

Project Summary

Project Overview	
Project Name	Lingang Distributed Solar Power Project
Country	The People's Republic of China
Sector	Renewable Energy; Sustainable Development
Approval Date (by the Board)	April 13, 2016
Closing Date	December 21, 2019
Total Project Cost	RMB 750.0 Million
Loan Amount	RMB 525.0 Million
Borrower	The People's Republic of China
Implementation Agency	Shanghai Lingang Hongbo New Energy Development Co. Ltd.

I. Introduction

Global energy markets are transitioning to cleaner, lower carbon fuels, driven by environmental concerns and technological advances. China is the leading country to drive this agenda forward, as the country moves to a more sustainable pattern of growth. With the plan to significantly raise the share of renewables in the energy mix, China aims to increase the share of non-fossil fuel energy to 15% of its primary energy consumption by 2020. The National Energy Administration established the development goal of 50 GW for solar power by 2020. In this context, the Lingang Distributed Solar Power Project is designed, supported by roof-top solar power technology advancements. The project is in alignment with New Development Bank's (NDB) objective to accelerate green financing and promote clean energy development.

II. Project Description

The objective of the project is to reduce carbon emission and promote renewable energy development, through using roof-top solar photovoltaic power technology to generate electricity in Shanghai Lingang Industrial Area (SLIA). The project aims to reduce 73,000 tons of carbon emission per year, providing electricity generated through 100 MW roof-top solar photovoltaic power with 1,155 effective generation hours per year. With the benefits from near point electricity generation, the project helps save the costs of potential transmission losses from importing electricity from provinces outside Shanghai.

The project will be divided into more than 30 sub-projects, sequentially implemented over a 3-year period. 3MW onsite pilot project has been successfully implemented to prove the concept. Electricity generated by the roof-top solar photovoltaic power will be sold to SLIA and the state grid.

III. Environmental and Social Aspects

The project contributes to a lower carbon environment. It aligns with NDB's primary focus to support projects that aim at developing renewable energy sources. The project is estimated to reduce carbon dioxide emissions by approximately 73,000 tons per year and NOx emissions by 1,300 tons per year. The project will save gas consumption by 23,000 tons per year and save coal consumption by about 32,000 tons per year.

Other environmental and social aspects include the usage of toxic materials during the production of solar PV cells and the disposal of solar PV panels at the end of their productive life. These two concerns shall be addressed by PIA through usage of nontoxic materials and environmentally friendly disposal and recycling of solar PV modules at the end of their productive life. The project will not have resettlement issues as all solar panels will be installed on existing rooftops.

IV. Financials

The overall cost of the project is estimated to be RMB 750.0 million over a 3-year period. The proposed financing plan includes a loan of RMB 525.0 million from NDB and RMB 225 million financed by Lingang Group.

Financier	Amount (¥ million)
New Development Bank	525.0
Lingang Group	225.0

V. Implementation

The project is estimated to be implemented over 3 years between 2017 and 2019. Suppliers for the project will be selected through a competitive and transparent bidding process.



The loan will be repayable in 28 structured semi-annual installments over 14 years, starting from 2019.

VI. Contact

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