

Evaluation Report

2014-4

# **Evaluation on EDCF Energy Sector**

**The Export-Import Bank of Korea**

(Government Agency for EDCF)

**EDCF Evaluation Team**

(Evaluated by Korean Development Policy Study Association)

This evaluation was entrusted to  
*Korean Development Policy Study Association* by EDCF  
for the purpose of independent evaluation research.  
The opinion, findings and conclusion or recommendations  
expressed in this report are those of the external evaluator  
and do not necessarily reflect the view of EDCF.

## **1. Purpose of Evaluation**

- This evaluation is intended to provide EDCF with the performance overview of its energy sector assistance and recommendations to be used for developing energy sector strategies.

## **2. Evaluation Outline**

### **External Evaluators**

- KDPSA (Korea Development Policy Study Association)

### **Duration of Evaluation**

- 12<sup>nd</sup> June 2014 - 31<sup>st</sup> Oct 2014

### **Evaluation Method**

- 33 EDCF projects in the energy sector for 16 partner countries that were approved during the period of 1990–2013 were selected for the review.
- The energy sector was evaluated at the strategic level and at the project planning and implementation level (hereinafter “project level”). Both levels were analyzed to review the overall direction of EDCF's energy sector assistance.
  - Literature review, coding and content analysis, quantitative analysis, and portfolio analysis were conducted on the overall activities in the energy sector at the strategic level.
  - Seven out of 33 projects were selected for the analysis at the project level. The analysis was carried out using quantitative data analysis, literature review, on-site inspections, and interviews with stakeholders and experts.

### 3. Evaluation Results

#### Strategic Level Review

- The overall direction of EDCF energy sector assistance was well-aligned with the Korean ODA policy and international trends in energy aid.

#### Project Level Evaluation

- The results of the project level review suggested that overall performance of energy sector assistance was “successful” (3.33/4).

Phase	Criterion		Score	Rating
<b>Planning</b>	Relevance	<ul style="list-style-type: none"> <li>• Relevance to development needs of partner country</li> <li>• Alignment with the EDCF's assistance strategies</li> <li>• Adequacy of project design</li> <li>• Ownership of partner country</li> </ul>	3.3	Relevant
<b>Implementation</b>	Efficiency & Performance	<ul style="list-style-type: none"> <li>• Efficiency of project cost</li> <li>• Efficiency of project duration</li> <li>• Performance of partner country's project management</li> <li>• Performance of EDCF's project management</li> </ul>	2.88	Efficient
<b>Result</b>	Effectiveness	<ul style="list-style-type: none"> <li>• Targeted vs. achieved project output</li> <li>• Targeted vs. achieved project outcome</li> </ul>	3.61	Effective
	Impact	<ul style="list-style-type: none"> <li>• Socioeconomic impact</li> <li>• Impact on partner countries' energy sector development</li> <li>• Impact on economic cooperation between Korea and partner countries</li> </ul>	3.38	Influential
	Sustainability	<ul style="list-style-type: none"> <li>• Technical sustainability (Human resources, maintenance system, etc.)</li> <li>• Financial sustainability</li> </ul>	3.47	Likely Sustainable
<b>Overall</b>	-	-	<b>3.33</b>	-

## **4. Lessons Learned and Recommendations**

### **[Lessons Learned]**

#### **Success Factors**

- EDCF projects were well-aligned with EDCF's support policy and international trends in energy aid.
- Most of EDCF projects were relevant to the development needs of partner countries, which contributed to effective economic development.
- EDCF's effective management of the projects was key to achieving intended output and outcome.

#### **Limitations**

- Relatively small sizes of EDCF projects reduce the effectiveness of EDCF assistance in the energy sector.
- EDCF needs to incorporate issues such as energy poverty into project selection and design.
- There was no specific key performance indicator for the project designed before 2007. The absence of indicators made the result-based management difficult.

## **[Recommendations]**

### **Secure Financial Resources and Strengthen the Impact of EDCF Assistance by Expanding Public-Private Partnership (PPP) in the Energy Sector**

- As previously stated, EDCF projects need to be scaled up to have a bigger impact.
- Expanding PPP projects would be one solution for overcoming the financial limitations by enabling EDCF not only to use the expertise of the private sector but also to share financial burden and risks with them.

### **Implement Joint Projects with Other Donor Agencies**

- Implementing joint projects with other donor agencies can improve aid harmonization, enhance development effectiveness and ease budget constraints. It can also contribute to improving the efficiency and effectiveness of the projects that need regional cooperation.

### **Increase Support for Energy Efficiency Optimization**

- One of the trends in energy aid is optimizing energy efficiency which can improve energy security and reduce greenhouse gas emissions. It is also important for the economic development in developing countries since higher energy efficiency can cut energy costs, which, in turn, lowers production costs that generate price benefits.

### **Expand Support for Renewable Energy**

- Support for renewable energy can yield high impact even with a relatively small budget. EDCF should consider increasing support for renewable energy which has been steadily increasing in the international development community.

**Contribute to Poverty Reduction by Addressing Energy Poverty**

- To reduce energy poverty and be in line with international aid trends, it is recommended that EDCF promote more inclusive project designs for the vulnerable population when designing its projects. It is also recommended that EDCF's loans be linked with other grant projects so as to improve their energy access.

**Set Outcome Indicators for Renewable Energy Sub-sector**

- EDCF has outcome indicators for transmission and distribution projects. However, these indicators cannot sufficiently capture the performance of a renewable energy project since it has different characteristics from transmission and distribution projects. Thus, it is recommended that appropriate outcome indicators be selected for renewable energy support.