



Qingdao Jiaozhou Bay Development Group Co., Ltd.

Second-Party Opinion | Sustainable Finance Framework

Report Type

Sustainable Finance
Framework Second-Party
Opinion

Analytical Standards

- » Green Bond Principles (GBP) (June 2021 Edition)
- » Social Bond Principles (SBP) (June 2023 Edition)
- » Sustainability Bond Guidelines (SBG) (June 2021 Edition)
- » Green Loan Principles (GLP) (February 2023 Edition)
- » Social Loan Principles (SLP) (February 2023 Edition)
- » United Nations Sustainable Development Goals (SDGs)

Industry

Local Investment and
Development Companies

Country/Region

China

Report Date

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Contacts

Chakki Ting, CESGA®
Associate
+852 3596 3037
chakki.ting@lianhegreen.com

Polex Lam, CESGA® CEnv

Managing Director
+852 3596 3026
polex.lam@lianhegreen.com

Summary

Lianhe Green Development Company Limited ("Lianhe Green") has reviewed a series of documents including the "Sustainable Finance Framework of Qingdao Jiaozhou Bay Development Group Co., Ltd.", and assessed the company's relevant work in respect of the use of proceeds, project evaluation and selection process, management of proceeds, reporting, and external review. The Group's Sustainable Finance Framework has received a "Complete" assessment opinion from Lianhe Green. Lianhe Green considers that the Framework is in compliance with the Sustainability Bond Guidelines (SBG) (June 2021 Edition), the Green Bond Principles (GBP) (June 2021 Edition), the Green Loan Principles (GLP) (February 2023 Edition), the Social Bond Principles (SBP) (June 2023 Edition), and the Social Loan Principles (SLP) (February 2023 Edition). In addition, the eligible green projects listed in this Framework are in line with the Green Bond Principles (GBP) (June 2021 Edition), the Green Loan Principles (GLP) (February 2023 Edition), and the United Nations Sustainable Development Goals (SDGs); the eligible social projects listed in this Framework are in line with the Social Bond Principles (SBP) (June 2023 Edition), the Social Loan Principles (SLP) (February 2023 Edition), and the United Nations Sustainable Development Goals (SDGs).

About the Company

Qingdao Jiaozhou Bay Development Group Co., Ltd. (hereinafter referred to as "Jiaozhou Bay Development" or "Group") was established in November 2007. In December 2018, it was approved by the Municipal State-owned Assets Supervision and Administration Commission to be 100% owned by Jiaozhou State-owned Assets Service Center. In January 2019, the registered capital was increased to 2 billion yuan. In July 2022, according to the Reply of Jiaozhou State-owned Assets Supervision and Administration Commission on Transferring 100% Equity of Qingdao Jiaozhou Bay Development Group Co., Ltd. and Other Four Companies issued by Jiaozhou State-owned Assets Supervision and Administration Commission, the shareholders of the Group agreed to transfer 100% equity of Qingdao Jiaozhou Bay Development Group Co., Ltd. held by Jiaozhou State-owned Assets Service Center to Qingdao Shanghe Holding Development Group Co., Ltd., and completed the change registration of Jiaozhou Administrative Approval Service Bureau in August 2022. After the equity transfer, the controlling shareholder of the company was changed to Qingdao Shanghe Holding Development Group Co., Ltd., which holds 100% equity of the company. Qingdao Shanghe Holding Development Group Co., Ltd. is a wholly state-owned company 100% owned by Jiaozhou State-owned Assets Service Center. It currently has a registered capital of 20 billion yuan. It is 100% owned by Jiaozhou State-owned Assets Service Center, and the actual controller is The Management Committee of the China-Shanghai Cooperation Organization (SCO) Local Economic and Trade Cooperation Demonstration Zone.

The group mainly serves the development and construction of Jiaozhou City and the SCO demonstration zone, and is the core platform and main infrastructure construction entity of the SCO demonstration zone. Since its establishment, with the strong support of the Jiaozhou Municipal



Party Committee and Municipal Government, the group's business scale and operational strength have continued to grow, and it has played an important role in infrastructure construction, real estate development, property leasing industry, and has good prospects for domestic and foreign trade, industrial investment and equity operation, and cultural tourism investment business.

About the Framework of Jiaozhou Bay Development

Jiaozhou Bay Development has prepared the Sustainable Finance Framework for Qingdao Jiaozhou Bay Development Group Co., Ltd. (hereinafter referred to as the "Framework"), which is intended to provide overarching principles and guidelines for all sustainable financing opportunities for Jiaozhou Bay Development.

The green bonds, social bonds, sustainability bonds, green loans, social loans, sustainability loans or other debt-like financing issued under the Framework will comply with the International Capital Market Association's (ICMA's) Sustainability Bond Guidelines (SBG) (June 2021 Edition), Green Bond Principles (GBP) (June 2021 Edition), and Social Bond Principles (SBP) (June 2023 Edition), as well as the Green Loan Principles (GLP) (February 2023 Edition) and the Social Loan Principles (SLP) (February 2023 Edition) published by the Loan Market Association (LMA), the Loan Syndications and Trading Association (LSTA) and the Asia-Pacific Loan Market Association (APLMA).

In this Second-Party Opinion, Lianhe Green has specifically examined the Framework but has not reviewed any transaction-specific legal documents or marketing materials. Nevertheless, the framework does provide a description of the qualifying projects as described in the legal documentation of the framework.

This framework addresses the five pillars including use of proceeds, project evaluation and selection, management of proceeds, reporting, and external review.

A. Use of Proceeds

Company Materials

the group will allocate at least the equivalent to the net proceeds of the bonds issued under this framework to finance, in whole or in part, green projects and/or social projects that meet the eligibility criteria of the following eligible green projects and/or social projects categories.

The criteria for the "qualified green projects and/or social projects" are as follows:

Eligible Green Project Category	Qualified Green Projects
Green Buildings	<p>Buildings must meet regionally, nationally, or internationally recognized green building standards or certifications, including but not limited to the following:</p> <ul style="list-style-type: none"> ✓ China Green Building Evaluation Label (2 stars or above) ✓ U.S. Leadership in Energy and Environmental Design (LEED) (Gold or above) ✓ Hong Kong BEAM (Gold or above) ✓ Building Research Establishment Environmental Assessment Method (BREEAM) (Very Good or above) ✓ Any other green building certification with the same standard as the above



Eligible Social Project Category	Qualified Social Projects
<p>Affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transport, energy)</p>	<p>Develop quality, reliable, sustainable infrastructure, including regional and transborder infrastructure, to support economic development and human well-being:</p> <ul style="list-style-type: none"> - It will improve the traffic conditions in the surrounding areas, facilitate the input and output of production materials, create conditions for the development of enterprises on the plot, improve the investment environment in the project area, and promote the development and utilisation of land along the project and industrial upgrading. - It brings convenience to the travel of residents and enterprise employees along the line, and provides great convenience for people's lives.

The Group follows the IFC exclusion list. It is prohibited to use funds raised through sustainable finance tools for the following related projects or portfolios:

- 1) Businesses that are prohibited by Chinese laws and regulations, such as child labor, gambling, adult entertainment, and businesses associated with illegal activities;
- 2) Luxury goods industry, such as precious metals, precious artworks, antiques, and golf course services;
- 3) Production of tobacco and tobacco products;
- 4) Hydroelectric power generation with installed capacity greater than 20MW;
- 5) Mining, quarrying and chemical fuel related assets
- 6) Nuclear fuel
- 7) Weapons and ammunition
- 8) Military vehicle leasing and operation
- 9) Activities related to hazardous chemicals and radioactive substances
- 10) Fossil fuel-related assets and activities, except for sustainable maritime transport as defined in the framework

Opinion of Lianhe Green

Lianhe Green has reviewed a number of documents, including the Framework, and has conducted a comprehensive review of Jiaozhou Bay Development's policy.

Lianhe Green compared the green project categories listed in this framework with the Green Bond Principles (GBP) (June 2021 Edition), the Green Loan Principles (GLP) (February 2023 Edition), China's Green Bond Endorsed Projects Catalogue (2021 Edition), Hong Kong Taxonomy, EU Taxonomy and the United Nations Sustainable Development Goals (SDGs) respectively. Besides, Lianhe Green also has compared the eligible social projects listed in this framework with the Social Bond Principles (SBP) (June 2023 Edition), Social Loan Principles (SLP) (February 2023 Edition), and the United Nations Sustainable Development Goals (SDGs).

1) Eligible Green Projects: Green Buildings

Eligible Green Projects

Buildings must meet regionally, nationally, or internationally recognized green building standards or certifications, including but not limited to the following:

- ✓ China Green Building Evaluation Label (2 stars or above)



- ✓ U.S. Leadership in Energy and Environmental Design (LEED) (Gold or above)
- ✓ Hong Kong BEAM (Gold or above)
- ✓ Building Research Establishment Environmental Assessment Method (BREEAM) (Very Good or above)
- ✓ Any other green building certification with the same standard as the above

Green Standards

- » GBP: Green buildings that meet regional, national or internationally recognised standards or certifications for environmental performance;
- » GLP: Green buildings that meet regional, national or internationally recognised standards or certifications for environmental performance;
- » SDGs: Goal 11 - Sustainable Cities and Communities.

Lianhe Green Findings / Suggestions

In recent years, Qingdao has actively [implemented](#) the national carbon peak and carbon neutral major decisions and deployments, creating green ecological urban areas (towns), cultivating green building industrial parks and other measures. It has successively issued the "Qingdao Green Building and Ultra-low Energy Building Development Plan (2021-2025)" and "Qingdao 14th Five-Year Plan" Building Energy Conservation and Green Building Development Plan. "Qingdao Green Building and Ultra-low Energy Building Development Special Plan (2021-2025)" is the first city-level plan based on the 2019 edition of green building evaluation standards, and won the national construction industry scientific and technological achievements and provincial construction scientific and technological innovation achievements. The "Qingdao Action Plan to Promote the Creation of Green Buildings" was issued to clarify the star-rating standards for various types of buildings. The "Notice on Further Standardizing the Management of Green Building Signs in Qingdao" was Issued to guide the large-scale development of star-rated green buildings. The Technical Guidelines for the Construction of Green and Ecological Urban Areas (towns) in Qingdao were issued, and the creation of green and ecological urban areas was carried out, with five green and ecological urban areas and two green and ecological towns being created in the first batch.

In December 2023, the Ministry of Housing and Urban-Rural Development [mentioned](#) that in September 2023, the Qingdao green city construction and development pilot successfully passed the assessment of the expert group led by Cui Kai, an academician of the Chinese Academy of Engineering. As of October 2023, the city has built 127 million square meters of green buildings, 190 green building star sign buildings, with a total area of 22.64 million square meters. The T1 terminal of Qingdao Jiaodong International Airport and the T2 tower of Qingdao Haitian Center have become the first three-star green building identification projects in 2023. The city will accelerate major leading projects in the Shanghai Cooperation Demonstration Zone, start construction of the Shanghai Cooperation Energy Island clean energy supply project with a total investment of 626 million yuan and the Shanghai Ruyi Lake landscape project with a total investment of 1.566 billion yuan, and promote the cluster development of related green industries.

Lianhe Green is in view that this type of project meets the "5. Sustainable Upgrade of Infrastructure - 5.2 Sustainable Buildings - 5.2.1 Energy-Saving Buildings and Green Buildings - 5.2.1.2 Green Buildings" under the Green Bond Endorsed Projects Catalogue (2021 Edition).

Lianhe Green considers the criteria for the construction of new commercial and residential buildings in Hong Kong is partially aligned with the Hong Kong Taxonomy's criteria for BEAM Plus certification to gold or above. However, the Hong Kong Taxonomy has additional thresholds



regarding the Energy Use component of the BEAM Plus certification, including minimum credits under the EU2 (Reduction of CO2 Emissions) and minimum scores in the Energy Use category, as well as minimum energy savings percentages against the relevant BEC baselines.

Lianhe Green generally considers these types of projects to positively contribute to the environment, as the construction of new buildings and renovation of existing buildings are included in the EU taxonomy. However, the EU taxonomy focuses on specific energy performance indicators rather than green building certification scheme. Information relevant to EU taxonomy's substantial contribution criteria will be required after project commencement or completion to determine EU taxonomy eligibility, in Lianhe Green's opinion.

2) Eligible Social Projects: Affordable Basic Infrastructure

Eligible Social Projects

Develop quality, reliable, sustainable infrastructure, including regional and transborder infrastructure, to support economic development and human well-being:

- It will improve the traffic conditions in the surrounding areas, facilitate the input and output of production materials, create conditions for the development of enterprises on the plot, improve the investment environment in the project area, and promote the development and utilisation of land along the project and industrial upgrading.
- It brings convenience to the travel of residents and enterprise employees along the line, and provides great convenience for people's lives.

Social Standards

- » SBP: Affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transport, energy);
- » SLP: Affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transport, energy);
- » SDGs: Goal 9 – Industry, innovation and infrastructure.

Lianhe Green Findings / Suggestions

In May 2022, The Qingdao government [published](#) the "Notice on issuing the 14th Five-Year Plan for Transportation Construction and Development of Qingdao West Coast New Area". The notice mentioned a preliminary study of Jiaozhou Bay cross-sea railway will be carried out, and it plans to build an expressway connecting Jiaozhou Bay and Airport. It also aims to conduct preliminary studies on the high-speed railway from Qingdao to Rizhao and the cross-sea railway from Jiaozhou Bay.

Lianhe Green generally considers these types of projects to positively contribute to society. Such projects enhance traffic conditions in the vicinity, streamlining material flow, and fostering enterprise growth on the site will improve the investment climate and promote land development and industrial progress. For residents and employees, it offers significant travel convenience along the route, enhancing overall quality of life.

B. Project Evaluation and Selection Process



Company Materials

The purpose of project evaluation and screening is to ensure that the proceeds obtained through sustainable finance tools are allocated to projects that meet the criteria listed in the "Use of Raised Funds" section. The specific evaluation and screening process is as follows:

- 1) The Group Investment Department will propose a preliminary plan for new project investment based on actual internal and external conditions, and determine the direction and purpose of project investment after communicating with the leaders in charge of the Group Investment Department;
- 2) The leader in charge of the group investment department convened a meeting to discuss and provide opinions on the investment plan for the proposed investment project. The participating departments included the group investment department, the group project department, and the group finance department;
- 3) The Group Project Department implements the project according to the final draft of the investment plan;
- 4) The Group's Investment Department will review eligible green and/or social projects annually, conduct regular monitoring, examine potential vulnerabilities, and propose modifications in the shortest possible time. If it is found during the evaluation that the invested project no longer meets the requirements for eligible green and/or social projects, the Group will nominate a new project for review.

Opinion of Lianhe Green

Lianhe Green has reviewed the Framework and other series of documents, and Jiaozhou Bay Development's policies on project assessment and screening process.

Jiaozhou Bay Development has established a proper assessment process for the selection and identification of green and/or social projects, and at the same time, a proper communication system for project assessment and screening has been established, whereby the leader in charge of the group investment department convenes meeting to discuss and provide opinions on the investment plan for the proposed investment project with the group project department and group finance department.

After the assessment, Lianhe Green considers that Jiaozhou Bay Development has established a proper project assessment and screening system, which meets the requirements of the assessment criteria.

C. Management of Proceeds

Company Materials

The Group has a sound internal financial management system managing the direction and payment of funds for eligible green projects and/or social projects financing.

For the temporarily unallocated raised funds, it will not be used for other non-eligible green projects and/or social projects, and will comply with the relevant standards requirements of the



issuing location. It may be temporarily used for liquid money market instruments until allocated to eligible green projects and/or social projects.

The responsibilities of the Group's Finance Department are:

- Record the transaction date, transaction number, due date, interest or coupon, ISIN code, etc. of each financing
- Track the use of raised funds to ensure that the proceeds from each sustainable bond are allocated to eligible green projects and/or social projects
- Unused funds will be temporarily held in cash by the Group or allocated to money market instruments with good credit ratings and market liquidity

Opinion of Lianhe Green

Lianhe Green has reviewed a series of documents such as the Framework and Jiaozhou Bay Development's policies on the management of proceeds.

Jiaozhou Bay Development will not use the unallocated raised funds for other non-eligible green or social projects. In addition, the company will track the use of raised funds to ensure that the proceeds from each sustainable bond are allocated to eligible green and/or social projects.

Upon assessment, Lianhe Green considers that Jiaozhou Bay Development has established a proper system on the management of proceeds, which is in line with the requirements of the assessment criteria.

D. Reporting

Company Materials

During the existence of sustainable finance instruments, the Group is obliged to disclose the sustainable finance situation once a year, and the disclosure will be made by means of information disclosure in the Group's annual report. The disclosure information includes but is not limited to the status of project investment, project progress (planned, under construction and completed), use of raised funds, supervision of environmental impact, etc.

The indicators are:

Eligible Project Category	Impact Indicators
Green Buildings	<ul style="list-style-type: none"> • The number and type of green building certifications obtained • Obtained certification level
Affordable Basic Infrastructure	<ul style="list-style-type: none"> • The length of the road constructed (km) • Number of people living in project areas benefited • Number of people provided with basic service

Opinion of Lianhe Green



Lianhe Green has reviewed a series of documents, including the Sustainable Finance Framework and Jiaozhou Bay Development's policy, following the relevant requirements for information disclosure and reporting under the evaluation criteria.

Jiaozhou Bay Development will regularly disclose the annual report of sustainable finance instruments until the proceeds come to maturity.

Upon assessment, Lianhe Green considers that Jiaozhou Bay Development has established a complete information disclosure and reporting system, which meets the requirements of the assessment criteria.

E. External Review

Company Materials

The Group will engage Lianhe Green to assess the compliance of the Framework with the relevant international and domestic standards and issue a second-party assessment opinion.

Opinion of Lianhe Green

Jiaozhou Bay Development has engaged Lianhe Green to assess the compliance of this framework with relevant international and domestic standards and to issue a second-party assessment opinion.

Upon assessment, Jiaozhou Bay Development has established a complete management system for external evaluation and meets the requirements of the assessment standards.



Analysis of Environmental Benefits

Eligible Green Project: Green Buildings

Environmental Benefits

Green building is a new type of building that does not destroy the basic ecological balance conditions of the environment during the construction period, and consumes significantly less material and energy than traditional buildings during the operation period, which can also be called sustainable building, ecological building, back to nature building, energy-saving and environmentally friendly building and so on.

Compared with ordinary buildings, green buildings can use land resources more efficiently and provide relatively more centralized public service facilities, use a higher proportion of renewable and recyclable materials in the construction process, give fuller consideration to the natural conditions of the site, and set up air-cooling systems according to the principle of natural ventilation, so that the green building can effectively make use of the dominant wind direction in summer; reasonably design the building envelope, using energy-saving lighting and configure corresponding intelligent control systems during operation. Elevators are equipped with high-efficiency transformers, and energy-using equipment can be equipped with variable frequency functions.

The relevant technical indicators of buildings that have undergone energy-saving renovation shall meet the relevant national or local requirements for energy conservation and environmental friendly renovation of existing buildings. Such projects are conducive to reducing energy consumption, saving energy, and alleviating the shortage of energy demand; and can also contribute to sound insulation, dust reduction, and thermal insulation of buildings, thus reducing usage costs, and improving the comfort of the building's indoor environment. Moreover, the green lighting technology used during renovation is also conducive to reducing greenhouse gas emissions, mitigating air pollution and improving environmental quality.

Eligible Social Project: Affordable Basic Infrastructure

Social Benefits

Developing regional and transborder infrastructure brings convenience to residents and corporate employees along the routes. The construction of roads strengthens the connection between different areas, facilitating the input and output of products and services, and is conducive to the business expansion of nearby enterprises. In addition, it can also gather citizens and enterprises to promote commodity circulation. The construction of urban-rural roads can also effectively improve the traffic conditions in surrounding areas, encouraging the investment environment in the project area, and promoting land development and utilization and industrial upgrading along the project line. For residents and employees, it offers significant travel convenience along the route, enhancing overall quality of life. Infrastructure projects also generate employment opportunities, stimulating local economies.



Appendix

About Lianhe Green

Lianhe Green Development Company Limited ("Lianhe Green") was established in 2023 and is a subsidiary of Lianhe Equator Environmental Assessment Co., Ltd. ("Lianhe Equator") and Lianhe Credit Management Co., Ltd. ("Lianhe Group"). Lianhe Equator is the largest green and sustainable bond/loan certification provider in mainland China. As an external reviewer recognised under the Hong Kong Monetary Authority's Green and Sustainable Finance Grant Scheme, Lianhe Green is headquartered in Hong Kong, mainly responsible for green and sustainable finance certification business in international markets, ESG reporting and consulting, ESG training services, and assist in operating carbon market-related businesses within and outside China.

Lianhe Green aims to become an internationally recognized external verifier for sustainable finance through cooperation with Lianhe Equator's professional and experienced team in this industry. With a goal of "shaping the origin of the earth and sky, and transmitting the civilization of mankind", Lianhe Green is committed to helping Chinese and foreign enterprises demonstrate their determination in sustainable development, and providing investors with independent and objective third-party certification services. It is our mission to leave green and oceans to our future generations.

Scope of Analysis

Lianhe Green was engaged by Jiaozhou Bay Development to provide an assessment of the company's Sustainable Finance Framework. The assessment is to provide a professional second-party opinion of the compliance of the Sustainable Finance Framework and does not provide any financial indicators or judgement on the investment values of the company's issuance.

Responsibilities

The Company

Jiaozhou Bay Development's responsibilities are to accept the interviews from Lianhe Green's analytical team, to provide relevant data and institutional documents for the analysis, and to ensure that the data and institutional documents provided are true and effective.

External Reviewer

Lianhe Green's responsibilities are to collect data and documents provided by Jiaozhou Bay Development. Lianhe Green will review all important data and documents, and issue conclusions. In addition, Lianhe Green will disclose information collected from Jiaozhou Bay Development and relevant parties to demonstrate whether its Sustainable Finance Framework meets the relevant requirements of the above standards.

Analytical Process

The main aspects of this assessment include the following:

- » Performing a comprehensive review on the persons in charge of the relevant departments to understand the key matters related to Jiaozhou Bay Development's policies and processes;
- » Review the Sustainable Finance Framework developed by Jiaozhou Bay Development;
- » Review relevant disclosure reports;
- » Obtain and review appropriate supporting documentation to support key findings.



Solicitation Status

The Second-Party Opinion was solicited and assigned or maintained by Lianhe Green at the request of the company.

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