



Bureau of Energy Efficiency



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Scaling up Energy Efficiency Financing- *Step towards Making India Carbon Neutral*

Energy is one of the key indicators that reflects the growth of a nation and efficient use of this important resource; is the cornerstone of sustainable development. For a nation that has a substantial population with tremendous appetite for energy to improve the living standards, constrained both by resource limitation and usage liberty, energy efficiency comes as the first fuel.

Energy efficiency has been highlighted as a key aspect of India's climate ambitions. At the 26th Conference of the Parties(COP26) to the United Nations Framework Convention on Climate Change, Prime Minister Shri Narendra Modi announced intentions to reduce India's carbon intensity by 45% over 2005 levels by 2030, significantly raising the existing target of 33-35%. Higher ambition brings immense investment potential for energy efficiency in India, and creating the enabling conditions for the flows of capital required to achieve this 2030 target will be essential

The micro, small, and medium enterprises (MSMEs) sector in India is heterogeneous in terms of products manufactured, firm size, processes and technological advancement. MSMEs are of particular importance in this context, which constitute more than 90% of all industrial units in India, employing over 111 million people and contributing to about 29% of India's gross domestic product. Altogether, MSMEs account for a quarter of the total industrial energy consumption in India. The MSME sector is GHG intensive due to the high use of fossil-based fuels in the sector and its unorganized nature. The projected energy consumption of the sector by 2030 is expected to be equivalent to above 72 million metric tonnes of CO₂.

A large number of MSMEs continue to depend on obsolete, low efficiency technologies, which result in wasteful energy consumption and reduce profitability and competitiveness. Technology need assessment and technology development to suit the requirements of the local MSMEs at the cluster level has emerged as one of the most important aspects that needs to be addressed in the MSME sector especially in energy intensive sectors. Hence energy efficiency improvement through adoption of cleaner energy efficient (EE) technologies and practices offers great potential for reduction in CO₂ emissions as well as improvements in product quality and profitability. Some of the major barriers faced by the sector include lack of knowledge about efficient technologies, financing, suppliers, demo projects, and trained workers.



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Access to affordable financing is a critical challenge, particularly given MSME credit profiles and the common need to provide upfront collateral or equity to access finance. There is also an overall lack of suitable finance solutions, such as cash-flow based financing options, to support energy efficiency investments by MSMEs.

Tapping more aggressively into the wealth of available, financially attractive energy-saving renovation projects requires mechanisms to develop and deliver large numbers of relatively small projects scattered among hundreds of MSMEs. The investment opportunities in energy efficiency projects result in operating-cost savings, as opposed to new production, and are technically and logistically diverse. As such, they often do not compete well with other opportunities for using up-front capital, such as capacity expansion or penetrating new markets. MSMEs have an enormous range of technically viable energy efficiency improvement projects. But the actual demand is still much below the potential. This is because the perceived financial benefits of energy efficiency improvement activities have been limited. The essential issue blocking the realization of the potential energy savings is the underdeveloped state of energy efficiency investment delivery mechanisms, adapted to be able to work well in national and local economic environments. Traditional investment delivery mechanisms operated by local banks and other financing organizations often have played useful roles in the energy efficiency business, but still only a fraction of the potential has been tapped. Energy efficiency finance faces a three-dimensional gap between needs and supply: instruments, funds and conditions. These, and the insufficient knowledge, lack of institutional capacity, and opportunity and start-up costs, constitute the challenges for financial institutions entering the field of energy efficiency finance. If left unaddressed, problems of prevailing high transaction costs, perceptions of uncertain risks, and unmet needs for financial intermediation or technical expertise mean that much of the potential for energy savings will remain unimplemented.

Renewed and strong efforts are required to develop financing programs that can combine effective technical project development with financial products appropriate for dispersed investments, with benefits focused on operating cost savings. Mainstreaming energy efficiency finance widens the utilization of existing instruments and extends them to environmentally beneficial activities. But successful cases prove that there are significant advantages from approaches that at the same time address the demand for energy efficiency finance and benefit both the financial institution and the borrower.



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संयुक्त जलवायु
Ministry of Power
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Several policies, initiatives and support schemes at both the national and cluster level have been taken for addressing these challenges. Consultations consistently pointed to the need to strengthen efforts in a way that ensures greater consistency and replicability of those efforts to address bottlenecks in the MSME energy efficiency finance and investment value chain. Given the effectiveness of previous initiatives working through a cluster-based approach, the Bureau of Energy Efficiency (BEE) proposed a few possible initiatives for MSME energy efficiency. The first is exploration of a Common Facility Centres, in which community-based energy efficiency technologies can be made available to MSME clusters on a pay-per-use basis. The second is exploration of expansion of coverage to include MSME clusters under the Perform, Achieve and Earn (PAE) scheme. The third is BEE's facilitation centre – Encouraging and up-scaling energy efficiency financing in the economy. These may help address issues along the MSME energy efficiency finance and investment value chain. The proposed measures would also build upon existing BEE initiatives to address finance and investment in energy efficiency technologies, such as the new Energy Efficiency Financing Platform (EEFP).

In order to overcome the above barriers, it is essential to bridge the gap between the supply side of Finance i.e Banks and the demand side i.e MSME sector.

The objectives of this workshop are briefly listed as under:

- To contribute in the ongoing policy dialogue between policy makers, industry and financial institutions with a view to mitigate gaps and help in smooth adoption and implementation of EE measures.
- To provide a platform to banks, ESCOs, Industry associations to have interactions on steps to scale up Energy Efficiency Financing and towards making India Carbon Neutral.
- To Sensitize banks and financial institutions, for giving more importance to energy efficiency, and scale up their energy efficiency financing.
- To propose strategies for creating an enabling policy and financing environment for up-scaling energy efficiency financing.



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Venue: Hotel the Lalit New Delhi

Date: 11th July 2023

Tentative Agenda

Time	Particulars of Events	Speakers
09:30 am – 10:00 am	Registration Welcome & Tea ~ Snacks	
Inaugural Session		
10:00 am –10:10 am	Welcome Address & Financing Energy Transition – BEE's Perspective	Ms. Vineeta Kanwal, Director, BEE
10:10am-10:20am	Thematic Address	Sh.Raj Pal, Policy Advisor , GIZ
10:20am-10:30am	Special Address	Sh. R. R. Jha, PFC (To be confirmed)
10:30am – 10:40am	Special Address	Sh. Vishal Kapoor, MD, EESL (To be confirmed)
10:40am – 10:50am	Special Address	Sh. Rajiv Kumar, SIDBI (To be confirmed)
10:50am -11:00am	Special Address	Senior representative, KFW (To be confirmed)
11:00am – 11:10 am	Special address	Senior representative, RBI (To be confirmed)
11:10am – 11:20 am	Special address	Representative from DFS
11:20am – 11:30 am	Inaugural Address	Sh. Abhay Bakre, Director General, BEE
11:30am-11:40am	Vote of Thanks	Representative from GIZ
11:40am-11:50am	Tea Break	
Technical Session-1: Investment opportunities in Large Industries		
11:50am-12:00	Financing Energy Efficiency in Large Industries	Sh. R. R. Jha, Director (Projects) Power Finance Corporation (To be confirmed)/ Senior official from IREDA (To be confirmed)
12:00am-12:15pm	Target on IB CO2 emission reduction – Role of EE technologies for large industries	Sh. Vivek Negi Joint Director, BEE
12:15pm-12:30pm	Role of BEE's Facilitation Centre in accelerating Energy Efficiency Financing	Sh. Sunil Sharma (Team Leader) BEE's Facilitation Centre



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12:30pm-12:45pm	Role of Waste Heat Recovery Solutions to Address Energy Security	Sh. Upendra Shukla, Head North India Alfa Laval (To be confirmed)
12:45pm- 1:00pm	Energy Conservation Opportunities using XPLATE Nano Technology	Sh. Rajeev Agarwal Solpower India Private Limited (To be confirmed)

Time	Particulars of Events	Speakers
1:00pm-01:15pm	Financing Energy Efficiency in Large Industries	Official, HDFC /(To be confirmed) Official, PNB (To be confirmed)
01:15pm – 01:30 pm	Q&A Session	Session moderator: Sh. Vivek Negi Joint Director, BEE
01:30pm-02:15pm	Lunch Break	
Technical Session-2: Investment opportunities in MSMEs		
02:15pm-02:30pm	Role of interest subvention credit guarantee & other incentives for EE financing	Sh. Neeraj Verma General Manager, SIDBI (To be confirmed)
02:30pm-02:45pm	Target on IB CO2 emission reduction – Role of EE technologies for large industries	Sh. Palraj Shyam Sunder Joint Director, BEE
02:45pm-03:00pm	Role of banks in MSME financing	Official Indian Bank (To be confirmed)
03:00pm-03:15pm	Energy Efficiency opportunities in Foundry sector	Sanjeev Kumar, Director/ Vinit Jain, President IIF (To be confirmed)
03:15pm-03:30pm	Decarbonization of paper industries in MSMEs	Dr. Sanjay Tyagi, Head CPPRT(To be confirmed)
03:30pm-03:45pm	Energy Efficiency in Boilers and Furnaces	Sh. CV Ramana(To be confirmed)
03:45pm-04:00pm	Role of public sector bank in accelerating EE Financing in MSMEs	Senior official from SBI (To be confirmed)
04:00 pm – 04:15 pm	Q&A Session	Session Moderator: Sh. Palraj Shyam Sunder Joint Director, BEE
04:15pm-04:30pm	Concluding remarks	GIZ
04:30pm-04:45pm	Vote of Thanks	Ms. Richa Project Engineer, BEE
04:45pm-05:01pm	Tea Break /High Tea End of Session	
