

# 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

<b>Name of the Technology:</b>	<b>BLDC (Brushless Direct Current) fans (28W)</b>
<b>Expected Type of Major Energy Saving</b>	<input checked="" type="checkbox"/> Electrical <input type="checkbox"/> Thermal
<b>Old Technology to be replaced</b>	Regular Ceiling Fans (75W)
<b>Brief about the New Technology</b>	<ul style="list-style-type: none"> <li>■ BLDC contains Permanent Magnets while Electromagnet is used in Induction Motors, with Direct Current input</li> <li>■ Super Energy efficient ceiling (BLDC) fan providing 50% savings over regular ceiling fan</li> <li>■ Remote integrated ceiling fan with service value &gt; 6.0 (m3/min/watt)</li> <li>■ Fan with wide operating voltage (90 - 300V)</li> <li>■ Capacitive regulator operated BLDC fan</li> <li>■ Lower noise, lower static pressure due lower RPM, and higher airflow(15% more) compared to any other fans</li> <li>■ Runs upto 3X longer on inverter</li> </ul>

## Success Story: Demonstration in Ceramic unit

<b>Year of demonstration</b>	: 2019
<b>Location of MSME</b>	: Thangadh
<b>Type of Cluster</b>	: Ceramic
<b>Name of the MSME Unit</b>	: Sunrise Pottery Works
<b>Annual Energy Saved (108 ceramic units and 17600 fans)</b>	: 48.2 Lakh kWh
<b>Annual Money Saved</b>	: Rs. 335 Lakh
<b>Total Project Cost (17600 nos.)</b>	: Rs. 382 Lakh
<b>Simple Pay-back Period</b>	: 2.4 Years
<b>Life of New Technology</b>	: 15 Years
<b>Warranty of the New Technology</b>	: 3 years



<b>Availability of Technology Locally</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<b>Probable Technology Providers</b>	<ul style="list-style-type: none"> <li>Havells <a href="https://www.havells.com/en/consumer/fans/">https://www.havells.com/en/consumer/fans/</a></li> <li>Crompton <a href="https://www.crompton.co.in/product-category/consumer-fans/">https://www.crompton.co.in/product-category/consumer-fans/</a></li> <li>Orient <a href="https://www.orientelectric.com/fan/intelligent-bldc-fans">https://www.orientelectric.com/fan/intelligent-bldc-fans</a></li> <li>Atomberg <a href="https://atomberg.com/atomberg-ceiling-fans">https://atomberg.com/atomberg-ceiling-fans</a></li> </ul>
<b>Supply &amp; Implementation</b>	<b>Typical Delivery time:</b> 2-4 Weeks
	<b>Ease of Implementation:</b> <input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low
	<b>Is unit shut-down required:</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Partial
	<b>Implementation by:</b> Jointly by Vendor & Plant, Packaged Product
<b>Buy-back Option:</b>	No
<b>Financing Options &amp; Models</b>	<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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