SAMEEEKSHA

SMALL AND MEDIUM ENTERPRISES: ENERGY EFFICIENCY KNOWLEDGE SHARING



17TH MEETING

8 JANUARY 2020

THE ENERGY AND RESOURCES INSTITUTE (TERI)
NEW DELHI











SAMEEEKSHA

Small and Medium Enterprises: Energy Efficiency Knowledge Sharing

- Platform for pooling the knowledge and experiences of various organizations that are engaged with the Indian SME sector.
- Enables like-minded organizations to coordinate and increase the impact of their activities in different areas in the SME sector.
- o <u>http://sameeeksha.org/</u>









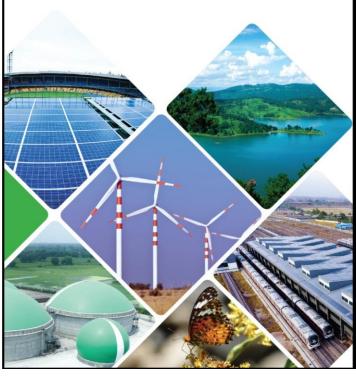


SAMEEKSHA INCLUDED IN INDIA SECOND BIENNIAL UPDATE REPORT

India

Second Biennial Update Report to the United Nations Framework Convention on Climate Change







reduction in the time taken for processing and granting approvals based on scientific and technical inputs. In this context, the Government of India launched 'PARIVESI' (Pro Active and Responsive facilitation by Interactive and Virtuous Environmental Singlewindow Hub), a Single-Window Integrated Environmental Management System for expeditious and transparent clearances in environment, forest, wildlife and coastal regulatory zone. The Ministry is using EIA to promote climate-friendly sustainable infrastructure development. One such example is related to the building and construction sector. Under the EIA process, the Ministry gives higher priority for environmental clearance to construction projects which have obtained green building rating by integrating a high-level of environmental norms into their building plans.

6.4.2 SAMEEEKSHA

Sameeeksha is a e-platform providing comprehensive information as well as an opportunity to the representatives of Micro, Small & Medium Enterprises (MSME) sector for an interface with policymakers, funding and development agencies, R&D institutions and cacdemia to promote energy efficiency and best operating practices in the sector. This platform is supported by the Ministry of MSME, Bureau of Energy Efficiency, Swiss Agency for Development and Cooperation and Shakti Sustainable Energy Foundation. The secretariat of Sameeeksha is housed at The Energy Resource Institute (TER). A MSME Energy Map has been developed, which is a dynamic tool that provides insights into energy-intensive MSME clusters across the country, on which detailed energy-related information and data is available. So far, the Sameeeksha database accounts for about 27.3 Mtoe of energy consumption in 109 MSME clusters across the country (sameeeksha.org, 2018).

6.4.3 Super-efficient Equipment and Appliance Deployment (SEAD)

India is a member country of the Super-efficient Equipment and Appliance Deployment (SEAD) initiative, which is a voluntary collaboration among governments working to promote the manufacture, purchase, and use of energy-efficient appliances, lighting, and equipment worldwide. SEAD is an initiative under the Clean Energy Ministerial (CEM). The SEAD initiative works with manufacturers, purchasers, purchase influencers, and policymakers to away.

6.4.4 PAHAL - Mass Collaboration for Clean Cooking Fuel

The Ministry of Petroleum and Natural Gas (MoPNG), Government of India, launched a modified Direct Benefit Transfer of LPG (DBT) scheme 'Pahai (Pratyaksh Hanstantrit Labh)' in 54 districts on 15th November 2014, which was extended to the entire country on 1th January 2015.



Figure 6.13: PAHAL acknowledged by Guinness Book of World Records (2015)

Liquefied Petroleum Gas (LPG) is used in most urban and urural households and is subsidized. To reduce subsidies, a programme was launched to encourage well-to-do households to voluntarily give up their LPG subsidy so that it could be targeted to the poor who generally use fuelwood, cow dung, crop residue and coal as cooking fuel. Data from the MoPNG indicates that as of January 2018, more than 0.57 million households had voluntarily surrendered their LPG subsidy. The availability of subsidy encourages people to move away from fuelwood, cow dung and crop residue to LPG.

LPG consumers who join the PAHAL scheme will get LPG cylinders at market price and receive LPG subsidy (as per their entitlement) directly into their bank accounts.

In 2015, PAHAL was acknowledged by the Guinness Book of World Records for being the largest cash transfer programme, with 125.7 million households receiving cash transfer as of 30th June 2015 (PIB, 2015) (Figure 6.13).

As on 1* March 2018, around 198.8 million LPG consumers have joined the scheme and an amount of ₹6,80,203.5 million has been transferred to the bank accounts of LPG consumers since the inception of the scheme (PIB, 2018). Direct transfer modality under the scheme has ensured substantive savings on supply of LPG consumers to the households by replacing inactive accounts.











AN UPDATE FROM SAMEEKSHA SECRETARIAT: REGIONAL MEETINGS











14TH MEETING - REGIONAL MEETING AT KOLKATA (AUGUST 2018)



















KEY DISCUSSION POINTS

- Need to deep-dive intervention in cold storage sector in Jharkhand
- Need to organize sector-specific intervention and awareness program for Refractory sector
 - Interactive session organized
- Specific program to be organized for brick kiln units to understand their concerns
- Creating more awareness about Government schemes by advertisement in newspaper/linking MSME-DI's web-site with SAMEEEKSHA web-site











15TH MEETING - REGIONAL MEETING AT COIMBATORE (JANUARY 2019)



















KEY DISCUSSION POINTS

- Need to incentivize manufacturing of EE pumps / support for development of IE3 and IE4 motors / upgrade the design of existing pumps / development of standards for solar pumping system
- Need to increase awareness on star labeling
- Need for testing facilities











16TH MEETING - REGIONAL MEETING AT RAJKOT (SEPTEMBER 2019)



















KEY DISCUSSION POINTS

- Solar PV system- DISCOM issues and use of vacant land
- Re-looking at 5 star BEE star rating with maximum EE achievable
- Functioning of RETARC (Rajkot Engineering Testing and Research Centre)
- Need for MSMEs to manufacture and promote only EE products in the market better coordination between BIS and BEE
- Need to develop BIS standards for specific ceramic products to facilitate supply to Government/other large clients















Jun' 19 Issue

Focused on Demand Side Management (DSM), a strategy that is being explored by a large number of DISCOMs with the aim of reducing the energy demand and energy bills of consumers and simultaneously improve their operational efficiency and profitability













INITIATIVE In each of the shortlisted sub-sectors, one or more MSME clusters were selected and unit-level studies were conducted on the relevant applications/ processes with focus on the following: » Understanding the reasons why MSMEs continue to use 'dirty' (high-carbon) fuels such as coal, pet-coke and diesel in the various applications and processes » Identifying electricity-based technologica solutions that are available in India and abroad and assessing their economic viability in the long of electrification options by MSMEs-particularly in heat processes-and identify possible ways in » Determining the policy and regulatory changes which to address these barriers. The participants that might be required in order to enable the in the workshop included representatives from MSMEs to switch over to these clean, electricity-Alliance for an Energy Efficient Economy (AEEE), based technological options Bureau of Energy Efficiency (BEE), Energy Efficiency In each sub-sector, the studies enabled the Services Ltd (EESL), Federation of Indian Chambers project to identify a number of electrification options for the identified processes/applications and of Commerce and Industry (FICCI), Petroleum Conservation Research Association (PCRA), Small examine their feasibility, as well as to understand the Industries Development Bank of India (SIDBI). Tata barriers and challenges that have to be overcome in Power, MSME entrepreneurs, industry associations order to enable MSMEs to adopt these electrification and technology suppliers. Some of the importan options on a wide scale. A separate article in this issue points and insights from the project studies and presents feasibility studies on a few electrification workshop discussions are summarized below. The project studies have clearly highlighted the following benefits of electrification at the unit Higher energy efficiency compared to fossil. fuel-based systems, with attractive payback periods on investment in many cases · Greatly reduced air pollution, and consequent

improvement in working environment Ease in control and operation of electrical

compared to fossil fuel-based systems

» In many of the existing fossil fuel-based processes/

efficiency is the absence of instrumentation

applications, a major reason for low energy

control systems for monitoring and regulating

process parameters like temperature, air pressure.

fuel consumption, air-to-fuel ratio, and so on.

Electricity-based technology options have a great

advantage in this regard, because they come with

built-in instrumentation & control systems and

· Reduced maintenance requirements

systems compared to fossil-fuel based

· Space saving (less paraphernalia required

Sep' 19 Issue

Focused on the huge potential for MSMEs in energy intensive sub-sectors to reduce their energy consumption and save energy costs by switching over from their existing fossil fuelbased technologies to electricity-based options.







Consultation workshop

On 24th July 2019, the project organized a Consultation

Workshop titled 'Accelerating switch to cleaner fuels

(Electrification) in industrial processes' to share the

experiences and insights from the project studies

with other MSME sector stakeholders, to discuss

other potential electrification options that could

be studied in future; and to deliberate on the major

issues and barriers that inhibit the implementation





NATIONAL CONCLAVE ON ENHANCING ENERGY EFFICIENCY IN MSME SECTOR, 23–24 September 2019, New Delhi



















NATIONAL CONCLAVE ON ENHANCING ENERGY EFFICIENCY IN MSME SECTOR, 23–24 SEPTEMBER 2019, NEW DELHI

- Over 300 participants
- Exhibition on "Energy Efficient Technologies and Innovative Models"
- Launch of knowledge resources and initiatives
 - Energy Conservation Guidelines for MSMFs
 - Simplified Digital Hands-on Information on Energy Efficiency in MSMEs (SIDHIEE)
 - MOU signed between DC-MSME and BEE for energy security of MSMEs.

"Innovation, entrepreneurship, science & technology, research and skills—these are the elements of knowledge, and they also help convert knowledge into wealth to secure our future..."

—Mr Nitin Gadkari, Union Minister of MSME, Government of India

"Providing free or subsidized power leads to wastage of energy, because the consumers have no incentive to save power... with Direct Benefit Transfer the consumers will realize that they can save money by using less power."

-Mr R K Singh, Minister of State (IC) for Power











Strategy, policy

- Drawing plans to phase out all energy-inefficient equipment/appliances from the market. Prepare schemes to support the manufacturers in modernizing their production facilities.
- To strengthen the enabling policy framework for EE,
 - Improve and consolidate data on energy use
 - Achieve coherence of policies on energy, MSMEs and climate
 - Develop convergence between various ministries/departments, and promote EE policies and instruments for MSMEs
- Demand aggregation coupled with bulk procurement to bring down EET costs;
 cluster-wide interventions; and lines of credit to make capital available at low cost.
- Energy security of MSMEs should be seen not only with reduction in SEC; but also in terms of improved productivity, reduced carbon intensity etc.











Implementation

- Need to increase awareness, among MSMEs on low-cost EE measures
- Monitoring and minimizing wastage of resources presents huge opportunities for improving EE and productivity among MSMEs
- o Innovative business models can help overcome the two primary barriers that prevent an MSME entrepreneur from adopting an EET- (1) reluctance to invest in a 'new' or 'unproven' technology; and (2) inability to meet the relatively high upfront capital cost of the EET.
- Need to create a cadre of qualified EE professionals, who can work at cluster/unit level to create local capacities and help scale up EETs.
- To set-up a few more industrial energy training and pilot institutes, similar to the Dr Ambedkar Institute of Productivity (AIP) established in Chennai by NPC.











THANK YOU

SAMEEEKSHA SECRETARIAT







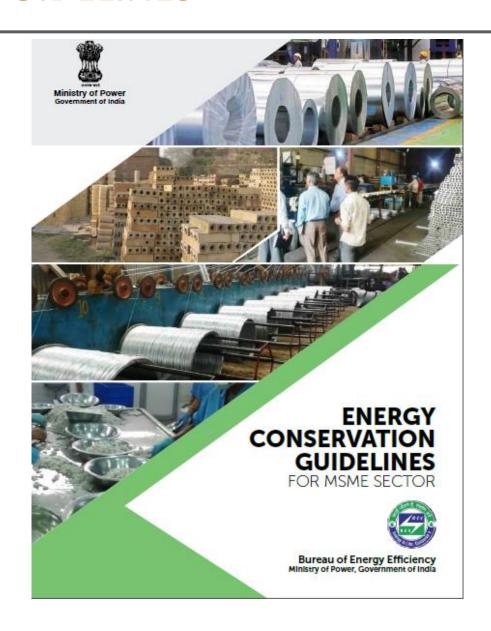


EC GUIDELINES

Comprehensive document for the industry with equipment-specific standards to promote energy conservation and improve energy performance in individual industrial units

Structure

- ✓ Section on common equipment
- ✓ Section on energy intensive process equipment in 25 energy intensive MSME subsectors



Dissemination of EC Guidelines

Possible strategies

- Distribution of hard copies with MSME associations
- ✓ Cluster specific interactions
- **√**