

PROJECT IMPLEMENTATION REPORT

Project ID:	9258
Project Name:	Creating and Sustaining Markets for Energy Efficiency
Countr(ies):	India
Implementing Agency:	UNEP

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I. Overview

A. Description

Project name Creating and Sustaining Markets for Energy Efficiency	
Country India	
GEF ID 9258	Implementing Agency UNEP
Executing Entity Energy Efficiency Services Limited (EESL)	
Trust Fund GET	Project Type FSP
PIR Submission 9/12/2025	Fiscal Year , PIR Number FY 2025 , 7th PIR
Objective To reduce greenhouse gas (GHG) emissions through energy efficiency through scaling up and new technology applications	

B. Ratings and Disbursements

Implementation Progress Moderately Satisfactory	Development Objective Moderately Satisfactory
Overall risk Low Risk	
Project Financing 20,553,000.00	Cumulative Disbursement 12,898,910.00

C. Key Dates

CEO Endorsement/Approval 6/1/2017	Agency Approval 10/24/2017
Implementation Start 10/24/2017	First Disbursement 1/18/2018

Expected MTR 12/1/2021	Actual MTR
Expected Completion 12/31/2025	Actual Completion

II. PROGRESS STATUS AND ISSUES

A. Progress: Information on progress and outcomes of project implementation activities

Summary on progress towards outcomes: Throughout project period, steady progress has been made toward achieving the intended outcomes, despite challenges such as operational delays and procurement issues. Notable achievements include the completion of key deliverables till Y2025, which have significantly contributed to reducing greenhouse gas (GHG) emissions by promoting energy efficiency through the scaling-up of interventions and the application of new technologies.

Outcome 1: Energy efficiency improved through the installation of street lighting (SL), domestic lighting (DL), 5 star ceiling fans and agricultural pumps (AgDSM). These include: Number of additional LED Street Lighting units replaced by LED lamps: Total of 8,657,408 units replaced Number of additional Domestic Lighting units replaced by LED lamps: Total 92,222,181 units replaced Number of additional pumps replaced by efficient agricultural pumps: Total 85,320 units replaced Number of additional fans replaced by BEE 5 Star Ceiling Fans: Total 10,999,961 units replaced The project has achieved 232% of the Domestic Lighting (DL) target and 574% of Street Lighting (SL) Target. As far as Ceiling Fans are concerned, the achievement is 51% and in AgDSM the achievement is 37%. **Outcome 2:** Energy efficiency improved through the installation of super-efficient ACs, tri-generation technologies, IE3 Motors under NMRP and EV Charging Infrastructure: Number of Super-Efficient ACs units installed / distributed: Total of 3,494 nos. of SEACs have been deployed till June 2024 Number of IE3 Motors under NMRP installed / distributed: Total 4451 nos. of IE3 motors installed till June 2024 Number of EV-PCIs installed: 319 EV Chargers installed Number of E-electric vehicles deployed (4-W): Total of 533 vehicles have been deployed or placed across different clients Installed Tri-generation capacity in MW: Implemented 0.8 MW + 236 TR VAM + 136000 kCal /hr (hot water) **Outcome 3:** Enabling conditions created to support EESL growth strategy targeting US\$ 300 million in investments across all 7 technologies (SL, DL, BEE 5 Star CF, Agricultural Pumps, Super-efficient ACs, IE3 motors, EVPCI). Based on the previous pilots and support to EESL for developing program strategies for new energy efficient technologies, fair progress has been witnessed in terms of attracting investments for new technologies. Amongst the new technologies in focus. EESL has initiated procurement of Super-Efficient Ceiling Fans, , Heat Pumps and Turbo Blowers and Compressors. The procurement details are mentioned below-, Heat Pumps and Turbo Blowers and Compressors. The procurement details are mentioned below- Tender Details: i. Compressed Air Systems: Designing, engineering, supply, inspection, installation, testing and commissioning, of energy-efficient compressor air system with screw compressors . Quantity: 13 nos. Tender Value: USD 492,311 ii. Turbo Blowers: Design, engineering, supply, inspection, installation, testing and commissioning of Energy Efficient Turbo-Blower along with onsite warranty of two years on Pan India Basis Quantity: 17 nos. Tender Value: USD 668,732 iii. Heat Pumps: Supply, Installation, Testing & Commissioning of Air based, and Water based Heat Pump Space Heating System at the various buildings under Power Development Department (PDD), Leh, UT of Ladakh Quantity: 8 nos. Tender value: USD 147,058 iv. Premium Efficiency (IE3) motors: Supply of 3 phase LV energy efficient induction motor (IE3) and after sales support including three-year comprehensive warranty from the date of supply Quantity: 10,000 nos. Tender Value: USD 5,446,500 v. Super-Efficient Fans tender for procurement is under process by EESL. The expected quantity is 700,000 nos. This tender has been designed based on the findings and inputs provided to the EESL program team under the recent study carried out for the program review supported by GEF6 project. vi. Procurement of Super-Efficient Air Conditioners (SEAC) is currently being done through EESLMart through EESL's own resources. The number of Acs deployed during the reporting period are 1190 nos. Furthermore, major commitments currently underway with support from project are as follows: - Technical Support to MSMEs for implementation of Energy Efficient Technologies (~ USD 230,000): This project involves both study and implementation components including feasibility studies in 75 units and implementation in 30 MSME units. Though the timelines for completion are till December 2025. However, it is envisaged that it may extend beyond Y2025 due to technical support required by MSMEs is more than what was expected at the start of project; additional time from the GEF project's purview can support the implementation of the activities. - Preparation of DPRs for Net Zero Pathway for President's Estate (~ USD 75,000): This is vey prestigious project bagged by EESL to develop the Net Zero Pathway for the President's Estate. Further a possibility of implementing a District Cooling System is also in discussion with the client, for which a feasibility study is proposed under the project which shall require timelines beyond the balance time period left for the project. Furthermore, as the

implementation shall start by the end of this year the impact of project TA support can be captured during the Y2026 only. - Conduct Feasibility Studies in 5 Corporates for EE technologies implementation (~ USD 150,000): EESL has recently signed MoUs with 3 conglomerates from the Steel & cement sector for developing Detailed Feasibility Reports (DFR) with help of the GEF project. - EESL staff capacity building needs assessment and training: The ToR is under finalization and the RFP for engaging a suitable agency is expected to be completed by September 2025. However, the final training and capacity building sessions shall extend beyond December 2025.

B. Challenges: Information on challenges of project implementation activities

The key challenge faced is aligning the project timelines with the priorities and schedules of government agencies. Since government bodies often operate under their own set of administrative procedures, approval processes, and regulatory frameworks, there can be delays or shifts in timelines that are beyond the control of the project team. These timelines are also influenced by changing policy directives, budgetary cycles, and competing priorities within different departments. As a result, maintaining project momentum and ensuring timely delivery becomes complex, requiring constant coordination, proactive communication, and flexibility in planning to accommodate evolving governmental requirements. Government agencies such as Bureau of Energy Efficiency, DISCOMs, State Designated Agencies (SDA) and other PSU clients whom project team is following up for studies and implementation requires time beyond the envisaged time. A possible extension of project timelines can help address this challenge.

C. Stakeholder Engagement

During the reporting period, relevant stakeholders were engaged through different approaches as detailed below. These consultations have supported to take forward the project discussions including identifying of new opportunities / project interventions:

1. Workshops:

Workshops	Participants	
	Male	Female
CII (Hyderabad) Upscaling of Energy-Efficient Technologies in India's Industrial sector Date: 12 th September 2024 Venue: Hyderabad	81	2
FICCI (Ahmedabad) Workshop On Adoption & Implementation of Energy Efficient Technologies in Industries Date: 18 th October 2024 Venue: Ahmedabad, Gujarat	56	3
FICCI (Ludhiana) Workshop On Adoption & Implementation of Energy Efficient Technologies in Industries Date: 22 nd November 2024 Venue: Ludhiana, Punjab	62	2
FICCI (Bengaluru) Workshop On Adoption & Implementation of Energy Efficient Technologies in Industries	96	3

Date: 29 th January 2025		
Venue: Bangaluru		
CII (Delhi) Advancing India's Low-Carbon Growth through Energy Efficiency intervention in the Industrial and Building Sector Date: 29 th May 2025 Venue: New Delhi	49	9

2. Stakeholder Consultations:

Stakeholder Consultations	Participants	
	Male	Female
Stakeholder Consultation on Compressed Air Systems (Technical Consultation on Super-Efficient Technologies for Industrial Utilities (Compressed Air Systems) Date: 06 th February 2024 Venue: New Delhi	25	1
Stakeholder Consultation on WHRS (Technical Consultation on Waste Heat Recovery Systems in Industries) Date: 13 th March 2024 Venue: New Delhi	41	NIL
Stakeholder Consultation on Heat Pump (Technical Consultation on Heat Pumps for Industrial & Commercial Applications) Date: 22 nd May 2024 Venue: Pune, Maharashtra	67	1
Stakeholder Consultation on Cooling Energy Efficiency (Technical Consultation on Accelerating the Adoption of Energy-Efficient Cooling Solutions) Date: 09 th May 2025 Venue: New Delhi	26	5
Two Stakeholder Consultations – IIT Madras Date: 19 th November 2024 Venue: IIT Madras	25	2
Two Stakeholder Consultations – IIT Madras (Development of Heat pump guidelines – discussion meeting) Date: 28 th February 2025 Venue: Pune	26	6

3. Cluster Level Boardroom Meetings:

Focused Group Discussions (FGD)	Participants	
	Male	Female
FGD with Reliance, Mumbai	7	0
FGD with Aditya Birla Group, Mumbai	12	2
FGD with Dalmia Cement, New Delhi	4	0
FGD with JSW Steel, Mumbai	6	0
FGD with Jindal Steel, Online mode	12	1

D. Gender Equality

Since 2024, under the project, a total of 16 events and focused group discussions were conducted, the details of which are provided above in the summary section. However, overall invitations were sent to around 1250 out of which the participants were 561 males and 34 females. The details of the same are mentioned in the summary section above. Further, EESL conducts energy efficiency awareness programmes for women. The sessions include information on important aspects such as India electricity generation and consumption patterns, major causes and impact of pollution, sources of renewable energy, electric vehicles, introduction to the concept of energy efficient technologies, sustainable energy use practices promoted by the Government of India's LIFE Mission and career opportunities in the energy efficiency sector. The objective of the sessions is to sensitize the participants, catalyze behavior change towards conscious energy choices, encourage the promotion of sustainable energy use at the household and community level and generate awareness on the career opportunities in the sector. As a key partner in the WePower Programme, supported by the Asian Development Bank (ADB), World Bank and with AIWC (All India Women Conference), EESL is promoting gender mainstreaming and social inclusion within the energy sector. Details of the awareness programs conducted in 2024-25 across different locations:

S.No	Details of the programs	Dates/Locations
1	Training on Gender Equity and Social Inclusion for Unit Heads /Cluster Heads/State Heads conducted by EESL 33 male and 15 female participated, supported by 3 facilitators conducted by EESL	2nd September 2024/Corporate office, Delhi 20th September 2024/Corporate office, Delhi
2	Conducted by EESL with support of AIWC and <i>Dhuri hu mai</i> NGO, attended by 55 females	16th July, 2024/Delhi
3	Conducted by EESL with support of AIWC and Vikas Mahila Sangam, attended by 46 females	1st October 2024/Delhi
4	Conducted by EESL with support of ADB and Azad Foundation, Jaipur, participated by 30 girls	9th December 2024, Jaipur
5	Conducted by EESL with support of AIWC and STREE Mandal (AIWC Center), Vadodara, Gujarat, participated by 58 females	28th December 2024/ Vadodara

E. Knowledge Management

The key learnings till date under the project are highlighted as follows-

1. Alignment of National priorities and project objectives: Since government bodies often operate under their own set of administrative procedures, approval processes, and regulatory frameworks, there can be delays or shifts in timelines that are beyond the control of the project team. These timelines are also influenced by changing policy directives, budgetary cycles, and competing priorities within different departments. As a result, maintaining project momentum and ensuring timely delivery becomes complex, requiring constant coordination, proactive communication, and flexibility in planning to accommodate evolving governmental requirements.
2. Pace of adoption of learnings from the studies and their conversion into scalable models: While national policies and development agendas often provide an overarching direction, projects may have more focused, sector-specific, or localized goals. In case of EESL being a State-owned Enterprise (SoE) with changing priorities, short-term projects requiring quick results hamper the progress towards long term goals. This misalignment can lead to delays in approvals, resource constraints, or reduced stakeholder buy-in.
3. Willingness and readiness of the beneficiaries such as MSME industries, building owners: While studies often generate valuable insights, recommendations, and innovative approaches, the process of mainstreaming these findings into actionable programs or largescale interventions tends to be slow. This delay can stem from institutional inertia, lengthy approval processes, lack of adequate funding, or limited technical capacity within implementing agencies. Additionally, stakeholders may be hesitant to adopt untested approaches at scale due to perceived risks, operational complexities, or conflicting priorities. As a result, the potential impact of these learnings remains underutilized, and opportunities for accelerating progress are lost. One way the project has ensured that the stakeholder buy-in increases is to extend support to the end users for conducting feasibility studies and DPR, which will help them make an informed decision.

III: Minor Amendments

CONTEXT	
Result Framework	
Components and Cost	
Institutional And Implementation Arrangements	
Financial Management	
Implementation Schedule	
Executing Entity	

Executing Entity Category	
Minor Project Objective Change	
Safeguards	
Risk Analysis	
Increase of GEF Financing up to 5%	
Co-Financing	
Location of Project Activity	
others	

IV: Geographic Coordinates of Project Activities

Location Name	Latitude	Longitude	GeoName ID
India	22	79	1269750

Location Description:

Activity Description:

V. ANNEX

Uploaded Document	
Document Category M and E Document	Title 9258-PIR-UNEP-2025-India Energy Efficiency