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Green Financing for Approaching towards Sustainable Energy Development in Bangladesh

Khanam Marzia, ^{1,2} Takahiko Miyazaki, ^{1,3} Bidyut Baran Saha³, Shigeru Koyama^{1,3}

¹*Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, Japan*

²*Green Asia Education Center, Kyushu University, Japan*

³*International Institute for Carbon-Neutral Energy Research, Kyushu University, Japan*

Abstract

Green financing is a crucial factor to approach towards sustainable energy development in any country. In a developing country like Bangladesh, it plays more vital role. In this article, present status of green financing and available financing schemes in Renewable Energy (RE) and Energy Efficiency (EE) sector in Bangladesh has been described. Besides, potential green financing schemes which can be learned from different countries have been discussed and finally some measures are proposed as well for the promotion of green/renewable energy finance in Bangladesh.

1. Introduction

Green finance is a broad term that can refer to financial investments flowing into sustainable development projects and initiatives, environmental products, and policies that encourage the development of a more sustainable economy. Among the developing countries, Bangladesh has its own share of success, especially through Solar Home System (SHS), impacting life of millions who are at the bottom of the pyramid. In the year of 2014, global financing for RE and EE in the developing countries and the developed countries were almost equal with the first group attracting \$131.3 billion and the second group \$138.9 billion. To achieve high economic growth as envisaged in the five-year plan, the government of Bangladesh has prioritized power sector development in a sustained manner.

2. Green Financing in Bangladesh

2.1. Green RE Financing Landscape

In order to ensure energy access to the rural households, government under Infrastructure Development Company Limited (IDCOL) installed 3.6 million SHS in the off-grid rural areas till March 2015. IDCOL has taken a target to finance another 6 million SHS with an estimated generation capacity of 220 MW of electricity within 2017.

Green Banking and Corporate Social Responsibility (CSR) department was established on April 04, 2013 with a view to develop sustainable banking (i.e. green banking, CSR and financial inclusion) framework and to integrate it into core business operation of banks and financial institutions. Bangladesh Bank (BB)

launched BDT 2.0 billion green banking refinance scheme in August 3, 2009 to fund renewable energy projects in the country. 1.64 billion BDT has been refinanced from this fund up to November 2014. Many commercial banks have signed an agreement with BB to disburse the environmental friendly loan.

2.2. Available Financing Schemes in RE & EE Sector

2.2.1. IDCOL'S RE financing Scheme & Programs

Apart from IDCOL's most successful SHS program, this reputed government financial institutions so far introduced many refinancing scheme and concerted programs to diversify the RE installations. The lending terms of all these different schemes are as follows:

Solar Home System (SHS) Program:

Under IDCOL SHS Program, IDCOL does not provide any loan directly to the end users. All loans are being channeled through the Participating Organizations (POs). The total loan amount will be up to 70% to 80% of POs loans to households for a tenure including grace of 5 to 7 years with a range of 6% to 9% per annum interest rate.

Domestic Biogas Program:

Like the SHS program, IDCOL does not give loan to the end users directly in this program also. In this case loans will be provided through the POs. The maximum total loan can be 80% of the POs loans to the households for tenure of 7 years where 1 year will be grace period with 6% per annum interest rate.

Solar Irrigation Projects:

The total loan amount for the solar irrigation

projects will be up to 50% of the project cost for a tenure of 8 years including up to 1 year grace period with a range of 6% per annum interest rate.

Solar Mini /Micro Grid Projects:

In case of solar mini/micro grid projects, the total loan amount will be not more than 40% of the project cost for a tenure of 10 years with 2 years grace period and 6% per annum interest rate.

Biogas-based Power Projects:

The total loan amount for the biogas-based power projects will be 80% of the project cost for a tenure of up to 8 years with 1 year grace period and 6% to 9% per annum interest rate.

Biomass-based Power Projects:

60% of the project cost will be the total loan amount for the biogas-based power projects where a tenure is maximum 8 years including up to 1-year grace period with a range of 6% per annum interest rate.

Other Renewable Energy Projects:

The lending terms for other solar/wind/hydro/ other renewable energy projects i.e. solar diesel hybrid solution for base transceiver stations, solar-powered transportation, rooftop solar system, solar cold storage and dryers, battery charging stations, community biogas projects etc. will be up to 80% of the project cost for a tenure of up to 10 years including up to 2 years grace period with a range of 6%–10% per annum interest rate.

2.2.2. Bangladesh Bank (BB) Refinancing Scheme

The central bank launched the BDT 2 billion green banking refinance scheme in August 2009. Under the scheme, BB is providing loans to commercial banks at interest rates from 5% to 12% for direct refinancing and credit wholesale to the entrepreneurs, who will then have access to commercial bank loans in those sectors at a maximum interest rate of a further 5%. Overall interest rates will not exceed 12%, according to the fund's conditions.

3. Potential financial mechanisms for RE

To promote green RE financing, some of the following innovative schemes can be of handy choice for Bangladesh Green bonds or climate bonds- asset-backed bonds that allow refinancing of RE projects and thus increase liquidity. Debt funds- allow tapping of long-term, low cost debt from insurance and pension funds. Off grid fund-financed by CSR and high-net worth individual sources.

Risk insurance instruments- designed to cover the various risks faced by RE projects, such as resource, technology, off-taker, power purchase agreement, project development risks and so on.

The above mentioned mechanisms have been

successfully implemented in many countries. These mechanisms can really spur RE investment by catalyzing new sources of financing such as pension funds, sovereign wealth funds, insurance companies and CSR funds.

4. Promoting Green Finance

Green Financing framework must be tailored to the local context, combining a supportive and transparent regulatory framework with targeted government interventions. The following measures can be taken to boost RE escalation under BB's existing green refinancing scheme:

- i) Present disbursement status in RE project is not reached up to a satisfactory level, simplification in loan due-diligence and collateral allocation can boost RE financing
- ii) Standardizing RE financing package can reduce ad hoc and variance for RE project due diligence procedure and can effectively address issues like credit linkage, risk exposure and repayment uncertainty.
- iii) RE financing not to be restricted/link to single borrower exposure limit which already in practice for conventional power plant project.
- iv) BB can increase the frequency of re-financing disbursement for financial institutions and align with RE project/program need.
- v) BB has the legal power to shape the behavior of the banks, it will have to motivate all the commercial banks to implement green banking policy to curb its own environmental pollution, giving loans to environmentally friendly projects and reducing investment in environmentally harmful projects.
- vi) Commercial banks should be encouraged to provide financial support to the potential off grid projects.

5. Conclusions

Government has set ambitious renewable energy goal of harnessing 500 MW by 2016 and 10% of total generation by 2021. It has done reasonably well so far, where total installed capacity of RE is 167 MW and many hefty projects are in the pipeline to follow. Green financing Schemes of Bangladesh can be a model for all other developing countries. However, proposed measures and mentioned potential financial mechanisms can be followed for approaching towards sustainable energy development in Bangladesh.

Reference

- [1] Infrastructure Development Company Limited (IDCOL), <http://idcol.org/>.
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Email: marzia@phase.cm.kyushu-u.ac.jp