

GREEN BOND FRAMEWORK

of

SHANGHAI PUDONG DEVELOPMENT BANK ("SPDB")

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SPDB Green Bond Framework

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1. Background

Shanghai Pudong Development Bank ("SPDB" or the "Bank") is a joint stock commercial bank with nationwide presence, founded in 1993. Just 26 years later, it is ranked the 24th place among the "Top 1,000 Global Banks" in 2019 by *The Banker* and the 216th place among the "Fortune Global 500" in 2019. The Bank upholds the core values of "Practising integrity and striving for excellence", and remains committed to innovative development and serving the real economy. While supporting and benefiting from the rapid development of the Chinese economy, SPDB has made the substantive leaps forward from a small-to-medium bank to a medium-to-large bank, and from a traditional commercial bank who merely served as a fund intermediary to a financial group capable of rendering a full package of financial services.

SPDB is fully committed to corporate citizenship and fulfilling its social responsibility. Over the years, SPDB received several awards granted by the China Banking Association, such as *Excellent Charity Project of the Year*, *Best CSR Green Finance of the Year* and *Best Outlet for Special CSR Contribution of the Year*, to name but a few.

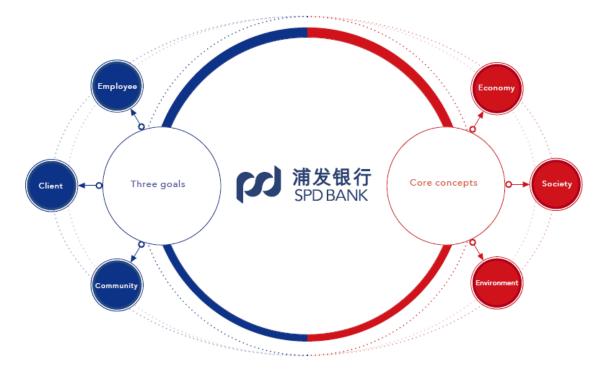
Three Goals and Core Concepts

SPDB deems corporate social responsibility as an organic constitute of its culture, brand and core competitive edge. SPDB is actively enforcing its responsibilities towards the economy, the society and the environment, and is dedicated to growing into a respectable listed bank.

Economic responsibility: SPDB is dedicated to legitimate integrity, and continuous value creation for our shareholders.

Social responsibility: SPDB is dedicated to improve welfare of our staff, clients, the community and other stakeholders.

Environmental responsibility: SPDB is committed to actively tackle and avert environmental risks; to continuously make green financial innovation; to build a low-carbon green bank, and to pursue sustainable development.



SPDB's Commitment and Strategy in Green Finance

The Bank has been actively expanding its green credit business and supporting the environmental protection industry. As the first bank in China to issue a corporate social responsibility report since 2006, SPDB officially started to disburse green loans in 2008 and has since enhanced credit-granting towards the low-carbon and circular economy. As of the end of 2018, the Bank's green credit balance has exceeded RMB 210 billion, contributing to an estimated annual reduction of 1.5 million tonnes of coal consumption, nearly 4 million tonnes of carbon dioxide emission reduced or avoided, and almost 250 thousand tonnes of water savings.

SPDB continues to encourage green finance innovation; strengthen linkage with external institutions; conduct regular training on green credit; deepen the development of green finance and support the transition to green and low-carbon economies. In 2016, the Bank has become the first Chinese financial institutions to issue a green bond, with an accumulative issuance size of RMB 50 billion, and has served nearly 600 corporate customers. Meanwhile, SPDB serves as a Director in the Green Finance Committee of the China Society for Finance and Banking, to contribute to the steering of market governance and policy-making in green finance. The Bank also contributed to the publication "Carbon Finance Guide" for the design and implementation of carbon emission trading in China.

As such, SPDB is well-recognized as a green bank, reflected by multiple international and domestic green awards. For example, the Bank has received the *Largest Green Bond Issuer Award* by the Climate Bonds Initiatives ("CBI") in early 2017, and the *Best Green Finance Award for Social Responsibility* for two consecutive years in 2017 and 2018 by the China Banking Association, the *Best Green Bond Bank* by Asiamoney, and the *Best Green Bank Award* by CFO World Magazine.

Green Finance Management and Policies

SPDB incorporates environmental and social risks management into the all stages of the entire project financing process, and strictly implements the relevant policies for energy conservation, emission reduction, and environmental and social risk management. Meanwhile, the Bank constantly aims to optimize the environmental and social risk management and control standards to improve its capacity to tackle environmental and social risks.

SPDB actively supports environmental protection by appropriately tilting credit resources towards green loans. The Bank considers energy conservation and emission reduction as a major indicator in enterprise appraisal and prudently dealt with companies with high energy consumption, high discharge, resource consumption and output surplus. SPDB has been actively supporting small and medium-sized enterprises in sectors related to energy conservation and emission reduction. For clients which failed to satisfy standards for green credit, SPDB will initiate withdrawal.

2. SPDB's Green Bond Framework (the "Framework")

SPDB has established this Framework to lay out the mechanism which the Bank set forth to raise funds via the issuance of offshore green bonds, in order to finance and/or refinance projects with environmental benefits.

Each green bond and its use of proceeds will align with the ICMA's Green Bond Principles 2018 (the "GBP")¹.

The Framework contains the key components of: (i) Use of Proceeds, (ii) Process for Project Evaluation and Selection, (iii) Management of Proceeds, and (iv) Reporting.

2.1 Use of Proceeds

The proceeds from any green bonds issued under this Framework (the "**Proceeds**") will be used to finance and/ or refinance loans in assets or projects that fall under the following eligible green asset categories:

2.1.1 Eligible Green Asset Categories

Eligible green asset categories	Description	UN Sustainable Development Goals ("UNSDGs") Alignment ²
Energy Conservation and Energy Efficiency	 Projects for industrial and building energy efficiency and energy efficiency improvement, including energy management centers and energy-efficient infrastructure construction projects 	9 state of contraction 9 stat
Renewable Energy	 Construction of solar photovoltaic energy, solar heat utilization, wind energy, small hydro³ generation facilities Transmission infrastructure wholly dedicated to renewable such as construction of transmission network and supporting infrastructure such as energy storage systems and inverters 	8 BUSINESSAN 9 MUTERIORISMS 11 BUSINESSAN 12 ENGINEERS 13 SURF

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 $^{^{1}\,\}underline{\text{https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/}$

² Please refer to this link for full mapping by ICMA: https://www.icmagroup.org/green-social-and-sustainability-bonds/mapping-to-the-sustainable-development-goals/

³ Installed capacity must be equal to or less than 20MW

Clean Transportation	 Purchase and construction of infrastructure related to electrified railway, urban rail transit, and other types of electrified transportation, such as public electric buses and electric taxis 	11 REGISTRATION OF THE PROPERTY OF THE PROPERT
Sustainable Water and Wastewater Management	 Project related to sewage treatment, river training, flood control and water conservation 	6 MANAGEMENT 11 SECRETARY CONTROL TO ACCOMMENTS 12 SECRETARY SECR
Green Buildings	 New constructions or major renovation of existing buildings which obtained or expect to obtain green building certifications of the below: Chinese Green Building Evaluation Label - 3 Stars LEED Gold or above 	11 SECREMENTS ASSESSMENTS
Environmentally sustainable management of living natural resources and land use	The preservation, restoration of natural landscapes including the designing and building of green landscapes, ecological parks and ecological function areas, etc.	13 direct 14 lift schements 15 lift lift lift lift lift lift lift lift

2.1.2 Exclusionary Criteria

SPDB commits that any activities, assets and technologies related to the below will be excluded from Eligible Green Assets:

- Fossil fuels related assets, such as any efficiency upgrades to clean coal technology;
- Mining and quarrying;
- Nuclear fuels related assets;
- Hazardous chemicals and radioactive substance; and
- Palm oil related assets.

2.2 Process for Project Evaluation and Selection

Eligible Green Assets will first be identified and selected by frontline credit departments of various branches, using this Framework as the primary selection guideline. The preliminary asset list will be

proposed to the green financial product managers⁴ of various branches for vetting, and will be submitted to the investment banking division of the SPDB head office for final screening.

The investment banking division of the SPDB head office will review the preliminary asset list, and subject to availability of information, the relevant environmental impact assessment reports, the environmental and social data on the feasibility reports, and the relevant certifications for each proposed project.

Then, the investment banking division of the SPDB head office will form a final list of eligible asset ("Eligible Asset List") and inform the branches to "green-tag" the projects in the Eligible Asset List. The process of granting green credit would be carried out in accordance with the relevant provisions of the Bank's existing credit approval process.

The various branches are responsible to monitor the status of each project to ensure alignment with the framework. The head office will also conduct review and checking on the Eligible Green Assets financed through sampling. SPDB will remove and replace projects that are no longer eligible, on a timely basis.

2.3 Management of Proceeds

SPDB will establish an independent register (the "**Register**") to record the allocation of the Proceeds. The Proceeds will be deposited in general funding accounts and tracked through a formal internal process to ensure the link of the Proceeds to the Eligible Green Assets.

SPDB shall fully allocate the Proceeds to Eligible Green Asset within 24 months after issuance.

Any temporarily unallocated balance of Proceeds will be invested in money market instruments with good credit ratings and market liquidity, and SPDB commits to avoid investing in any high-polluting and resource-intensive related activities.

2.4 Reporting

On an annual basis until full allocation, and on a timely basis upon material changes in proceeds allocation, SPDB commits to publish reporting related to its green bonds (the "Report"), providing information on the allocation and the environmental impacts of the Proceeds as follows:

2.4.1 Allocation reporting

SPDB will report the allocation of proceeds, including the total amount of Proceeds allocated to Eligible Green Assets Category and the amount of unallocated Proceeds. Subject to confidentiality disclosures, SPDB may provide some project examples.

2.4.2 Impact reporting

SPDB commits to provide impact reporting to demonstrate the expected environmental benefits of the Eligible Green Assets financed. The impact indicators, evaluation methods and key assumptions

⁴ The green financial product managers have environmental expertise, by regularly attending relevant trainings.

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will be described in the Report. Some potential impact indicators by Eligible Green Asset Category are as follows:

Eligible Green Asset Category	Potential environmental impact indicators
Energy Conservation and Energy Efficiency	 CO₂ (or other GHG) avoided (tonnes) Annual energy savings
Renewable Energy	 CO₂ (or other GHG) avoided (tonnes) Installed capacity (MW) Net on-grid power generated (kWh)
Clean Transportation	 Length of tracks built or maintained in case of infrastructure Capacity of passengers CO₂ (or other GHG) avoided (tonnes)
Sustainable Water and Wastewater Management	 Wastewater treatment capacity (m³/day) Water use savings (m³) Improvement in capacity to withstand flood
Green Building	 Energy consumption reduced per square foot CO₂ (or other GHG) avoided (tonnes)
Environmentally sustainable management of living natural resources and land use	 Additional green area (m²) Number of ecological parks / areas built Number of protected species

3. External Review

SPDB has engaged Sustainalytics to review this Framework and provide Second Party Opinion. Sustainalytics has provided a positive Second Party Opinion assuring the alignment with the GBP.

In addition, the green bonds issued by SPDB under this Framework can be certified by the Climate Bonds Initiative (CBI) in accordance with the Climate Bond Standard.

The relevant external review reports will be made publicly available via annual updates on SPDB's official website.

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