

Scaling Up of Investments through ESCO Mechanism in MSME Clusters by Deploying Standard Energy Efficient Technologies (SEET)

Federation of Indian Chambers of Commerce and Industry (FICCI) in association with Energy Efficiency Services Ltd. (EESL) is implementing a project funded by Global Green Growth Institute (GGGI) titled "Scaling Up of Investments through ESCO Mechanism in MSME Clusters by Deploying Standard Energy Efficient Technologies (SEET)". The project activities will be executed in 3 MSME clusters of Haryana (a) Rice Mill Cluster in Karnal (b) Textile Cluster in Panipat (c) Mixed Industry Cluster in Kundli, Sonapat

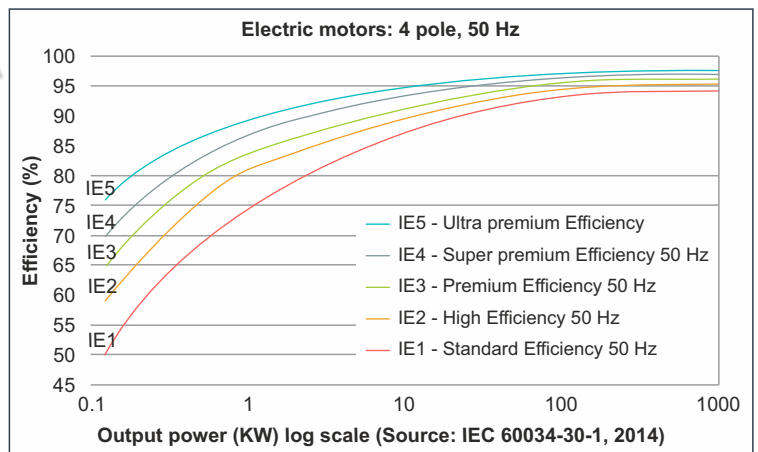
The overall project objective is to create an eco-system to accelerate adoption of Energy Efficient (EE) Technologies by MSMEs through innovative financing mechanism supported by ESCOs, Financial Institutes (FIs); deployment of Standard Energy Efficient Technologies (SEET) already identified under the EESL UNIDO MoMSME (GEF-5) Project in the targeted clusters; aggregation of demand of EE Technologies and developing suitable IT Tools for improving efficacy of the program implementation at large scale.

Brief Note on Technology

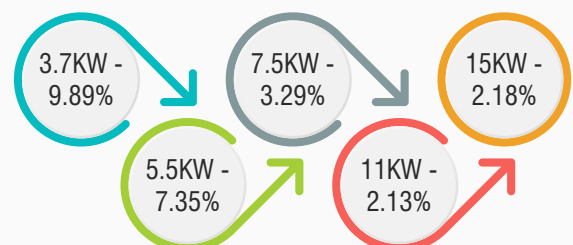
Name of the Technology:	Energy Efficient IE3 Motors
Expected Type of Major Energy Saving	<input checked="" type="checkbox"/> Electrical <input type="checkbox"/> Thermal
Old Technology to be replaced	Inefficient standard (IE1) motors
Brief about the New Technology	<p>Over 70% of all electrical energy consumed in industries is used by the Standard motors, hence replacing with IE3 motors can save energy as well as operating cost, which is more than its purchase cost. IE3 motors offers</p> <ul style="list-style-type: none"> Higher Efficiency and hence Lower Power Consumption Constructed with superior material Longer Insulation and Bearing Lives Lower Waste Heat Output Less Vibration

Success Story: Demonstration in Textile Unit

Year of demonstration	: 2018
Location of MSME	: Banswara, Rajasthan
Type of Cluster	: Textile
Name of the MSME Unit	: Banswara Syntex Limited
Annual Energy Saved	: 2,44,094 kWh
Annual Money Saved	: Rs. 14,64,563
Total Project Cost (125 nos. IE3 Motors)	: Rs. 35,88,000
Simple Pay-back Period	: 2.4 Years
Life of New Technology	: 15 Years
Warranty of the New Technology	: 3 years



Rating-wise energy saving percentage for replacing Standard motors with IE3 motors



Benefits Incurred from the Project

- IE3 motor provide 2-3% higher efficiency compare to IE2 motor, which even higher compare to IE1 motor
- Suitable for continuous process industries , where high energy saving is essential.
- Short Payback Period, Enhanced motor life, Less maintenance

Availability of Technology Locally	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Probable Technology Providers	<ul style="list-style-type: none"> • Siemens https://www.siemens.com • ABB https://new.abb.com/motors-generators • Havells https://www.havells.com • Bharat Bijlee https://www.bharatbijlee.com • Crompton https://www.cgglobal.com
Supply & Implementation	<p>Typical Delivery time: 2-4 Weeks</p> <p>Ease of Implementation: <input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low</p> <p>Is unit shut-down required: <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Partial</p> <p>Implementation by: Jointly by Vendor & Plant, Packaged Product</p> <p>Buy-back Option: No</p>
Financing Options & Models	<input checked="" type="checkbox"/> Self-Financing <input checked="" type="checkbox"/> Private ESCO <input checked="" type="checkbox"/> EESL <input checked="" type="checkbox"/> Local Bank

WAY FORWARD

Expression of Interest (Eoi):

The MSME Unit shall submit the Eoi as per the format to FICCI duly signed by the plant authority/ authorized representative

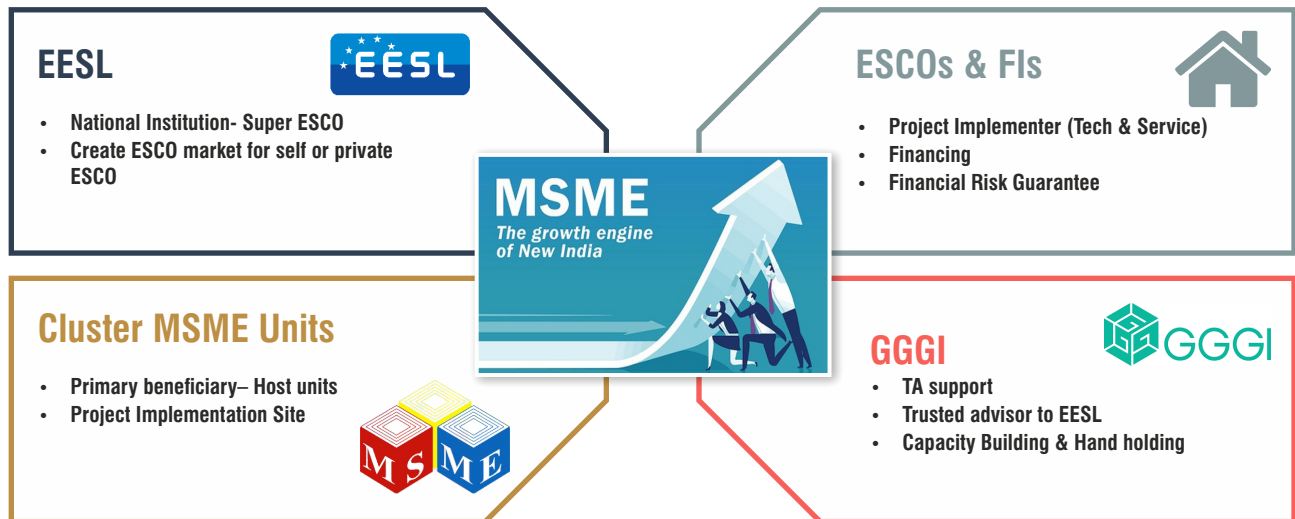
Baseline Study:

FICCI shall conduct the baseline study “Free of cost”. The study consists of collection of relevant data from the industry and few technical measurements. The baseline study may take maximum “One Day”.

Selection of ESCOs/ Technology Provider:

To be indicated later

Project Stakeholders



For further information, please contact:

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