

India

Ex-Post Evaluation of Japanese ODA Loan Project
Micro, Small and Medium Enterprises Energy Saving Project

External Evaluator: Yumiko Onishi, IC Net Limited

0. Summary

In India, rapid economic growth in recent years has led to an increase in energy consumption, thereby making the promotion of energy efficiency through energy saving an urgent task. The Micro, Small and Medium Enterprises Energy Saving Project (“the project”) provides medium- and long-term financial assistance to micro, small, and medium enterprises (MSMEs) in India for their energy saving efforts. It also provides assistance for strengthening loan appraisal capacity of the executing agency and Participating Financial Institutions (PFIs) and promotes awareness of energy saving among the MSMEs. The project is in line with the development policy and development needs of India as well as the ODA policy of Japan; thus, this project is highly relevant. In the project, the impact of trainings related to strengthening loan appraisal capacity of the executing agency and PFIs is limited. However, the amount of energy consumption actually reduced through energy saving loan is higher than planned. This has had some impacts on the environment; moreover, from the perspective of the sustainable development of the MSMEs, there has been some increase in profitability, and the competitiveness of the MSMEs has been strengthened through energy saving initiatives. Through the implementation of the project, the objectives have largely been achieved; thus, the effectiveness and impact of the project are high. The efficiency of the project is also high since both project cost and project period are as planned. With regard to the sustainability of the project, there are no specific issues related to the institutional and technical aspects of operation and maintenance. However, considering the financial status of some of the PFIs and the fact monitoring of revolving and debt recovery status is not possible, the sustainability of project effect is fair.

In light of the above, the project is evaluated to be highly satisfactory.

1. Project Description



Energy saving machine purchased by one of the end user companies (paper industry)



Automobile component produced by one of the end user companies

1.1 Background

In India, the rapid economic growth in recent years has led to an increase in energy consumption, thereby making it essential to promote energy efficiency through energy saving for stable energy supply and environmental sustainability for the future. The energy consumption of Indian manufacturing sector, including the MSMEs, was estimated to be 40-50% of total energy consumption¹. However, the MSMEs have been consuming energy in an inefficient manner compared to large enterprises, mainly due to obsolete machines, and it was believed that they have a high potential for improving energy efficiency.

Given these circumstances, the Government of India has been promoting efficient use of energy through the enactment of the Energy Conservation Act and Integrated Energy Policy. The government has also been giving the MSMEs priority for lending based on the Micro, Small, and Medium Enterprises Development Act. However, due to the limited capacity of the MSMEs to access finance needed for capital investment related to energy saving, limited skills and know-how, as well as low awareness of the importance of energy saving, the initiatives on energy saving have not expanded.

1.2 Project Outline

The objective of the project is to promote energy saving among MSMEs by providing medium- and long-term financial assistance to MSMEs needed for their energy saving initiatives, strengthening the loan appraisal capacity of SIDBI, the executing agency and PFIs, and strengthening their awareness towards energy saving, thereby contributing to environmental improvement and economic development in the country as well as addressing climate change.

Loan Approved Amount/Disbursed Amount	30,000 million yen /30,000 million yen
Exchange of Notes Date/ Loan Agreement Signing Date	October 2008/November 2008
Terms and Conditions	Interest Rate: 0.3% Repayment Period: 15 years (Grace Period: 5 years) Conditions for Procurement: Untied
Borrower / Executing Agency	Small Industries Development Bank of India (SIDBI)/SIDBI Guarantor: the President of India
Final Disbursement Date	November 2010
Related Projects	<Japanese ODA Loan Projects> • Small Scale Industries Development Program (1)-(6) • Micro, Small and Medium Enterprises Energy Saving Project Phase II (2011-2014)

¹ Source: the Government of India, Twelfth Five Year Plan.

	<Other international donors> <ul style="list-style-type: none"> • Micro, Small and Medium Enterprises Financing and Development Project (Financing by IBRD and KfW and technical assistance by DFID and GIZ) • Financing Energy Efficiency Project in Micro, Small and Medium Enterprises Sector (KfW)
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2. Outline of the Evaluation Study

2.1 External Evaluator

Yumiko Onishi, IC Net Limited

2.2 Duration of Evaluation Study

Duration of the Study: September 2012 – July 2013

Duration of the Field Study: December 1–12, 2012, and February 17–25, 2013

2.3 Constraints during the Evaluation Study

In the ex-post evaluation, end user companies that obtained financial assistance by availing the energy saving loan as part of the project were interviewed either directly or through a questionnaire to grasp the impact of energy saving and ascertain the level of customer satisfaction, among other things. There are over 3,000 end user companies in the project and the selected sample size for the evaluation is 45. Since many of the end users were not aware that the loan they have taken was assisted by a Japanese ODA Loan, some of them declined to give the interview. Since part of the effectiveness and impact is evaluated on the basis of the information collected from the end users with such constraints, the evaluation result does not necessarily reflect the comprehensive situation of the project.

3. Results of the Evaluation (Overall Rating: A²)

3.1 Relevance (Rating: ③³)

3.1.1 Relevance with the Development Plan of India

(1) Promoting Energy Saving

At the time of the appraisal, the goal of the Indian government was to “achieve 20% energy efficiency by FY 2017,” which is mentioned in the Eleventh Five Year Plan (April 2007 to March 2012). In addition, the government planned to control the energy demand through energy saving based on the Integrated Energy Policy, which was announced in 2006. Furthermore, in addition to Bureau of Energy Efficiency’s (BEE) ongoing effort for improving the efficient use of energy, the government announced that it would consider introducing market mechanisms, tax reliefs, and tax incentives for energy saving equipments in the National Climate Change Action Plan of 2008. In the Twelfth Five Year Plan (April 2012 to March 2017), announced at the time of the ex-post evaluation, it is mentioned

² A: Highly satisfactory; B: Satisfactory; C: Partially satisfactory; D: Unsatisfactory

³ ③: High; ②: Fair; ①: Low

that to strike a balance between economic growth and environmental sustainability, it is necessary to promote energy saving in every possible manner. Accordingly, the project is relevant at the time of the ex-post evaluation.

(2) MSME Development

Development of MSMEs is considered to be a key to economic growth in the Eleventh Five Year Plan and the government has targeted an annual growth of 15% during the period. Subsequently, priority is given to the development of MSMEs in the Twelfth Five Year Plan also and the government aims to improve productivity and competitiveness of the MSMEs, upgrade technology and promote export. Based on the MSME Development Act of 2006, medium enterprises have been added to the definition of MSMEs in India. With the implementation of the Act, the scope of government assistance to the MSMEs has also expanded.

Considering above, the project is highly relevant with the development plan of India at the time of the appraisal and the ex-post evaluation.

3.1.2 Relevance with the Development Needs of India

At the time of the appraisal, due to rapid economic growth, the energy consumption in the country was increasing at the rate of 7% per annum in manufacturing sector⁴, thereby making it essential to promote energy efficiency through energy saving to ensure a stable energy supply and environmental sustainability for the future. In particular, energy usage by the MSMEs was said to be inefficient mainly due to slow investment in energy saving equipments and the use of obsolete machines, and their potential for improvement was considered to be high. Given such circumstances, the Government of India has been promoting efficient use of energy and giving priority for lending to MSMEs based on the MSME Development Act. However, due to the MSMEs' limited capacity to access finance needed for the investment related to energy saving equipment, their limited skills and know-how, as well as low awareness of the importance of energy saving, the initiatives on energy saving have not gained much ground.

According to the report published by the Ministry of MSMEs in 2009, the advance from public sector banks to the MSMEs increased from INR 460.4 billion in 2000 to INR 1,852.1 billion in 2009; however, in the same period, the share of credit to the MSMEs against total amount of the loan declined from 12.5% to 10.9%, indicating mismatch between the increase in amount of advance given to MSMEs and their share of credit against total amount of the loan. In the study conducted by United Nation's Industrial Development Organization (UNIDO) in 2011 targeting MSMEs in India, the limited access to credit was indicated as the biggest obstacle for MSMEs in achieving efficient use of energy, making it clear the importance of strengthening energy saving loans for the MSMEs⁵. In addition, the project has been completed earlier than planned due to tremendous demands for financial

⁴ Source: the Government of India, 12th Five Year Plan.

⁵ 'Approach to energy efficiency among micro, small and medium enterprises in India: Result of a field survey', UNIDO Working Paper 8/2011.

resources from the MSMEs (for details, see the section on Efficiency). As evident from above, there is a high demand for strengthening energy saving loans for MSMEs even at the time of the ex-post evaluation.

3.1.3 Relevance with Japan’s ODA Policy

One of the priority areas of Japan’s Country Assistance Policy for India (May 2006) was the “improvement of the poverty and environmental issues.” The Japan International Cooperation Agency (JICA) is targeting assistance to tackle environmental issues and climate change as a priority area and is also aiming to introduce energy saving technology in the industrial sector. As the project aims to provide mid- to long-term financial resources to achieve energy saving among the MSMEs, it is relevant to Japan’s ODA policy.

The project has been highly relevant with the country’s development plan, development needs, as well as Japan’s ODA policy; therefore its relevance is high.

3.2 Effectiveness⁶ (Rating: ③)

The project provided financial resources to the MSMEs for investment in energy saving equipment (sub-project). The loans for such energy saving equipment were provided as two-step loans through the executing agency, SIDBI, or as three-step loans through on-lending from SIDBI to the selected PFIs to the MSMEs.

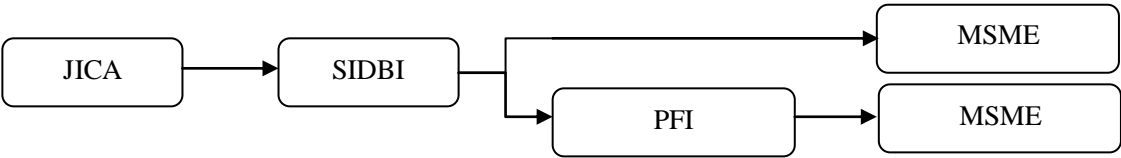


Figure 1: Financing scheme under the project

In addition to the two-step and three-step loans under the Japanese ODA Loan, the project had inputs from technical assistant (TA) consultants who conducted energy saving awareness campaigns targeting MSMEs, updated the Energy Saving Equipment List (ESEL)⁷ and conducted capacity building training on energy saving loan appraisal for SIDBI and PFIs (for details on technical assistance, see the section on Efficiency).

3.2.1 Quantitative Effects (Operation and Effect Indicators)⁸

In the project, the target for the amount of energy consumption reduction was to be calculated at the beginning of the project as an operation and effect indicator. However, according to SIDBI and TA

⁶ Sub-rating for Effectiveness is to be put with consideration of Impact.
⁷ In order to provide information for staffs of the financial institutions and for the MSMEs, the list contains information on the energy saving equipments that can be financed by the project, their specifications and equipment suppliers.
⁸ Figures related to disbursement and reduction on energy consumption indicated in the report refer to the achievement arising only from the primary lending to MSME and do not include achievement from revolving of the fund.

consultants⁹, the target was not established since it was impossible to calculate the amount of energy saved from the project because the amount of energy consumption varies from industry to industry, and differs depending on the kind of energy saving equipment used by end users, while the energy saving loan was made available to various industries and used to procure various types of energy saving equipments. At the same time, the appraisal document mentions the energy saving benchmark of 10% at the time of project completion (based on the Indian policy target to “achieve 20% energy efficiency by FY 2017,” as mentioned in the Eleventh Five Year Plan) and it can be considered as the project target. The amount of energy consumption reduction from the energy saving equipments installed in the project is shown below¹⁰.

Table 1: Energy consumption reduction from the project

Average energy saving rate	35.67%
Annual reduction on electric energy consumption	477.71 MkWh
Annual reduction on thermal energy consumption	446,474.00 MkCal

Source: SIDBI (Questionnaire interview)

At the time of the appraisal, 10% reduction in energy consumption was considered to be the benchmark target. Given that the average rate of energy saving from the project was 35.67%, it can be said that the project has achieved a higher level of energy saving than the plan. According to the Confederation of Indian Industry, the potential for energy consumption reduction of MSMEs through energy saving is estimated to be 1,000 MW per annum¹¹. At the same time, the electric and thermal energy consumption reduction from the project is equivalent to 119 MW when converted to MW¹², the project has contributed to 12% of the energy saving potential of MSMEs. Considering that the number of end users covered by the project is less than 1% of all the MSMEs in the country, it is evident that the amount of energy saved through the project is considerably large¹³.

3.2.2 Qualitative Effects

(1) Improving Awareness of Energy Saving among the MSMEs

At the time of the ex-post evaluation, 45 end user companies who availed financial assistance from the project were interviewed either directly or through questionnaire to collect information on reasons for availing the energy saving loan and their satisfaction with respect to the loan scheme

⁹ TA consultants were hired by technical assistance for the Japanese ODA Loan scheme. TA consultants are also engaged with Phase 2 of the project.

¹⁰ Estimated based on 67 selected sample sub-projects. Electric and thermal energy consumptions of the sample sub-projects before and after installing the energy saving equipment were compared and the energy saving amount for each sample sub-project was calculated. Based on the energy saving amount from the sample, the energy saving for similar sub-projects were calculated and finally the total energy saving for the entire project was estimated.

¹¹ “Energy Efficiency – India” Confederation of Indian Industry, 2005.

¹² Calculation (for the project): (1) Annual electric energy reduced 477.71M kWh = 477,710,000 kWh/24 (hour/day)/350(working day/year)/1,000 (kw/Mw) = 56.87MW. (2) Annual thermal energy reduced 446,474M kCal = 446,474,000,000 kCal/860 (kCal/kWh)/24 (hour/day)/350 (working day/year)/1,000 (kw/Mw) = 61.80 MW. (1) + (2) =118.76MW

¹³ The total number of end users of the project is approximately 3,000. According to the estimate of the Ministry of MSMEs, the total number of MSMEs in the country in FY 2010 was 31 million.

among other things¹⁴. In the interview survey, 42 out of 45 end users responded that they were aware of energy saving before project implementation. Since the proprietors of the end user companies are highly educated and standards such as emission of pollutants for each industry are specified under the pollution control laws in the country which the end users must comply, the end users seemed to be highly aware of energy saving and environmental protection. Out of 45 end users interviewed, 15 participated in the awareness campaign of the project, out of which 13 responded that by attending the campaign, their awareness of energy saving was further enhanced. According to SIDBI, some of the MSMEs were hesitant about the project since installing energy saving equipment often entailed changing manufacturing technology and enhancing production scale. Through the awareness campaigns, there has been an improvement in the understanding of energy saving initiatives MSMEs can practice and benefits arising from it, thereby resulting in some MSMEs availing the energy saving loans.

(2) Strengthening MSME Energy Saving Loan Appraisal Capacity of Financial Institutions (SIDBI and PFIs)

In the project, SIDBI provided energy saving loans to over 2,000 sub-projects. According to SIDBI, the loan appraisal officers have become more efficient and effective in implementing energy saving loan appraisal through the project. Moreover, the loan appraisal and disbursement processes have become more efficient at the institutional level; however, improving specific areas such as reducing the time taken for loan appraisal remains unrecognized. Forty-eight SIDBI branches have participated in the project, and the number of sub-projects approved and branches are shown in Table 2 below. There are a few branches that have approved more than 100 sub-projects while many others have had less than 10 sub-projects.

Table 2: Number of sub-projects approved at SIDBI branches

No. of Sub-projects	No. of Branches
More than 100	3
80~99	2
60~79	1
50~59	1
40~49	5
30~39	4
20~29	5
10~19	8
Less than 10	18

Source: SIDBI
 Note: Above figure excludes 838 loans given through a taxi association.

With the objective of enhancing the capacity of SIDBI and PFIs, the TA consultants held two

¹⁴ As referred in the column at the end of the report, the samples were selected mainly from automobile industries located in New Delhi and Bangalore area that have experience of trading with Japanese companies. Out of the 83 end users contacted, interviews were conducted with 45 end users who agreed to participate.

training programmes each for Clean Development Mechanisms (CDM)¹⁵ and energy saving loans. The training participants were mostly SIDBI staff. The training programme included introduction of energy saving technologies and case studies. Since it has taken time to coordinate aspects such as designing training contents and securing the venue, all the four training programmes were conducted in 2011 after project completion; however, only by definition of project completion the training programmes were conducted beyond the project period. Since all the training programmes were conducted after project completion, they have not contributed to improving the SIDBI staff's loan appraisal capacity in Phase 1 of the project. As the training included introduction of energy saving technologies and specific case studies, it would have been beneficial if they had been conducted at an earlier stage in the project.

Taking the above discussion into consideration, it can be said that the effect of capacity building of SIDBI and PFIs for energy saving loan appraisal to the MSMEs under the project was limited.

(3) Accelerating the Effort for Efficient Use of Energy

Through the interviews conducted with end users at the time of the evaluation, it was evident that out of 45 end users interviewed, 17 have taken their own energy efficiency initiatives apart from the sub-projects such as regular monitoring of electricity consumption and switching to CFL bulbs¹⁶. Satisfied with the performance of the energy saving equipment installed under the project and improvement in product quality, more than 100 end users of SIDBI have taken energy saving loans again.

3.3 Impact

3.3.1 Intended Impacts

3.3.1.1 Environmental Improvement

As an example of energy saving loan contributing to environmental improvement, SIDBI has provided a loan to a taxi association to procure over 800 compressed natural gas (CNG) taxis. Furthermore, Delhi Financial Corporation (DFC), a PFI, has extended loans to over 500 auto-rickshaws to convert from diesel to liquid petroleum gas (LPG) fuel. Compared to diesel, LPG is considered to emit a lower amount of harmful gases after combustion. Therefore, it can be said that the project has contributed to improving the environmental condition to a certain extent.

3.3.1.2 Sustainable Economic Development

(1) Improving the Profitability and Competitiveness of MSMEs

Among the 45 end users who participated in the direct or questionnaire interview, 42 responded

¹⁵ CDM is one of the global warming combat mechanisms defined by Kyoto Protocol to reduce green house gases. Industrialized countries with CO₂ cap may purchase the amount of carbon emission reduced from the developing countries that are not meeting the emission allowance.

¹⁶ Compact florescent light, a type of energy saving light.

that the loan from the project has contributed to improving the company’s performance. Out of the 42, 33 end users indicated benefits from the project such as improvement in product quality by installing energy saving equipment, obtaining new contracts due to increased customer satisfaction and expansion of the business by rationalizing the production process.

Not many end users have maintained a record of the amount of energy consumption and energy cost associated with production before and after the implementation of the sub-project. And the per unit electricity price increased during the project period; therefore, it is not possible to estimate the actual changes in energy cost incurred during production. At the same time, due to reduced energy consumption after the installation of energy saving equipment, there should be a general reduction in energy cost for producing the same quantity of products. Better product quality and reduced production cost because of improved energy efficiency may have contributed to providing MSMEs in India with a competitive edge, as they have been recently facing severe competition not only domestically but also internationally. For example, Company A, an end user, that manufactures cardboard boxes has availed the project loan to install an energy saving machine that automates the production process of cardboard boxes. As shown in Table 3, by installing the energy saving machine, the company’s electricity consumption has reduced, and as a result, electricity charge has also reduced. The electricity charge for manufacturing one cardboard box has reduced by 40% and the company’s productivity has increased by almost eight times.

Table 3: Energy consumption and electricity charge of Company A

	Before	After
Energy consumption (per 1 ton of cardboard box)	78.00 kWh	49.00 kWh
Electricity charge (per 1 cardboard box)	Rs. 0.40	Rs. 0.25

Source: Company A

(2) Creating Employment Opportunities

While there is possibility of reduction in employment due to upgrading and rationalizing production technology as a result of installing energy saving equipment, out of 45 end users interviewed for the ex-post evaluation, the number of employees has increased in two-third of the end user companies after sub-project implementation. According to SIDBI, out of 2,133 end users, 34% of them have utilized financial assistance from the project to establish new businesses. Therefore, considering the fact that establishing new businesses would have created new employment, it can be said that the project has also contributed in generating employment opportunities.

3.3.1.3 Contribution to Climate Change

According to the hearings conducted from SIDBI and BEE, the project has had no specific impact on policies related to climate change and other environmental protection standards in the country.

3.3.2 Other Impacts

According to SIDBI and PFIs, JICA's *Guideline for Confirmation of Environmental and Social Considerations* (April 2002) was explained to end user companies at the time of loan appraisal. Before loan disbursement, candidate sub-projects were required to adhere to requirements from the Pollution Control Board and submit a copy of the pollution control certificate to the financial institution. Sub-projects were appraised in line with the JICA's guideline on social and environmental consideration and no negative impacts were observed. There was no resettlement and rehabilitation associated with land acquisition in the project.

In the project, the effect of strengthening energy saving loan appraisal capacity of SIDBI and PFIs is limited. However, the amount of energy saving achieved through the energy saving loan to MSMEs is above the targeted level and there is also some impact in terms of environmental improvement. Further, from the viewpoint of sustainable development of MSMEs, there has been a certain increase in profitability and productivity and MSMEs have gained a competitive edge through energy saving initiatives. This project has largely achieved its objectives; therefore, the project's effectiveness and impact are high.

3.4 Efficiency (Rating: ③)

3.4.1 Project Outputs

3.4.1.1 Financing Scheme

As shown in Figure 1, the project has provided mid- to long-term finance to MSMEs through SIDBI to the end user as two-step loan or from SIDBI to PFIs and then to the end users as three-step loan. There was no change in the financing scheme between the plan made at the time of appraisal and in the manner the project was actually implemented. Table 4 presents the list of PFIs that participated in the project, the number of sub-projects covered under the project and the disbursement.

Table 4: Sub projects and disbursement under the project

Institution ¹⁷	Sub-projects	Disbursement (INR10 million)
SIDBI	2,133	883
IREDA	25	200
APSFC	35	69
DFC	586	6
KSFC	134	55
TIIC	151	50
WBSFC	15	15
SB	460	405
Total	3,539	1,683

Source: SIDBI

Since the network of SIDBI's branches is limited to 103, by bringing other PFIs on board, the project was able to extend the loans to wider geographical areas. Most State Financial Corporations (SFCs) like Andhra Pradesh State Financial Corporation (APSFC) and Karnataka State Financial Corporation (KSFC) have extensive coverage in specific geographical areas compared to SIDBI and have a strong relationship with the MSMEs in the area. Hence, the participation of other financial institutions enabled the project to serve more clients.

3.4.1.2 Eligible Sub-Projects

The project has targeted MSMEs across India and loans were provided to those who passed the loan appraisal process of SIDBI or relevant PFI. The definition of MSME according to the MSMEs Development Act of 2006 is presented in the following table.

Table 5: Definition of MSME

	Micro	Small	Medium
Manufacturing sector	Less than INR 2.5 million	Less than INR 50 million	Less than INR 100 million
Service sector	Less than INR 1.0 million	Less than INR 20 million	Less than INR 50 million

Source: the Government of India

Note: The values in the table refer to investment in plant and machinery.

Eligible sub-projects are capital investment in energy saving equipment listed in the ESEL which is specifically prepared for the project. Except for arms, narcotics, and any other unlawful businesses, there was no restriction on the target industry; and the loans were given mainly to the industries with

¹⁷ Expanded names of PFI are as follows:

IREDA: Indian Renewable Energy Development Agency

APSFC: Andhra Pradesh State Financial Corporation

DFC: Delhi Financial Corporation

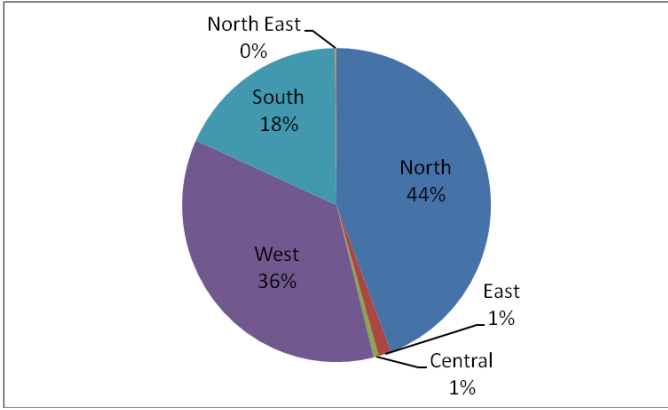
KSFC: Karnataka State Financial Corporation

TIIC: Tamil Nadu Industrial Investment Corporation

WBSFC: West Bengal State Financial Corporation

SB: Syndicate Bank

large energy consumptions. Energy saving loans were actually extended to various industries including auto ancillaries, textile, food processing, and medical equipment. Further, SIDBI provided loans mainly to industries such as auto ancillaries, textile, engineering, iron and steel casting, and forging. Figure 2 depicts the geographical spread of SIDBI loans. Eighty percent of the lending was concentrated in the north and west India where many of the industrial areas are located.



Source: SIDBI
 Figure 2: Geographical spread of SIDBI’s lending (based on lending amount)

3.4.1.3 Lending Terms and Conditions

According to the plan at the time of the appraisal, lending terms such as interest rate and repayment period were to be decided at the discretion of SIDBI and the relevant PFI as a general rule. By availing soft loans from the Japanese ODA Loan, SIDBI was able to extend loans to MSMEs at a lower-than-normal lending rate, thereby increasing the incentive of MSMEs to procure energy saving equipment. During the project period, SIDBI’s lending rate to end users varied from 9.5% to 11.5%. Further, the lending rate from the PFIs to end users ranged from 11% to 14% (for details of lending terms and conditions, see Comparison of the Original and Actual Scope of the Project at the end of the report).

In the interviews with end users (45 end users), 56% responded that a low lending rate was the deciding factor for availing the energy saving loan. The fact that the project allowed end users to utilize the loan to procure energy saving equipment as additional equipment instead of making it obligatory to replace the existing low-efficiency equipment has also encouraged MSMEs to avail energy-saving loans¹⁸.

¹⁸ According to SIDBI, a similar financing scheme assisted by other donor makes it mandatory to replace the existing low-efficiency equipment as they give importance to short-term energy saving benefit and the implementation of the scheme has been reported to be slow.

3.4.1.4 Technical Assistance

The TA consultants associated with the project conducted the following activities:

(1) Energy Saving Awareness Campaign for MSMEs

According to SIDBI, 28 energy saving awareness campaigns for the MSMEs were held during the project. Existing industrial clusters in the country were selected for the campaigns based on criteria such as high energy consumption and energy saving potential. At the campaign, in addition to providing the information on the energy saving loan of the project, energy saving initiatives in industrial clusters and the energy saving potential of the industry were presented. The awareness campaigns also served as a publicity tool for the energy saving loan. In particular, in the latter half of the project, the loan was promoted more effectively by holding focus group discussions with influential persons related to MSMEs such as the representatives of industrial clusters, chartered accountants and energy auditors. In the areas where the awareness campaigns were conducted, number of sub-projects is comparatively large in respective SIDBI branch. For instance, out of 23 branches that manage the areas where the awareness campaigns were conducted, 17 branches have approved more than 20 sub-projects. In contrast, out of 25 branches in whose areas the awareness campaigns were not conducted, only 4 has more than 20 sub-projects, indicating the effect of the awareness campaign.

(2) Updating ESEL

The ESEL was the first of its kind in India and the list included energy saving equipments and technologies for many industries such as textile, automobile components, food processing, casting and forging, pharmaceuticals, and printing. The list was compiled based on the information provided by ongoing energy saving projects of the government, energy saving equipment suppliers, and opinions of MSMEs and also includes information on the specifications of the equipment and contact details of the suppliers. The equipments on the list are selected taking into consideration the unique situations of MSMEs such as the energy consumption pattern, their business scale and technology employed. In particular, they were selected based on the equipment suppliers' sales network in the country and quality control certification (ISO9000) among other things. For some of the equipments listed in the ESEL, their effect of energy saving was verified by visiting the equipment users during the project. The list was updated 10 times during the project. The ESEL was prepared with objective to provide information regarding eligible energy saving equipments and its performance to loan appraisal officers of financial institutions and the MSMEs. It was particularly helpful for the loan appraisal officers of SIDBI and PFIs to determine if candidate sub-projects are eligible to avail the energy saving loan. At the same time, according to some of the equipment suppliers at the time of the ex-post evaluation, there were certain suppliers who were not aware of the project and the ESEL¹⁹.

¹⁹ Some of the suppliers expressed that had they known about the project, they could have introduced equipments that were in line with the needs of MSME and could have introduced energy saving loans to their MSME customers.

(3) CDM Registration Related Support

TA consultants also undertook activities related to registering a CDM project. Four industrial clusters were selected within the country and the possibility of formulating the CDM project at cluster level was explored²⁰. Out of the four, one was selected and a project design document was prepared in order to register as a CDM project. Since registering a CDM project is a long process, the process was not completed at the time of the ex-post evaluation; however, according to the TA consultants, the process of registering will continue. Nevertheless, the amount of green house gases is lowering due to economic slowdown, and as a result, demand for carbon credit is reduced and the price in CDM market is also lowering. Given such situation in the CDM market, it is unclear whether the CDM project will be successfully registered for CDM.

(4) Other Technical Assistance

Apart from the technical assistance mentioned above, TA consultants have undertaken monitoring of social and environmental impact, monitoring of operation and effect indicators, and capacity building of SIDBI and PFIs²¹.

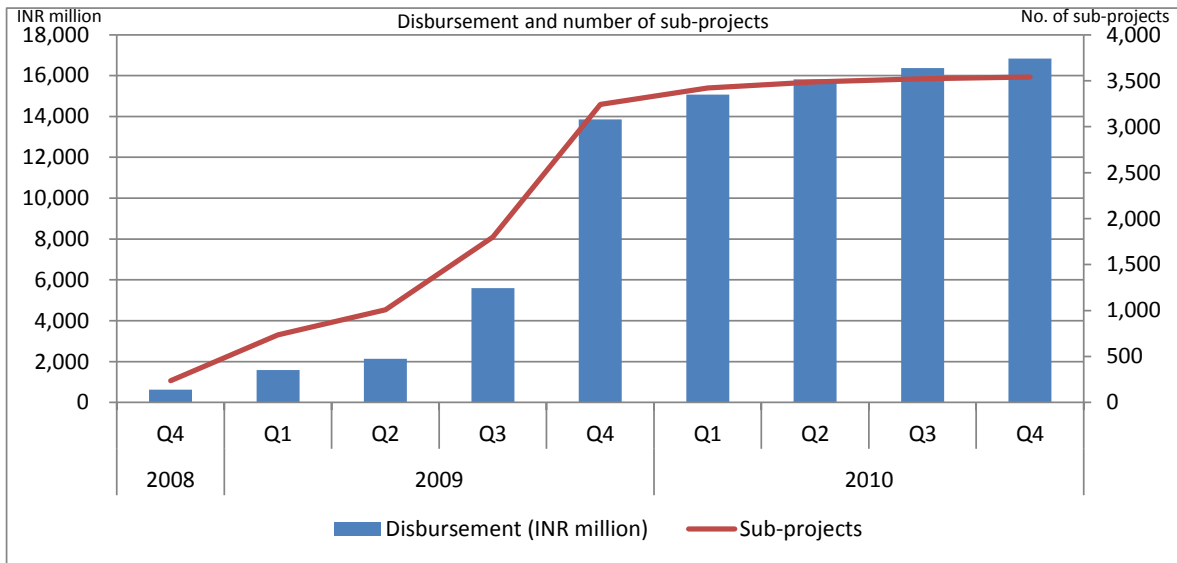
3.4.2 Project Inputs

3.4.2.1 Project Cost

At the time of the appraisal, the project cost was JPY 31,593 million (out of which the Japanese ODA Loan accounted for JPY 30,000 million) and the actual disbursement was JPY 31,228 million as planned.

²⁰ For the project industrial clusters of foundry, rolling mill, ceramic, and steel re-rolling mill were selected with high potential for CDM project.

²¹ For monitoring the social and environmental impact, priority was given to the end users of leather and foundry industries where there is a relatively large environmental impact. Twenty samples were selected from among the end users and ambient air quality, noise level and water quality were tested. Details on monitoring of operation and effect indicators as well as capacity building of SIDBI and PFIs are described in the section on Effectiveness.



Source: SIDBI

Figure 3: Disbursement and sub-project implementation under the project

3.4.2.2 Project Period

At the time of the appraisal, the planned project period was 36 months from October 2008 to September 2011. For the project, project completion was defined as the last disbursement from JICA to SIDBI, the executing agency. The project began in November 2008, and although the capacity building of SIDBI and PFIs by TA consultants were still ongoing, the last disbursement was made in November 2010. Therefore, the project was completed 11 months earlier than the plan. At the beginning of the project, due to the world financial crisis, the borrowings from the MSMEs were slow; however, through efforts such as soliciting more participation from PFIs and publicizing energy saving loans through awareness campaigns, the disbursement from JICA was completed in November 2011. Lending from SIDBI and PFIs to end users continued even after project completion; however, according to the information provided by SIDBI, the last lending was made in March 2011 and therefore, duration of the project was as planned.

Both project cost and project period were as planned, therefore efficiency of the project is high.

3.5 Sustainability (Rating: ②)

3.5.1 Institutional Aspects of Operation and Maintenance

SIDBI, the project executing agency, was established in 1990 as a development bank to promote the development of small-scale industries in India. As was planned at the time of the appraisal, the project was implemented under the direction of the Chief General Manager of the Resource Management Department and the coordination with PFIs was the responsibility of the Chief General Manager of the Credit Department. As of March 2011, the total number of SIDBI employees was 1,032 and it has 103 branches across the country. The Energy Efficiency Cell, which was established under the SIDBI's Credit Department as the section in charge of the project, was upgraded to Energy

Efficiency Centre (EEC) in October 2010. The EEC has 12 employees and it reviews the lending and debt recovery status every two weeks. Monitoring of the debt recovery status from the end users is the responsibility of respective branch from which the loan was given. In the future, it is expected that the EEC will change its name to Sustainable Finance Vertical and expand its services beyond energy efficiency to provide financial services that are socially and environmentally sound.

In terms of selecting the PFIs, those with prior experience of dealing with SIDBI on a regular basis and those that are financially sound were selected. In order to secure the network that covers MSME clusters where the demand for financial resources is high, financial institutions that possess such network were given importance. Further, smooth repayment from PFIs to SIDBI was also one of the important requirements; thus, the financial institutions that fulfilled SIDBI's minimum internal rating were selected. Finally, seven financial institutions that met these criteria and expressed interest were selected. For PFI selection process, SIDBI's Refinance Department and branch in charge of lending coordinated with the PFIs. Loan appraisal and debt repayment status in PFIs are monitored along with other financial products at branch level. The progress is reported monthly from head offices of PFIs to the SIDBI's Refinance Department through SIDBI's coordinating branches. In SFCs, a representative appointed by SIDBI is assigned as board member and the project is also monitored in the SFC's regular meetings.

It must be noted that staff turnover is very low in SIDBI and PFIs and the problems associated with manpower shortage are not reported. The employees have university degrees and internal trainings are conducted regularly for them; thus, they appear to have sufficient knowledge required to implement their duties.

3.5.2 Technical Aspects of Operation and Maintenance

In SIDBI, most tasks related to loan appraisal and debt recovery are the responsibility of branches. According to SIDBI, the employees possess sufficient skill to conduct daily tasks and continuous trainings are also conducted for them. For updating of the ESEL, the TA consultants continue to update the list since the Phase 2 of the project is under implementation.

In SIDBI's operational manuals, the criteria for loan approval for the MSMEs are clearly described and along with other guidelines, the manual seem to be utilized well by the employees. Table 6 presents the criteria for loan screening which is defined for each financial scheme.

Table 6: Example of mid- and long-term loan screening criteria (SIDBI)

Parameters	Norms
Debt Equity Ratio	2:1
Debt Service Coverage Ratio	1.5:1
Borrower's contribution	
New entity	33%
Existing entity	25%
Asset coverage	
New entity	1.4
Existing entity	1.3
Existing entity with CGTMSE ²² coverage	1.2
Service sector	1.75

Source: SIDBI Loan Policy

SIDBI also checks the balance sheet of end user company at the time of loan appraisal. The final interest rate on lending and collateral are decided based on the end user's previous loan repayment record. Depending on the amount of loan, the approval is made at a different level within SIDBI. For example, when the loan amount is INR 10 million or less, the assistant general manager of the respective branch has sanctioning power, while a loan size up to INR 50 million is approved by the deputy general manager, and larger loans get sanctioned at SIDBI head office's credit committee and even by the executive committee.

According to PFIs, loan policy and guidelines are in place and they are well utilized by the staffs. KSFC screens loan applications from technical, financial, and legal viewpoints. In each branch, there are technical, financial, and legal experts; moreover, in case there are loan applications that are difficult to be screened with internal expertise, KSFC has an arrangement with universities and research institutions to seek expert assistance. For the energy saving loan, apart from the fact that the loan is available only for the equipments listed in the ESEL, employees of branch offices implement the process of loan screening and loan collection in almost the same manner as for other loans. By using the ESEL, loan officers were able to confirm whether the candidate sub-project is eligible for project financing.

Since the criteria for loan approval and sanctioning authority are clearly indicated in operation manuals and guidelines of SIDBI and PFIs, there are no technical issues.

3.5.3 Financial Aspects of Operation and Maintenance

SIDBI has maintained a stable financial condition from the time of the appraisal to the ex-post evaluation. SIDBI's equity ratio is approximately 20% and non-performing assets (NPA) are less than 1%. Considering that State Bank of India—India's largest commercial bank—and the Industrial Development Bank of India (IDBI), SIDBI's predecessor, have an equity ratio of a little over 10% in recent years and their respective NPA in FY 2011 was 1.82% and 1.61%, it is evident that SIDBI's financial situation is rather healthy. Table 7 shows the major financial indicators of SIDBI and the

²² The Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) is a Government of India scheme in which the government provides a guarantee on behalf of MSME as security against the loan.

PFI.

Table 7: Financial indicators of SIDBI and PFIs

Institution	Return on Asset (%)	Non-Performing Assets (%)
SIDBI	2.00	0.28
IREDA	3.30	5.31
APSFC	2.84	2.87
DFC	1.84	9.43
KSFC	0.50	3.72
TIIC	3.45	2.98
WBSFC	1.44	15.00
SB	0.76	2.40

Source: SIDBI and PFIs

Note: The financial indicators from each institution are either from FY 2010 or FY 2011.

SIDBI's return on assets (ROA) in FY 2011 was 2% and most of the PFIs have similar ROA. However, DFC and West Bengal State Financial Corporation (WBSFC) have NPA of 9.43% and 15%, respectively. Since the average NPA of India's 48 public and private commercial banks in the last three years is a little more than 1%, the financial performance of these PFIs is not necessarily sound²³. However, the PFIs were selected based on the SIDBI's internal rating system and debt repayment from PFIs to SIDBI, including from DFC and WBSFC, have not experienced any problem thus far.

3.5.4 Debt Recovery Status

Table 8 presents the debt recovery status from the PFIs to SIDBI in cases where the repayment has already begun. As was explained above, there is no problem associated with the repayment even from DFC and WBSFC whose NPA are relatively high.

Table 8: Debt recovery status from PFIs to SIDBI

Unit: INR

PFI		FY 2010	FY 2011	FY 2012
DFC	Due amount	3,148,750	1,259,000	1,259,000
	Repaid amount	3,148,750	1,259,000	1,259,000
WBSFC	Due amount	40,098,305	38,454,401	36,105,514
	Repaid amount	40,098,305	38,454,401	36,105,514
SB	Due amount	—	670,900,000	894,700,000
	Repaid amount	—	670,900,000	894,700,000

Source: SIDBI

In the project, a Special Account was established. According to the appraisal plan, in addition to the Special Account, revolving fund account was to be established, which would be managed by

²³ Source: Indian Bank's Association

SIDBI and external audit was to be conducted each year. According to SIDBI, the Special Account was audited each year by an external auditor. With regard to the revolving fund, the revolving fund account was not established, since it was believed that the status of the revolving fund could be monitored from data system of SIDBI even without a dedicated account. However, due to SIDBI's system, it is not possible to identify the status of the revolving fund or debt recovery pertaining only to the project; thus, neither is actually monitored.

PFI's principal collection rate is indicated in Table 9. As indicated in the table, only three PFIs have the data on principal collection rate pertaining to the sub-projects implemented under the project. Other PFIs are not monitoring the information such as principal collection rate and sub-projects with arrears because the Reserve Bank of India (RBI) announced financial parameters that need to be disclosed by financial institutions in July 2012. In the RBI circular, disclosure and reporting of principal collection rate and arrears are not made obligatory; therefore, institutions like SIDBI and Syndicate Bank do not maintain record of the related data, not only for the project but for the entire institution as well.

Table 9: Principal collection rate

PFI	Unit: %		
	FY2009	FY2010	FY2011
IREDA	64.82	68.01	76.73
APSFC	72.08	82.08	77.72
DFC	93.00	95.00	97.00
KSFC	88.75	56.94	61.35
TIIC	76.92	78.14	87.15
WBSFC	—	58.06	100.00

Source: PFIs

* Figures for IRED, DFC and WBSFC are only for the project. For other PFIs in the table, the principal collection rate is for the entire institution as the data pertaining to the project are not available.

Considering above, some problems have been observed in terms of the financial status of some PFIs and monitoring of revolving funds and debt recovery situations. Therefore, the sustainability of the project effect is fair.

4. Conclusion, Lessons Learned and Recommendations

4.1 Conclusion

In India, rapid economic growth in recent years has led to an increase in energy consumption, thereby making the promotion of energy efficiency through energy saving an urgent task. The project provided medium- and long-term financial assistance to MSMEs in India for their energy saving efforts. It also provided assistance for strengthening loan appraisal capacity of the executing agency and PFIs and promoted awareness of energy saving among the MSMEs. The project is in line with the development policy and development needs of India as well as the ODA policy of Japan; thus, this project is highly relevant. In the project, the impact of trainings related to strengthening loan appraisal capacity of the executing agency and PFIs is limited. However, the amount of energy consumption

actually reduced through energy saving loan is higher than planned. This has had some impacts on the environment; moreover, from the perspective of the sustainable development of the MSMEs, there has been some increase in profitability and the competitiveness of the MSMEs has been strengthened through energy saving initiatives. Through the implementation of the project, the objectives have largely been achieved; thus, the effectiveness and impact of the project are high. The efficiency of the project is also high since both project cost and project period are as planned. With regard to the sustainability of the project, there are no specific issues related to the institutional and technical aspects of operation and maintenance. However, considering the financial status of some of the PFIs and the fact monitoring of revolving and debt recovery status is not possible, the sustainability of project effect is fair.

In light of the above, the project is evaluated to be highly satisfactory.

4.2 Recommendations

4.2.1 Recommendations to the Executing Agency

(1) According to the interviews with end users, the project has undoubtedly contributed to reducing energy consumption and making energy use more efficient. However, the number of end user companies is very small in relation to the MSMEs in the country; thus, environmental improvement at the national level is yet to be realized. Therefore, in order to further promote energy efficiency and contribute to environmental sustainability through energy saving, it is expected that financial services like providing energy saving loans will continue considering the energy saving loan mechanisms and additional initiatives based on the approach and success cases of the project, thereby extending loans to more MSMEs. With regard to the executing agency, as EEC will be upgraded to Sustainable Finance Vertical, it is expected to utilize the approaches and mechanisms that were proven successful in the project in similar initiatives.

(2) The introduction of ESEL was effective in implementing smooth loan appraisal in the project, despite it being the first such initiative in the country. However, there were certain suppliers of energy saving equipment who were not aware of the project. Some of the suppliers have long-standing relationships with MSMEs and are able to suggest the use of equipment that meets the needs of MSMEs. Thus, strengthening cooperation with suppliers, particularly those listed in the ESEL is desirable.

4.2.2 Recommendations to JICA

There is no specific recommendation to JICA.

4.3 Lessons Learned

(1) In the project, since the branch network of the executing agency was limited, the project was promoted using the branch network of the PFIs. By utilizing a network that is wider and more deeply rooted in the community compared to that of the executing agency alone, the project was possibly

implemented more efficiently and effectively.

(2) The energy saving loan provided through the project allowed the MSMEs to use old equipment in addition to the new equipment procured under the project instead of replacing the old equipment with new. This has promoted the use of energy saving loan among the MSMEs. The executing agency has also indicated this as an advantage of the project as some other international donor has a similar financial scheme that requires old equipment that tends to be less efficient to be discarded with emphasis on short-term impact of energy saving. Considering that the business of MSMEs is growing and that they require additional equipment for business expansion, the financial products that require them to replace old equipment are not necessarily attractive. Therefore, financial products that consider the needs of MSMEs are highly desirable.

(3) The lending to the MSMEs was effectively implemented by including technical assistance to the project. Energy saving awareness campaigns did not only enhance the understanding towards energy saving among the MSMEs but also prompted them to take energy saving initiatives through presenting specific activities and indicating their benefits. Further, in the areas where the awareness campaigns were conducted, the number of subprojects is relatively higher compared to the areas without the campaigns. This indicates that the awareness campaigns have accelerated the lending to the MSMEs. As seen in the project, provision of technical assistance with due consideration to needs of the MSMEs to compliment Japanese ODA loan project is expected.

(4) Although it was believed that the status of revolving fund can be monitored in the executing agency at the time of the appraisal, there is actually no system to monitor the status of revolving fund. Moreover, it is not necessarily possible to monitor the status of debt recovery from the end users. In two-step loan project, it is desirable to agree among the project related agencies on responsibility of monitoring the revolving fund and debt recovery including its method and duration, thus establishing the monitoring system.

BOX: The Results of Examining the Ripple Effects of Two-Step Loan Projects

The ripple effects of two-step loan projects were examined for three projects that were selected out of the FY 2012 Ex-Post Evaluations, namely the “Micro, Small and Medium Enterprises Energy Saving Project” in India, the “Small and Micro Industries Leader and Entrepreneur Promotion Project (III)” in Sri Lanka, and the “Small and Medium-Sized Enterprises Finances Project (II)” in Vietnam, all of which are yen-loan projects. The following are the three main areas studied.

- The relationship between the subject projects and the degree to which the business development service (BDS) market has developed in the respective countries²⁴
- The macro-political and financial effects of two-step loan projects
- Whether or not local Japanese-affiliated companies benefited from the projects through supply chains which include end users

²⁴ For the purpose of this detailed analysis, BDSs were defined as follows. In principle, BDSs are services which help companies to grow and become competitive. They include training, consulting, marketing assistance, information provision, legal and accounting services, technical development and dissemination. However, they do not include financial assistance (“The Follow-up Study Report for Projects in Mining and Manufacturing Industries” [Japan International Cooperation Agency, August 2003], p. 87).

1. The Relationship between Two-Step Loan Projects and the Degree to Which the BDS Has Developed

The following explains the degree to which the BDS market has developed and the characteristics of the BDS providers in the three countries.

In Vietnam, it is reported that BDS sales account for about 1.5% of GDP. The main tasks of the BDS providers include the following: mediating clients and assisting market development; creating personal connections between companies; giving advice on government rules and regulations; training; consulting on marketing, management strategies and business management; and assisting with the preparation of financial statements. Government-managed agencies, trade associations and business organizations preceded other types of organizations in providing BDS, but their services had some room for improvement²⁵. The number of private BDS provider companies has gradually increased in recent years and they have begun to provide high-quality services to relatively large corporations. In India, there are various actors who provide BDS including government agencies, business organizations, private firms, research institutes, NGOs, and individuals. BDS providers provide services in various fields such as accounting and marketing, assistance for export procedures, and training programs. More than 14,000 BDS providers are registered on the web portal operated by the Small Industries Development Bank of India (SIDBI). In Sri Lanka, it is reported that there are between 300 and 500 BDS providers nationwide. They are generally classified into government-managed providers, private providers, and NGOs. There are no significant differences in the types of services provided, but the fees and quality levels vary significantly.

Next, when we look at the overall situation of these three countries regarding the relationship between BDS and end user companies in two-step loan projects, it cannot be said that the end user companies have been utilizing BDS frequently but the end users who ever used BDS replied that the BDS were effective. In addition, end users, including those that had not used BDS, expressed an interest in using it from now on. Although there are a certain number of BDS providers in Vietnam, only one company out of 50 replied that it contacted a (private) BDS provider to receive advice on business in the questionnaire survey. BDS was not essential for the development of vast majority of end users. There are, however, quite a few end users which are interested in the use of BDS in the future. In India as well, except for the services of daily administration such as accounting and tax reporting, the use of BDS for the purpose of business improvement is limited. (Eight companies out of 45 replied that they used BDS.) The fact that micro, small and medium enterprises (MSMEs) do not know the existence of BDS and how to access BDS providers is a major obstacle to BDS utilization. Meanwhile, more than a half of the end users who did not use BDS are interested in the future use of BDS. In Sri Lanka, the questionnaire survey confirmed that the use of BDS by end users is limited and only 3 companies out of 50 used BDS. A major problem is that MSMEs are not

²⁵ In interviews, many stakeholders stated that the content of seminars and consulting provided by government-managed agencies, trade associations and business organizations is very basic and not practical. On the contrary, private BDS providers seem to have many MBA holders and deliver services that meet the international standards.

familiar with what a BDS is and how they can access it. However, many end users want to use BDS when their business becomes stable.

Although JICA implemented relevant projects for supporting BDS providers in Vietnam and Sri Lanka, these projects did not create any particular synergistic effect with the two-step loan projects. The reason is that the projects were conducted separately and no joint activities between them were organized. In India, such relevant project for supporting BDS providers has not been implemented by JICA.

Accordingly, the two-step loan projects have realized a certain level of effect even without BDS, as confirmed by the individual ex-post project evaluations. However, it does not mean that MSMEs in all three countries have no need for BDS. It is still possible that, in the future, MSMEs will actively utilize BDS to enhance the quality of their businesses. The following three factors should be regarded as basically common in all three countries: (1) MSMEs have needs for BDS after growing to a certain level; (2) it is confirmed that utilizing BDS has provided a certain level of effect; and (3) matching between MSMEs with needs for BDS and BDS providers is not sufficient but can be improved, because companies are interested in the use of BDS.

2. Macro Policies and Two-Step Loan Projects

The two-step loans carried out in the three subject projects have not provided any ripple effects in the governmental policies of India or Sri Lanka; this was confirmed by the interviews with officials responsible for financial policies. Nor do they seem to have provided any clear effects in the policies of Vietnam. However, according to officials of Vietnam's Ministry of Finance and Ministry of Planning and Investment, the success in JICA's two-step loan projects in the country appears to have had a certain amount of influence on the recently announced plan of "SMEs (Small and medium-sized enterprises) Development Funds".

In all three countries, we were unable to confirm any particular effect such as increased financing to MSMEs by financial institutions which did not participate in the two-step loan projects. Financing by the two-step loan projects is not remarkably different to existing schemes of private financial institutions for financing companies except for the fact that financing in India was limited to investment in the procurement of energy-saving equipment. On the other hand, there are advantages to the two-step loan projects such as having relatively low interest rates for Vietnam and India, and a longer repayment period in Sri Lanka.

3. Beneficial Effects to Local Japanese-Affiliated Companies of Two-Step Loan Projects

In Sri Lanka, there is no local Japanese-affiliated company in the end users' supply chain. We confirmed the presence of a few local Japanese-affiliated companies in the end user companies' supply chain in Vietnam and India by conducting questionnaire surveys to end users, but it is very rare that local Japanese-affiliated companies are customers of end users. In conclusion, we were unable to fully confirm benefits for Japanese-affiliated companies by the two-step loan projects.

Comparison of the Original and Actual Scope of the Project

Item	Original	Actual																											
1. Project Outputs																													
(1) Financing scheme	Two-step loan from SIDBI to end users and three-step loan from SIDBI through PFIs to end users	As planned																											
(2) Terms and conditions																													
a. Eligible sub-projects	Capital investment for equipment listed in ESEL specifically prepared for the project.	As planned																											
b. Eligible end users	MSMEs as defined by the Ministry of MSMEs.	As planned																											
c. Eligible industries	Mainly energy intensive industries. Arms, narcotics and other unlawful business are excluded.	As planned																											
d. Geographical area	All over India	As planned																											
e. PFIs	Financial institutions meeting SIDBI's selection criteria.	As planned																											
g. Terms and conditions	<p>Terms such as interest rate and repayment period are decided by each financial institution.</p> <p><u>Interest rate:</u> 1 to 2% below SIDBI's ordinary loan.</p> <p><u>Repayment period:</u> To be decided with about 10 years as upper limit.</p>	<table border="1"> <thead> <tr> <th></th> <th>Interest rate (%)</th> <th>Repayment (maximum)</th> </tr> </thead> <tbody> <tr> <td>SIDBI</td> <td>9.5-11.5</td> <td>7 years</td> </tr> <tr> <td>IREDA</td> <td>11.5-13.75</td> <td>10 years</td> </tr> <tr> <td>APSFC</td> <td>13-14</td> <td>8 years</td> </tr> <tr> <td>DFC</td> <td>12.25</td> <td>4.7 years (56 months)</td> </tr> <tr> <td>KSFC</td> <td>12.25-12.5</td> <td>6 years</td> </tr> <tr> <td>TIIC</td> <td>12.25-13.25</td> <td>7 years</td> </tr> <tr> <td>WBSFC</td> <td>11-13.25</td> <td>5 years</td> </tr> <tr> <td>SB</td> <td>11.5-13.5</td> <td>7 years</td> </tr> </tbody> </table>		Interest rate (%)	Repayment (maximum)	SIDBI	9.5-11.5	7 years	IREDA	11.5-13.75	10 years	APSFC	13-14	8 years	DFC	12.25	4.7 years (56 months)	KSFC	12.25-12.5	6 years	TIIC	12.25-13.25	7 years	WBSFC	11-13.25	5 years	SB	11.5-13.5	7 years
	Interest rate (%)	Repayment (maximum)																											
SIDBI	9.5-11.5	7 years																											
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WBSFC	11-13.25	5 years																											
SB	11.5-13.5	7 years																											
(3) Technical assistance	<ul style="list-style-type: none"> • Energy saving awareness campaigns for MSMEs • Update ESEL • Monitor social and environmental impact • Monitor operation and effect indicators • Capacity building of SIDBI and PFIs • CDM activities 	As planned																											
2. Project Period	October 2008–September 2011 (36 months)	November 2008–November 2010 (25 months)																											
3. Project Cost																													
Amount paid in Foreign currency	30,093million yen	30,093million yen																											

Amount paid in Local currency	1,500 million yen (INR 591 million)	1,135 million yen (INR 591million)
Total	31,593 million yen	31,228 million yen
Japanese ODA loan portion	30,000 million yen	30,000 million yen
Exchange rate	INR 1 = 2.54 yen (As of June 2008)	INR 1 = 1.92 yen (Average between November 2008 and November 2010)