

Ex-Ante Evaluation (for Japanese ODA Loan)

Private Sector Investment Finance Division,
Private Sector Partnership and Finance Department, JICA

1. Name of the Project

Country: Republic of India

Project: Climate Change Management Project ("Project")

Loan Agreement: March 25, 2021

2. Background and Necessity of the Project

(1) Current State and Issues of the Climate Change Management Sector in India

India's per capita greenhouse gas emissions have increased from 1.01 tons in 1999 to 1.94 tons in 2018 (increase by an average of 3.61% per year). With total emissions of approx. 2.5 billion tons (in 2017), the country has been the world's third largest emitter of greenhouse gases. Meanwhile, power demand is expected to be 2,499 TWh by 2030, compared with power supply of 1,614 TWh in 2019. Promoting both a reduction of CO₂ emissions and securing power supply has become an important issue of the country. The government of India signed the Paris Agreement in 2016. It has set goals in the NDC (Nationally Determined Contributions) to reduce per GDP greenhouse gas emissions in tons of CO₂ equivalent by 33% to 35% by 2030 from 2005 levels, and to increase power supply from non-fossil fuels to 40% based on the installed capacity. The government of India also established the Energy Saving Act in 2001, and has been promoting energy saving since 2012 through the PAT (Perform, Achieve and Trade) mechanism. In order to mitigate the negative impact on the environment caused by transportation demand, which has been increasing in the country, it also announced that the percentage of new car sales of electric vehicles (EV) in 2030 will be 30%. This Project will promote financing to fields of renewable energy, energy saving, and EV through TCCL, a Non-Bank Finance Company (NBFC) that provides financing to the Climate Change Management Projects. This Project is consistent with the issues of the relevant sector and the policy of the government of India.

(2) Japan and JICA's Policy and Operations in the Climate Change Management Sector

This Project will promote climate change management (mitigation) and use of low carbon energy by promoting the Climate Change Management Projects through providing support to the private sector. It is considered that this Project will contribute to SDGs Goal 7 (Affordable Clean Energy), Goal 13 (Climate Action), and Goal 17 (Partnerships for the Goals). Japan's Country Development Cooperation Policy for India (March 2016) stated "support for sustainable and inclusive growth" as one of the

priority areas and that Japan will provide support for environmental and climate change issues of India. Also, the JICA Country Analysis Paper for March 2018 analyzed the importance of infrastructure development for the development of productive industry. JICA has implemented the New and Renewable Energy Development Project (Phase 2) and the "Micro, Small and Medium Enterprises Energy Saving Project (Phase 3)" since 2014 to support financing to renewable energy and energy saving through Indian Renewable Energy Development Agency (IREDA) and Small Industries Development Bank of India (SIDBI). However, since no subsequent ODA loan project has been implemented, fund provision to the relevant sector is expected through the mobilization of government funds as well as private funds. In addition, the 10th Japan-India Energy Dialogue, a minister-level meeting between Japan and India, held in December 2019 announced the promotion of cooperative relationship between the countries for the introduction of renewable energy, energy saving, and EV. This Project is consistent with these policies and analysis.

(3) Other Development Partners' Activity

International Finance Corporation (IFC) is an equity shareholder of the borrower

3. Project Description

(1) Project Objective

The objective of the Project is to improve financial access of renewable energy projects, energy saving projects, and electric vehicle (EV) projects (collectively the "Climate Change Management Projects"), by providing a long-term financing to Tata Cleantech Capital Limited ("TCCL") in India, thereby contributing to sustainable economic growth and climate change mitigation in the country.

(2) Project Site/Target Area

The whole country of India

(3) Project Components

Through a long-term financing to TCCL, improve financial access and increase financing to the Climate Change Management Projects implemented by TCCL in the whole country of India.

(4) Loan Amount for Project

10,000 million Yen

(5) Project Implementation Structure

1) Borrower: TCCL

2) Executing Agency: TCCL

3) Operation and Maintenance Agency: TCCL

(6) Environmental and Social Consideration / Cross-sectoral Issues / Gender Categorization

1) Environmental and Social Consideration

- ① Category: FI
- ② Reason for Categorization: The Project as a whole is classified as Category FI according to JICA Guidelines for Environmental and Social Considerations (announced in April 2010), because its sub-projects will be identified after the approval of JICA's funding.
- ③ Other: In this Project, TCCL will categorize each sub project based on our environmental and social consideration policy and the JICA Guidelines, and necessary measures will be taken for each sub project. It has been agreed that each sub project will not include Category A. Funds will be used mainly for financing to solar power generation projects and wind power generation projects as well as Energy Efficiency and EV projects..

2) Cross-sectoral Issues: This project will promote projects in fields of renewable energy, energy saving, and EV in India through financing to TCCL, thereby contributing to the mitigation of climate change impact.

3) Gender Categorization: [N/A] GI (Gender Mainstreaming Needs Survey, Analysis Project)

<Reason> Gender mainstreaming needs were confirmed in the review, but it was not decided to carry out specific activities that contribute to gender equality or women's empowerment.

4. Targeted Outcomes

(1) Quantitative Effects

1) Outcomes (Operation and Effect Indicators)

Indicator	Baseline (Actual Value in December 2019)	Target (3 years after the completion of disbursement: currently expected in 2026)
Volume of outstanding Renewable Energy loans (rupees)	41,980 million rupees	100,000 million rupees
Renewable Energy Installation by TCCL ¹ (Generation capacity: GW)	7 GW	13 GW
Volume of outstanding Energy Efficiency and EV loans (rupees)	57 million rupees	8,000 million rupees

(2) Qualitative Effects

¹ This indicator will be calculated by summing up all the projects which TCCL has participated in.

Improvement in financial access of renewable energy, energy saving, and EV businesses

5. Preconditions and External Factors

No in particular

6. Lessons Learned from Past Projects

Lessons learned in the ex-post evaluation of an ODA loan project for India, the New and Renewable Energy Development Project, was that support should be provided to the establishment of a monitoring system for the credit management of the intermediate financial institution, since renewable energy and energy saving projects are likely to be affected by changes of political, economic, and natural circumstances. It has been confirmed through the review of the Project that TCCL has necessary monitoring system for the credit management.

7. Evaluation Results

This Project is consistent with the development issues and development policy of Japan as well as cooperation policies and analyses of Japan and JICA, and contributes to climate change management through improvement in financial access of businesses in fields of renewable energy, energy saving, and EV. Therefore, the Project contributes to SDGs Goal 7 (Affordable Clean Energy), Goal 13 (Climate Action), and Goal 17 (Partnerships for the Goals). It is significant to provide support.

8. Plan for Future Evaluation

(1) Indicators to be Used

As described in Section 4.

(2) Timing

Ex-post evaluation: 3 years after the completion of disbursement

End