The Micro, Small and Medium Enterprises (MSME) sector in India is one of the backbones of the country’s growth and is a major energy guzzler. The energy consumption in manufacturing processes is a significant share of MSMEs overall production cost, with the share of energy cost being as high as 35-40% of total manufacturing cost at times.

With the use of obsolete technologies and poor operating practices, MSMEs have a significant potential for energy saving through technology upgradation and adoption of best operating practices. The adoption of energy efficiency measures may support reducing the overall production cost by 2-5%. However, the MSME Sector in India is traditionally lagging behind in terms of the adoption of Energy-Efficient (EE) Technologies due to lack of awareness and technical know-how, barriers to investments and unwillingness to change due to the absence of Proof-of-Concept (PoC) of technology and business model.

During 2018-2022, EESL had implemented a program targeting NINE MSME clusters for demonstrating EE Technologies and Business Models with support from Global Environment Facility (GEF). Although the technology demonstration was successful, the program faced several challenges for scale-up given the absence of a structured approach for awareness creation, demand aggregation, investments facilitated by ESCOs and operationalization of Energy Efficiency Revolving Fund (EERF).

GGGI will develop a PoC for an end-to-end ESCO project implementation mechanism through EESL in THREE MSME clusters through:

1. Technology Mapping, obtaining Expression of Interest (EoI), estimation of baseline, demand aggregation, selection of ESCO and agreeable business models.
2. Creation of User-Friendly decision-making IT Tools and platform for ease of technical due diligence, program management and transparency.
3. Development of standardized documents for various purposes like EoI, Baseline Energy Audit, Proposals, Agreements, M&V, and capacity development of MSME, ESCOs, FIs, EAs etc.
4. Supporting EESL in mobilizing investments from private ESCOs and facilitating EESL in linking ESCO investments through EERF.

The chosen clusters targeting Karnal, Panipat and Kundli together as the KPK cluster.

OBJECTIVE

Transforming the ESCO market in India to establish the National Framework for Implementation (NFFI) of Standard Energy Efficiency Solutions in MSMEs through Proof-of-Concept leading to the accelerated investments and use of Energy Efficiency Revolving Fund (EERF).

OUTPUTS

- Demand Aggregation of at least TEN EoIs per Technology and Selection of ONE ESCO to invest. EESL will conduct Institutional Capacity Building through standardization of process and improved decision making tools.
- Initiate implementation of at least FIVE projects.
- Create roadmap for investment opportunities of USD 60 million by 2024 with linkage to EERF.
ESCO will implement the project in the MSME unit and get paid back by the client as per the service agreement. The investment may also be done by EESL as an ESCO (with operationalization of EERF) or the MSME unit of its own apart from the private ESCOs.

**PROJECT PARTNERS**

Energy Efficiency Services Limited (EESL), a JV of PSUs of Ministry of Power, GoI, is recognized as the Super ESCO that facilitates market creation for Energy Efficiency (EE).

Global Green Growth Institute (GGGI) is the technical and trusted advisor to EESL and implementing partner of the project.

**FUNDING PARTNER**

Ministry of Foreign Affairs, Korea (MoFA) is providing funding support for the project.

**ABOUT GGGI**

Global Green Growth Institute (GGGI), headquartered in Seoul, Republic of Korea, is a treaty-based international intergovernmental organization dedicated to supporting and promoting strong, inclusive, and sustainable economic growth in developing countries and emerging economies.

**Contact**

Mr. Soumya Prasad Garnaik  
- Lead Energy Efficiency, GGGI  
M-6, 3rd Floor Haus Khas Delhi-110016  
Email: soumya.garnaik@gggi.org

Mr. Girja Shankar  
- G.M. (Technical), EESL  
6th Floor Core-3, Scope Complex, Delhi-110003  
Email: gshankar@eesl.co.in

**GGGI INTERVENTION AREAS**

- **Demand Aggregation:** Technology Mapping, Expression of Interest, Baseline Assessment, Demand Aggregation.

- **Market Intervention:** Mapping of cluster level Technology Providers, & Financial Institutions, Selection of ESCO and development of Business Models.

- **Institutionalization:** Standardization of processes and documents, Capacity building of EESL, structuring of EERF.