Ex-ante Evaluation (for Japanese ODA Loan)

1. Name of the Project

Country: India

Project: Micro, Small and Medium Enterprises Energy Saving Project (Phase 2)

Loan Agreement: June 16, 2011 Loan Amount: 30,000 million yen

Borrower: Small Industries Development Bank of India (SIDBI)

2. Background and Necessity of the Project

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

In India, with its recent rapid annual economic growth rate of more than 8%, energy consumption has been increasing and India has become the fifth largest energy consumer in the world. Moreover, India's energy consumption is also expected to increase in the future. For constant energy supply and environment conservation, it is urgently necessary for India to promote Energy Efficiency.

MSMEs are regarded as important sector for the Indian economy since they account for about 40% of total exports, about 50% of gross mining and industrial production and about 90% of the total number of factories. Although their energy consumption is relatively not very high with estimation about 30% to 40% of the total energy consumption of all the factories in India, it has been pointed out that their Energy Efficiency is lower than that of large enterprises mainly due to the generally decrepit condition of equipment. They still lag in taking energy saving measures because their financial capacity and skills/know-how in Energy Efficiency are limited and awareness of the importance of energy saving is generally low.

(2) Development Policies for the Energy Sector and MSMEs in India and the Priority of the Project

The Indian Government 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 specified the policy of promoting restrictions on energy demand through energy conservation in the energy policy announced in 2006. Moreover, as a part of the National Action Plan on Climate Change announced in 2008, the Indian Government established a "National Mission on Enhanced Energy Efficiency" in 2010. In this Mission, the Government stated the policy to introduce market mechanisms, preferential taxation, and a reduction of taxes on energy saving equipment, in addition to the ongoing efforts by the Bureau of Energy Efficiency under Ministry of Power.

The range of MSMEs supported by the Indian Government was widened under the MSMEs Development Law in 2006. The Indian Government stated that it is necessary to grow the economy by 12% over the five years – especially in the manufacturing sector, most of which consists of MSMEs in the 11th Five-Year Plan. This Project will support these policies of Indian Government.

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

In the Japanese Country Assistance Program for India, "improvement of poverty and environment issues" is identified as a Priority Area. JICA has adopted "Assistance for Tackling against Environment Issues and Climate Change" as a Priority Area for cooperation and been promoting Energy Efficiency technology in the industrial sector.

Japan has so far provided 73 loan projects totaling 1,051.3 billion yen to energy sector in India and 8 loan projects totaling 193 billion yen for the support of MSMEs. In addition, JICA has provided technical assistance for the development of small and medium enterprises under the "Project for Visionary Leaders for Manufacturing Programs", and have offered energy saving trainings. This Project is a subsequent loan project to the "MSMEs Energy Saving Project" in 2008.

(4) Other Donors' Activity

The World Bank supports Energy Efficiency of power stations, financial support to MSMEs, etc. The Asian Development Bank (ADB) has extended assistance for climate change. The Kreditanstalt fur Wiederaufbau (KfW) and L'Agence Française de Développement (AFD) have also support promoting mitigation of environmental impact and energy saving to MSMEs in India.

(5) Necessity of the Project

This Project will promote MSMEs' energy saving efforts through the provision of medium-term and long-term funds for energy conservation measures and raising awareness of energy saving. The previous project already provided the total amount of loans before the expiration of the disbursement period. This Project is to meet such a robust demand for funds, and it is essential and appropriate for JICA to support.

3. Project Description

(1) Project Objective

The objective of this Project is to promote MSMEs' energy saving efforts through the provision of medium-term and long-term funds for energy conservation measures and raising awareness of energy saving. Also this project is expected to strengthen the capacity of the Small Industries Development Bank of India (SIDBI), the executing agency, and its intermediary financial institutions, to This project would contribute to environmental improvements, sustainable economic development, and the mitigation of climate change.

(2) Project Site/Target Area

The whole area of India

(3) Project Components

the medium-term and long-term funds required for investment in energy saving equipment are provided to MSMEs by two-step loans scheme from SIDBI or by three-step loans through intermediary financial institutions.

(4) Estimated Project Cost (Loan Amount)

33,330 million yen (including the amount covered by ODA loan: 30,000 million yen)

(5) Schedule

June 2011 – March 2014 (34 months in total); Project completion is defined as entire amount has been financed (March 2014).

(6) Project Implementation Structure

- 1) Borrower: Small Industries Development Bank of India
- 2) Guarantor: The President of India
- 3) Executing Agency: Same as 1)
- 4) Operation and Maintenance System: Same as 1)

(7) Environmental and Social Consideration/Poverty Reduction/Social Development

- 1) Environmental and Social Consideration
 - (1) Category: FI
 - (2) Reason for the Categorization: According to "JICA Guidelines for Environmental and Social Considerations" (put into effect as of April 2010), this Project is classified as Category FI because the loans are given to financial intermediaries, no sub-projects can be identified before the approval of JICA's loans (such sub-projects are estimated to have an environmental impact)

- (3) Other aspects: At the stage of appraisal of the sub-projects, the executing agency will check if the end users will appropriately give considerations to the environment, according to the guidelines and standards established by the state or central pollution control agency and the JICA Guidelines. At the stage of monitoring, the executing agency will check the status of compliance with the environmental regulations and the JICA Guidelines. If there is a violation, the executing agency will report it to JICA. The executing agency will take appropriate measures as required. However, no sub-project is expected to have a serious environmental impact since this Project mainly aims to invest in energy saving equipment. No sub-project that falls under Category A is covered by this Project.
- 2) Promotion of Poverty Reduction

None

3) Promotion of Social Development (gender perspective, measures for infectious diseases including HIV/AIDS, participatory development, consideration for persons with disabilities, etc.)

None

(8) Collaboration with Other Donors

It is planned to provide technical support to increase the awareness of Energy Efficiency among MSMEs and improve the capacity of financial institutions to examine Energy Efficiency projects.

(9) Other Important Issues

Because the purpose of this Project is to promote Energy Efficiency of MSMEs, it can be considered to contribute to climate change mitigation. In addition, technical support and other support is planned to be provided for registration of the Clean Development Mechanism (CDM) projects.

4. Targeted Outcomes

(1) Quantitative Effects

1) Performance Indicators (Operation and Effect Indicator)

	Baseline	Target (2016)
Indicator	(Actual value	[2 years after project
	in 2010)	completion]
Output		
Total number of approved and disbursed		3,000
sub-loans	ı	3,000
Total amount of approved and disbursed	ı	Completion of the
sub-loans (in million yen)		disbursement of all loans
Ratio of non-performing loans to the total	I	Fixed at the beginning of
amount of loans (%)		the project
Ratio of non-performing loans to the total	_	Fixed at the beginning of
number of loans (%)		the project
Technical support for business		Fixed at the beginning of
promotion, such as awareness-raising	_	the project
activities (number of times)		the project
Energy saving		
Reduction in energy consumption		Fixed at the beginning of
(Oil equivalent tons/year)		the project
Reduction in greenhouse gas emissions	_	Fixed at the beginning of
(CO ₂ equivalent tons/year)		the project

2) Internal Rates of Return Not calculated

(2) Qualitative Effects

An increase in the awareness of Energy Efficiency among MSMEs; improvements in the capacity of financial institutions to examine energy saving loans to MSMEs; improvements in the efficiency of energy use: environmental improvements and sustainable economic growth; the mitigation of climate change

5. External Factors and Risk Control

Fluctuation risk in energy saving demand, political and economic system change risk, etc.

6. Lessons Learned from Past Projects

The following lesson has been gained from the ex-post evaluation: if two or more executing agencies (financial institutions) intervene in the provision of development loans, it is effective to apply the project scale and sub-loan conditions flexibly according to financial demand from each institution's target end users instead of applying the same conditions. It would be considered

7. Plan for Future Evaluation

(1) Indicators to Be Used

- 1) Total number of approved and disbursed sub-loans
- 2) Total amount of approved and disbursed sub-loans (in million yen)
- 3) Ratio of non-performing loans to the total amount of loans (%)
- 4) Ratio of non-performing loans to the total number of loans (%)
- 5) Technical support for business promotion, such as awareness-raising activities (number of times)
- 6) Reduction in energy consumption (oil equivalent tons/year)
- 7) Reduction in greenhouse gas emissions (CO₂ equivalent tons/year)

(2) Timing

Two years after project completion