Private Sector Investment Finance

Ex-Ante Evaluation

Private Sector Investment Finance Division
Private Sector Partnership and Finance Department
Japan International Cooperation Agency (JICA)

1. Name of the Project

Country: Developing regions, mainly in Latin America and the Caribbean

Project: Energy Efficiency and Renewable Energy Project II

Signing Date: March 27, 2019

Investee: MGM Sustainable Energy Fund II L.P.

2. Background and Necessity of the Project

(1) Current State and Issues of the Energy Sector Development

Energy issues and climate change are major development challenges for developing countries and solving these issues is one of targets of the Sustainable Development Goals (SDGs). The "Paris Agreement", which came into effect in November 2016, requires not only developed countries but also developing countries to set greenhouse gas emission reduction targets. Most countries in Latin America and the Caribbean are classified as middle income countries. In 2016, real GDP per capita in the region was about 8,900 dollars (World Development Indicators), which is higher than in other regions, but about 34 million people still lack access to energy (Inter-American Development Bank [IDB] estimates). According to IDB's "Energy Needs in Latin America and the Caribbean to 2040 (2016)", electricity demand in Latin America and the Caribbean increased by more than 1,180 TWh in about 40 years from 1971 to 2013 as a result of economic growth, and is expected to continue increasing at an annual rate of 2.4% through 2040. The region relies on fossil fuels for 74.3% of its energy sources. From the perspective of ensuring stable energy supply, environmental consideration. and reducing greenhouse emissions. gas diversification of energy sources, particularly promotion of renewable energy, has become more important. Promotion of energy efficiency is also an urgent issue from the viewpoint of environmental consideration and the balance of supply and demand of electricity. On the other hand, according to the World Bank's "State of Electricity Access Report 2017", developing countries, including the countries covered by this project, have been unable to promote energy conservation due to the government protection policies for their countries' own products and high initial costs. Furthermore,

introduction of renewable energy has been delayed due to such reasons as subsidies for natural resources and the underdeveloped finance market in the field.

(2) Japan and JICA's Cooperation Policy in the Energy Sector in the Region As one of the priority policies of the "Development Cooperation Charter (February 2015)", the Government of Japan has set forth "building a sustainable and resilient international community through efforts to address global challenges," in which it will work to create a low carbon society and tackle climate change. In addition, "the Priority Policy for Development Cooperation FY2018 (April 2018)" identifies climate change countermeasures as one of the priority issues in Latin America and the Caribbean countries, and the Government of Japan intends to provide cooperation and support in this area. JICA has also announced a policy to further expand its support for climate change measures to developing countries by making use of Japan's advanced and innovative technologies. In line with this policy, JICA and IDB signed a Framework Agreement on the "Co-financing for Renewable Energy and Energy Efficiency (CORE)" scheme in 2012 for Latin American and the Caribbean, and are aiming a target of 3 billion US dollars in Japanese ODA loans in this field by fiscal 2020. In terms of Private Sector Investment Finance, JICA approved this project's predecessor, Energy Efficiency and Renewable Energy Project¹ (Fund I) in 2014. The investment to the second fund aims to expand JICA's activities both within and outside the region.

3. Project Description

(1) Project Objectives

The purpose of this project is to contribute to measures against climate change, sustainable economic growth and reduction of greenhouse gas emissions, by financing energy efficiency and renewable energy projects in developing regions, mainly in Latin America and the Caribbean.

(2) Project site: Developing regions mainly in Latin America and the Caribbean

(3) Project Description

(1) Amount of investment: 30 million US dollars (15% stake if the total fund size is

¹ Invested in MGM Sustainable Energy Fund L.P. (hereinafter referred to as "Fund I"), which was the preceding fund of this fund.

200 million dollar)

② Project Plan Overview:

As a limited partner (LP), JICA invests in the fund that provides funding for energy efficiency and renewable energy projects utilizing low-carbon technologies in developing regions, mainly in Latin America and the Caribbean.

- 3 Fund Manager: MGM Innova Capital II, LLC
- 4 Target Fund Size: 200 million US dollars
- (4) Schedule: The investment period is from March 2019 to March 2024. The fund existing period ends in March 2030.
- (5) Environmental and Social Consideration / Poverty Reduction / Social Development
 - 1) Environmental and Social Consideration
 - 1 Category: FI
 - ② Reasons for Categorization: Recipients of this project cannot be identified before JICA investment according to the JICA Guidelines for Environmental and Social Considerations (Promulgated in April 2010).
 - ③ In this project, the same provisions regarding environmental and social considerations as in Fund I are stipulated in the limited partnership agreement. In addition, the fund manager is required to comply with the JICA Guidelines for Environmental and Social Considerations (Promulgated in April 2010) and not to be involved in Category A projects.
 - 2) Cross-Cutting Issues: None in particular.
 - 3) Gender category: [Not applicable] Not applicable to gender Activities / Reason for Categorization:

The nature of the project makes it difficult to include gender initiatives.

- (6) Collaboration with Other Donors: Joint investment with donors such as IDB Lab, GEEREF, EIB, FMO, and BIO².
- (7) Other Important Issues: N/A

IDB Lab is an innovation laboratory of the Inter-American Development Bank. GEEREF: Global Energy Efficiency and Renewable Energy Fund. EIB: European Investment Bank. FMO: Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden N.V., BIO: Belgian Investment Company for Developing Countries

4. Targeted Outcomes

(1) Quantitative Effects

Operational Performance Indicators:

- Number of loans and investments (projects)
- Equity IRR
- Greenhouse gas reduction (tCO2)
- Renewable energy power generation (MWh)

(2) Qualitative Effects

The investment and financing from this fund is expected to promote spread of energy-saving products through increased awareness in the region of the necessity and importance of energy-saving products. In addition, this fund is expected to be a leading source of private funds and contribute to increased private investments, and accordingly, private investments in low-carbon technologies (Ex.: photovoltaic power generation, LED light, eco-home appliances, etc.) and measures against climate change (mitigation) will be promoted. Furthermore, promoting use of Japanese products that contribute to energy conservation through this fund is expected to stimulate business development of Japanese companies in the region in addition to contributing to measures against climate change.

5. Lessons Learned from Past Projects and Application to the Project

(1) Evaluation Results of Similar Cases:

Reasons of decrease in the return on the energy efficiency and renewable energy projects in Fund I would be delay in construction works and low financial leverage.

(2) Lessons Learned for This Project

Considering the assessment results of Fund I, this Fund will minimize decrease in return due to delay in construction works by transferring risks properly to customers and EPC³ contractors.

7. Evaluation Results

This project is consistent with the development issues and policy, and assistance policies of Japan and JICA in developing regions in Latin America and the Caribbean, and will surely contribute to SDGs Goal 7 (Affordable and clean energy) and Goal 13 (Climate action). Accordingly, there is a high need for JICA to support the implementation of this project.

³ Acronym of Engineering, Procurement, and Construction

8. Plan for Future Evaluation

- (1) Indicators to be Used
 As indicated in 4.(1).
- (2) Timing: Fund closure year (2030) (Schedule)

END