Ex-Ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: India

Project: Micro, Small and Medium Enterprises Energy Saving Project (Phase 3)

Loan Agreement: September 1, 2014 Loan Amount: 30,000 million yen

Borrower: Small Industries Development Bank of India (SIDBI)

2. Background and Necessity of the Project

(1) Current Status and Issues of the Energy Sector and Micro, Small and Medium Enterprises (MSMEs) in India

With its recent rapid economic growth, India, the world's fourth largest energy consumer, has been consuming increasingly large amounts of energy. To ensure a stable energy supply and conserve the environment, it is urgently necessary for the country to promote efficient use of energy (energy saving). MSMEs play an important role in the country's economy, accounting for about 45% of the nation's industrial output and 43% of total exports (2011). However, their energy efficiency is low mainly due to aging equipment. They also lag behind large enterprises in making energy-saving efforts because of their limited finances for equipment investment and limited skills and know-how regarding energy saving as well as lower awareness of the importance of energy saving.

(2) India's Development Policies for the Energy Sector and MSMEs and the Role of the Current Project

The Government of India set the policy objective of "improving the efficiency of energy use by 20% by 2017" in the 11th Five-Year Plan (April 2007 to March 2012) and showed a policy of further restraining energy demand through energy conservation in the 12th Five-Year Plan (April 2012 to March 2017). As a development policy for MSMEs, in 1990 the government established the Small Industries Development Bank of India (SIDBI), which is the executing agency of the Project, to promote the development of MSMEs. Under the 2006 MSME Development Law, the government further expanded the scope of MSMEs eligible for assistance. To achieve inclusive growth for all, the 12th Five-Year Plan emphasizes the importance of growth strategies for MSMEs as an important sector for job creation.

(3) Japan and JICA's Policy and Operations in the Energy Sector and Micro, Small and Medium Enterprises

The Government of Japan places importance on the development and promotion of energy saving technologies to strengthen national energy security and realize a low-carbon society; it plans to assist in introducing such technologies in the industrial sector. In the 7th Japan-India Energy Dialogue held in September 2013, both countries confirmed the importance of bilateral cooperation in the area of energy saving, where the Japanese Country Assistance Program for India states the importance of assistance with "improvement of poverty and environment issues" as a priority area. JICA also sees "response to environmental problems and climate change" as a priority area for India. The Project, which will assist MSMEs in the development of energy-saving technologies, reflects the Government of Japan's policy and JICA's view. Examples of recent technical assistance efforts include JICA's training program to develop small and medium enterprises in the Project for Visionary Leaders for Manufacturing Programs (2007-2012) as well as projects, such as the Research Partnership for the Application of Low Carbon Technology for Sustainable Development (SATREPS) (2010-2014) and the Energy-Saving Technology Training (2008-2010 and 2011-2014). The Project's predecessors

are MSMEs Energy Saving Project in 2008 and MSMEs Energy Saving Project (Phase 2) in 2011, which are both Japanese ODA loan projects.

(4) Other Donors' Activities

SIDBI also received loans from the World Bank in 2005, 2009 (jointly with the Department for International Development (DFID), Kreditanstalt für Wiederaufbau (KfW) and Gesellshaft für Internationale Zusammenarbeit (GIZ)), 2010 and 2011; the Asian Development Bank (ADB) in 2010; KfW in 2006 and 2013; and L'Agence Française de Développement (AFD) in 2010.

(5) Necessity of the Project

The Government of India is working to improve the Country's energy efficiency by enacting energy-saving laws and establishing a general energy policy in order to meet demand for electricity that has been increased by recent economic growth and the increase in the population. As part of its efforts, the government makes preferential loans to MSMEs under the MSME Development Law because MSMEs have more room for improvement in energy efficiency than large enterprises. Assisting India's MSMEs in their energy-saving efforts by providing them with mid- to long-term funds through SIDBI, the Project's Executing Agency, meets the country's development needs and is consistent with the assistance policies of Japan and JICA. For this reason, it is highly necessary and appropriate for JICA to assist the Project.

3. Project Description

(1) Project Objective

The Project provides medium- to long-term financial assistance to MSMEs in India primarily to make energy efficient facilities, which will improve energy efficiency in the MSME sector, thereby contributing to environmental improvement and sustainable economic development in the country, as well as mitigating climate change. The Project will also aim to promote high energy-efficiency equipment, and will allocate part of the funds to the health care sector for pilot projects.

- (2) Project Site / Target Area: Throughout India
- (3) Project Components (Including Procurement Methods)

Provide MSMEs (end users) with the funds necessary to invest in energy-saving equipment (and some medical equipment) in the form of two-step loans through SIDBI or three-step loans through intermediary financial institutions.

(4) Estimated Project Cost (Loan Amount)

33,060 million yen (Loan Amount: 30,000 million yen)

(5) Project Implementation Schedule

April 2014 to March 2019 (60 months). The Project will be deemed complete when the entire amount of loans has been disbursed (March 2019).

- (6) Project Implementation Structure
 - 1) Borrower: SIDBI
 - 2) Guarantor: The President of India
 - 3) Executing Agency: Same as 1)
 - 4) Operation and Maintenance System: Same as 1)
- (7) Environmental and Social Considerations / Poverty Reduction / Social Development
 - 1) Environmental and Social Considerations
 - (i) Category: FI
 - (ii) Reason for Categorization: According to the "JICA Guidelines for Environmental and Social Considerations" (put into effect in April 2010; hereinafter, the "JICA Guidelines"), the Project is classified as Category FI because no sub-projects can be identified before approval for JICA's loans (such sub-projects are estimated to have an environmental

impact).

- (iii) Other Aspects/Monitoring: In the Project, SIDBI shall categorize sub-projects and take necessary measures for the relevant categories according to India's domestic laws and the JICA Guidelines. Since the Project mainly aims to invest in energy-saving equipment, no sub-projects fall under Category A.
- 2) Promotion of Poverty Reduction: None
- 3) Promotion of Social Development (e.g. Gender Perspective, Measures for Infectious Diseases Including HIV/AIDS, Participatory Development, Consideration for Persons with Disability, etc.): None
- (8) Collaboration with Other Schemes or Donors: Through technical assistance, the Project will hold seminars to raise awareness of energy saving among MSMEs and improve the ability of financial institutions to screen loan applications for energy-saving efforts. The Project will use the Energy Saving Equipment List prepared for Phase 1 and Phase 2 of the Project. Through technical assistance, JICA will proactively communicate with other donors assisting SIDBI to avoid duplication of assistance by other donors and strengthen mutually complementary relationships.
- (9) Other Important Issues: None

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicators)

Indicators	Baseline (2013)	Target (2021) (two years after project completion)
Output		
Number of sub-loan cases committed and disbursed (cumulative)	-	2,000
Number of seminars held to raise awareness of energy saving among MSMEs	-	Fixed at the beginning of the project
Number of participants in seminars to raise awareness of energy saving among MSMEs	-	Fixed at the beginning of the project
Reduction in energy consumption (oil equivalent tons/year)	-	Fixed at the beginning of the project
Reduction in greenhouse gas emissions (CO ₂ equivalent tons/year)	-	Fixed at the beginning of the project

2) Internal Rate of Return: Not calculated

(2) Qualitative Effects

Increased awareness in energy saving among MSMEs; improvement in the ability of financial institutions to screen loan applications by MSMEs for energy-saving efforts; improvement in energy use efficiency; environmental improvement; sustainable economic growth; mitigation of climate change

5. External Factors and Risk Control

Risk of fluctuation in energy-saving demand, risk of system changes

6. Results of Evaluations and Lessons Learned from Past Projects

(1) Evaluation Results of Similar Projects

The following lesson has been obtained from the results of ex-post evaluations of projects to develop small and medium enterprises (MIDF, BITMB and BPIMB) in Malaysia: if there is more than one executing agency (financial institution) involved in the provision of development loans, it is effective to be flexible about the size of the sub-project as well as the terms and conditions of sub-loans so that the financial needs and sizes of targeted end users are grasped well by each financial institution.

(2) Lessons for the Project

To benefit from the above lesson, JICA will secure flexibility of loan conditions and of decisions at each intermediary financial institution.

7. Plans for Future Evaluation

- (1) Indicators for Future Evaluation
 - 1) Total number of approved and disbursed sub-loans
 - 2) Number of seminars held to raise awareness of energy saving among MSMEs
 - 3) Number of participants in seminars to raise awareness of energy saving among MSMEs
 - 4) Reduction in energy consumption (oil equivalent tons/year)
 - 5) Reduction in greenhouse gas emissions (CO₂ equivalent tons/year)
- (2) Timing

Two years after project completion