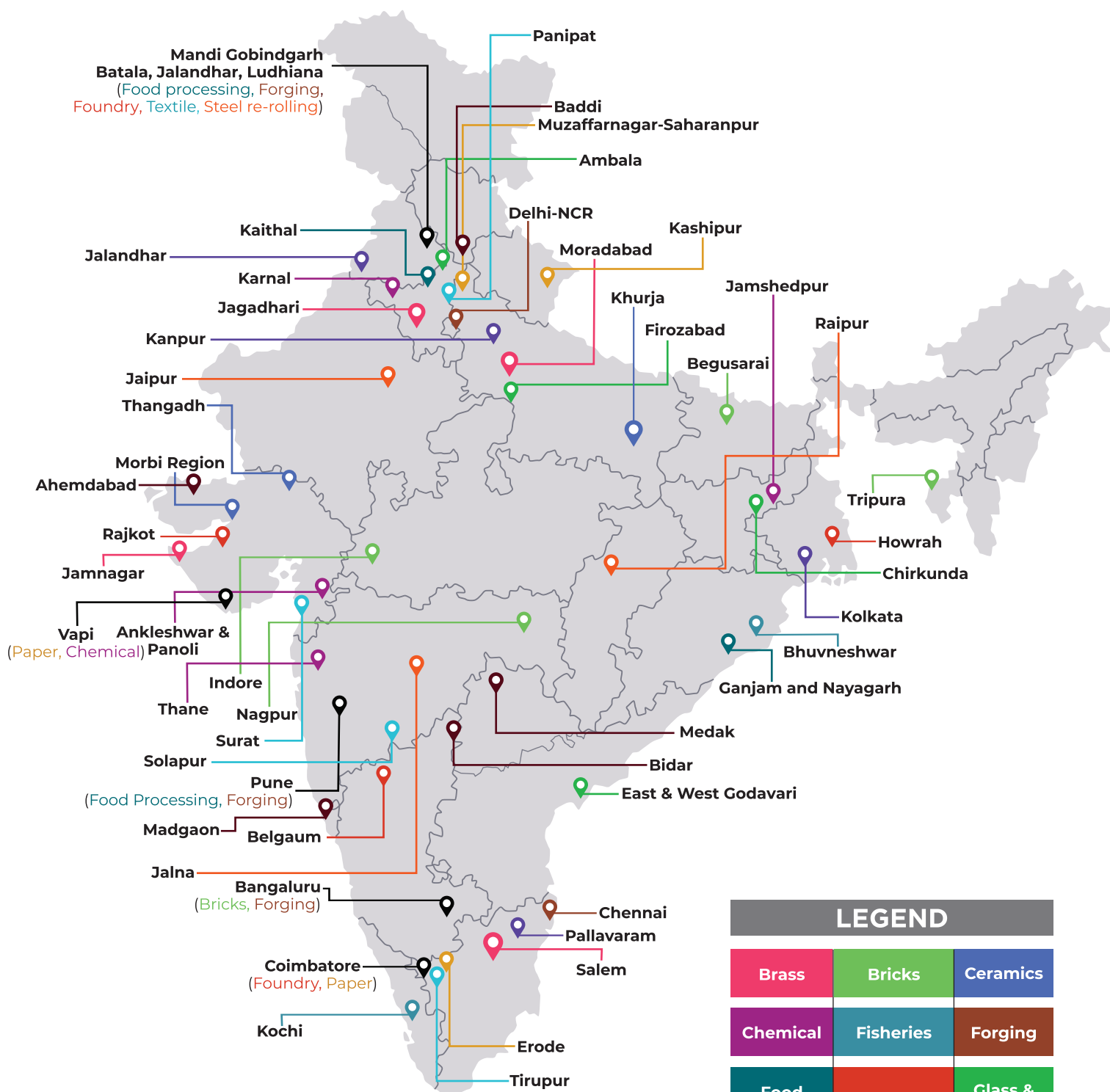
Loan amounts ranging between Rs10 lakh to Rs15 Cr will be eligible.

Projects with a minimum of 10% energy saving potential are eligible to receive annual interest subvention.





# CLUSTERS ELIGIBLE UNDER ADEETIE SCHEME



Note: This map is for illustrative purposes only. Cluster positions may not represent exact geographic coordinates.

## LEGEND

|                  |           |                    |
|------------------|-----------|--------------------|
| Brass            | Bricks    | Ceramics           |
| Chemical         | Fisheries | Forging            |
| Food Processing  | Foundry   | Glass & Refractory |
| Leather          | Paper     | Pharma             |
| Steel re-rolling | Textile   |                    |

## LIST OF IDENTIFIED SECTORS AND CLUSTERS

### Bricks

Bengaluru, Begusarai  
Indore, Nagpur  
Tripura

### Steel Re-Rolling

Mandi Gobindgarh  
& Ludhiana, Jaipur  
Jalna, Raipur

### Textile

Ludhiana, Surat,  
Tirupur, Solapur  
Panipat

### Chemicals

Ankleshwar & Panoli  
Jamshedpur, Karnal  
Thane, Vapi

### Pharma

Baddi, Medak  
Madgaon,  
Ahmedabad, Bidar

### Fisheries

Kochi  
Bhuvneshwar  
West Godavari

### Food Processing

Ganjam & Nayagarh  
Kaithal, Ludhiana  
Pune

### Leather

Kanpur, Kolkata  
Pallavaram &  
Vaniyambadi  
Jalandhar

### Forging

Bangaluru, Pune  
Delhi-NCR, Chennai  
Ludhiana

### Foundry

Batala, Jalandhar, Ludhiana  
Howrah, Rajkot, Belgaum  
Coimbatore

### Paper

Muzaffarnagar-Saharanpur  
Kashipur, Vapi  
Coimbatore & Erode

### Brass

Jagadhari, Jamnagar  
Moradabad  
Salem

### Glass & Refractory

Ambala, Chirkunda  
E & W Godavari  
Firozabad

### Ceramics

Morbi Region  
Thangadh, Khurja

## List of Energy Efficient Technologies under the ADEETIE Scheme

| No. | Name Of Technology                           | Energy Saving Potential (%) | Sector            |
|-----|--|-----------------------------|-------------------|
| 1   | Rotoberatory Furnace                         | 20-25%                      | Brass             |
| 2   | Electrical Annealing Bogie Furnaces          | 25-30%                      | Brass & Aluminium |
| 3   | Gasifier for Melting and Reheating Process   | 20-25%                      | Brass & Aluminium |
| 4   | Vertical shaft brick kilns                   | 15-20%                      | Bricks            |
| 5   | Zig-Zag Firing                               | 20-25%                      | Bricks            |
| 6   | BEE 5 Star Rated AC                          | 20-45%                      | Building          |
| 7   | Gas Engine based co-generation technology    | 30-40%                      | Ceramics          |
| 8   | Energy Efficient Tray Dryer                  | 15-20%                      | Chemical          |
| 9   | Gas fired hot air generator system           | 20-25%                      | Chemical          |
| 10  | Membrane Filter Press                        | 30-40%                      | Chemical          |
| 11  | Vertical Agitator System for Reaction Vessel | 20-25%                      | Chemical          |
| 12  | Adiabatic Pre-reformer                       | 4-10%                       | Fertilizer        |
| 13  | Heat Pump                                    | 30-40%                      | Fishery           |
| 14  | Thyristor Control for Electric Oven          | 7-15%                       | Fishery           |
| 15  | Radio frequency heating                      | 30-50%                      | Food Processing   |
| 16  | Forging Furnace                              | 15-20%                      | Forging           |
| 17  | Hydraulic Hammer                             | 30-40%                      | Forging           |
| 18  | Induction Billet Heater                      | 20-25%                      | Forging           |
| 19  | Divided blast cupola                         | 20-25%                      | Foundry           |

|    |   |        |                 |
|----|---|--------|-----------------|
| 20 | Natural Gas fired Boiler                      | 20-30% | Foundry         |
| 21 | Veneering for Industrial furnaces             | 20-25% | Foundry         |
| 22 | Lost foam casting technology                  | 50-60% | Foundry         |
| 23 | Energy efficient gas fired pot furnace        | 30-35% | Glass           |
| 24 | Energy Efficient Tank furnace                 | 15-20% | Glass           |
| 25 | Low Thermal Mass cars in Tunnel Kiln          | 10-13% | Glass & Ceramic |
| 26 | Tube ice plant                                | 10-15% | Ice Making      |
| 27 | Waterless Chrome Tanning                      | 30-40% | Leather         |
| 28 | CNC Machine (Special Purpose Machine)         | 30-35% | Machine Tool    |
| 29 | CNC Bending Machine                           | 30-35% | Machine Tool    |
| 30 | CNC Gear Hobbing Machine                      | 20-25% | Machine Tool    |
| 31 | CNC Grinding Machine                          | 20-25% | Machine Tool    |
| 32 | CNC Horizontal M/c Centre                     | 25-30% | Machine Tool    |
| 33 | CNC Lathe Machine                             | 25-30% | Machine Tool    |
| 34 | CNC Milling M/C                               | 25-30% | Machine Tool    |
| 35 | CNC Turn Mill Centre                          | 20-25% | Machine Tool    |
| 36 | CNC Turret Punch Machine                      | 35-40% | Machine Tool    |
| 37 | CNC Wire Cut Machine                          | 30-35% | Machine Tool    |
| 38 | Screw Washer                                  | 10-15% | Paper           |
| 39 | Nutsche Filtration and Drying Process         | 10-20% | Pharmaceutical  |
| 40 | Bleached Chemi Thermo Mechanical Pulp (BCTMP) | 15-20% | Pulp & Paper    |
| 41 | Cascaded Condensate Recovery System           | 5-7%   | Pulp & Paper    |
| 42 | Fabricated Water Ring Vacuum Pumps            | 30-40% | Pulp & Paper    |
| 43 | Hi-Consistency Pulper                         | 10-15% | Pulp & Paper    |
| 44 | High Efficiency Refiner                       | 7-20%  | Pulp & Paper    |
| 45 | Low Consistency Refining (LCR)                | 20-30% | Pulp & Paper    |

|    |   |        |                  |
|----|---|--------|------------------|
| 46 | Oxyfuel Burner  | 30-40% | Pulp & Paper     |
| 47 | Pocket Ventilation System                                   | 5-15%  | Pulp & Paper     |
| 48 | Shoe Press  | 20-30% | Pulp & Paper     |
| 49 | Boiler Conversion: Atmospheric Fluidised bed to Spouted bed | 25-30% | Pulp & Paper     |
| 50 | Modern Brownstock Washers (BSWs)                            | 10-20% | Pulp & Paper     |
| 51 | Black Liquor Gasification                                   | 15-20% | Pulp & Paper     |
| 52 | Drum pulpers  | 20-30% | Pulp & Paper     |
| 53 | Vacuum blower   | 20-25% | Pulp & Paper     |
| 54 | Direct Rolling  | 30-40% | Steel Re-rolling |
| 55 | Exhaust humidity measurement & control system               | 5-15%  | Textile          |
| 56 | Rapier or Auto Loom   | 15-20% | Textile          |
| 57 | Carbon Fiber Fan  | 15-20% | Textile          |
| 58 | Pulser dyeing technique                                     | 20-30% | Textile          |
| 59 | Waste heat recovery in centrifugal compressor               | 10-20% | Textile          |
| 60 | Gas fired stenters  | 30-40% | Textile          |
| 61 | Light weight carbon reinforced spinning pot                 | 18-20% | Textile          |
| 62 | High-speed carding machine                                  | 30-40% | Textile          |
| 63 | PLC based dyeing machine                                    | 20-25% | Textile          |
| 64 | High-speed Ring spinning frame                              | 10-20% | Textile          |
| 65 | Light weight bobbins  | 7-20%  | Textile          |
| 66 | Synthetic sandwich tapes                                    | 5-15%  | Textile          |
| 67 | SITRA Excel fans  | 15-20% | Textile          |
| 68 | Auto loom   | 25-30% | Textile          |
| 69 | Ultrasonic technology                                       | 40-50% | Textile          |

Note: The scheme is open beyond the above indicative list.



# ADEETIE IMPLEMENTATION PROCESS

1

## Registration by MSME

MSME identifies high energy consumption areas and registers on the scheme portal to adopt energy-efficient technologies.

2

## Investment Grade Energy Audit (IGEA)

An empanelled energy auditor conducts a detailed energy audit to identify energy savings opportunities.

3

## DPR Preparation and Submission

Based on the audit, the auditor prepares and submits IGEA based Detailed Project Report (DPR) outlining technologies, costs, savings, implementation plans, Return on Investment (ROI) and Internal Rate of Return (IRR).

6

## Technology Procurement and Implementation

MSME procures and installs approved energy-efficient technologies and systems.

5

## Loan Application and Sanction

MSME applies for a loan from suitable financial institutions.  
IGEA fees are credited to the MSME.

4

## Technical Committee Approval

BEE's Technical Committee reviews the IGEA based DPR for feasibility and scheme compliance. Approved projects become eligible for accessing finance and interest subvention under scheme.

7

## Monitoring and Verification (M&V)

Empanelled auditors verify actual energy savings and submit reports to BEE for compliance.

8

## Subvention Claim and Disbursement

Lending Financial Institutions submit subvention claims to BEE for disbursement to beneficiaries through nodal bank (Central Nodal Agency) on quarterly basis.

9

## Impact Assessment and Monitoring

BEE maintains records and periodically assesses the scheme's impact on energy efficiency.



# FAQs for INDUSTRIES

## 1 What is the ADEETIE Scheme?

The ADEETIE Scheme is a flagship initiative of the Ministry of Power, implemented by the Bureau of Energy Efficiency (BEE), to support MSMEs in adopting energy-efficient technologies through interest subvention and complete technical handholding.

## 2 What is the objective of the scheme?

The primary objective is to facilitate MSMEs in upgrading their processes by adopting energy-efficient technologies through:

- Financial support (interest subvention on loans)
- Technical support (Investment Grade Energy Audits, DPR preparation, and M&V)

## 3 What kind of financial support is provided?

Interest subvention is provided on loans for technology adoption:

- 5% for Micro and Small Enterprises
- 3% for Medium Enterprises
- Lending rates are capped at a minimum of 2%

## 4 What are the eligible sectors and clusters under the scheme?

ADEETIE covers 14 energy-intensive sectors across 60 MSME clusters in the initial phase, including:

- Brass, Bricks, Ceramics, Chemicals, Fisheries, Food Processing, Forging, Foundry, Glass & Refractory, Leather, Paper, Pharma, Steel Re-rolling, and Textile

## 5 Who is eligible to apply?

MSME units engaged in manufacturing and located within the identified clusters of the 14 target sectors. They must demonstrate at least 10% energy savings through the implementation of selected technologies.

## 6 What are the scheme's main components?

- Interest Subvention on loans for energy-efficient technologies
- End-to-End Implementation Support (audits, DPRs, technical handholding)
- Dedicated Project Management Unit (PMU) and a Nodal Bank

## 7 How will the implementation be carried out?

The scheme will be implemented in two phases:

- Phase 1: 60 clusters across India
- Phase 2: Additional 100 clusters (based on learnings from Phase 1)

Each project is tracked digitally using a unique project ID within the MIS system managed by the PMU.

## 8 What is the anticipated impact of the scheme?

- Mobilization of ₹9,000 crore in energy efficiency investments
- ₹6,750 crore in MSME lending
- Significant energy savings and emission reductions
- Enhanced creditworthiness and competitiveness of MSMEs

## 9 What is the scheme's implementation period?

The ADEETIE Scheme will be implemented over a three-year period, from FY 2025–26 to FY 2027–28.

## 10 What is the scheme's budget?

- The total outlay is ₹1,000 crore, allocated as follows:
- ₹875 crore – Interest subvention
- ₹50 crore – Investment Grade Energy Audits
- ₹75 crore – Handholding and implementation support



# FAQs

## for Auditing Agencies

## 1 What is the objective of the empanelment under ADEETIE and BEE MSME programs?

To create a technically capable network of certified and experienced Energy Auditors and firms that can support MSMEs in energy efficiency improvement by conducting detailed Investment Grade Energy Audits (IGEA), preparing Detailed Project Reports (DPRs), and Monitoring and Verification of implementations and providing technical assistance.

## 2 What is the empanelment duration?

Auditing firms and auditors are empanelled for a tenure of up to 3 years, subject to performance reviews .

## 3 Who is eligible to apply for empanelment under ADEETIE?

Firms:

- At least 5 years operational experience
- At least one BEE Certified Energy Auditor with 5+ years' experience
- Must have energy auditing tools

Individuals:

- BEE Certified Energy Auditor
- 5+ years' experience in industrial/MSME energy audits
- Skilled in using energy audit tools

## 4 What services do auditors provide?

- Conduct Investment Grade Energy Audits (IGEA)
- Identify energy-saving opportunities
- Prepare DPRs for EE technology implementation
- Support post-implementation Monitoring & Verification (M&V)

## 5 A firm or an individual auditor be empanelled for multiple MSME clusters?

Yes, a firm or individual can be empanelled for multiple clusters.

## 6 Where and how to apply for empanelment?

Submit the application form via [adeetie.beeindia.gov.in](https://adeetie.beeindia.gov.in) and email to [facilitation-centre@beeindia.gov.in](mailto:facilitation-centre@beeindia.gov.in)



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