



# Qingdao Jiaozhou Urban Development and Investment Co., Ltd.

## Second-Party Opinion | Green Finance Framework

### Report Type

Green Finance Framework  
Second-Party Opinion

### Analytical Standards

- » Green Bond Principles (GBP) (June 2021 Edition (with June 2022 Appendix 1))
- » Green Loan Principles (GLP) (February 2023 Edition)

### Industry

Local Investment and Development Companies

### Country/Region

China

### Report Date

21<sup>st</sup> January 2025

### Summary

Not Aligned	Aligned	<b>Good</b>	Excellent
-------------	---------	-------------	-----------

Pillar	Alignment
Use of Proceeds	Good
Process for Project Evaluation and Selection	Good
Management of Proceeds	Good
Reporting	Good
External Reviews	Good

Lianhe Green Development Company Limited (hereafter referred to as “Lianhe Green”) has reviewed a series of documents including the “Green Finance Framework” (hereafter referred to as “Framework”) issued by Qingdao Jiaozhou Urban Development and Investment Co., Ltd. (hereafter referred to as “the Company” or “the Group”), and assessed the company’s relevant work in respect of the Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, Reporting, and External Reviews. The Framework has received an assessment opinion of “Good” from Lianhe Green. Lianhe Green considers that the Framework and the eligible green projects listed in the Framework are in compliance with the *Green Bond Principles (GBP) (June 2021 Edition (with June 2022 Appendix 1))* and the *Green Loan Principles (GLP) (February 2023 Edition)*. At the same time, Lianhe Green’s assessment includes the contributions of the project categories to the relevant United Nations Sustainable Development Goals<sup>1</sup>.

### Contacts

Sherry Li  
Analyst  
+852 3596 3037  
[sherry.li@lianhegreen.com](mailto:sherry.li@lianhegreen.com)

Kathleen Liu  
Associate Analyst  
+852 3596 3052  
[kathleen.liu@lianhegreen.com](mailto:kathleen.liu@lianhegreen.com)

<sup>1</sup> According to the definitions of (A/RES/70/1 - Transforming our world: the 2030 Agenda for Sustainable Development)



## About the Company

### Company Materials

Established in 2009, the Group is an important state-owned assets supervision and operation platform focusing on infrastructure construction and land management in Jiaozhou City and is a major development entity of the Qingdao Jiaodong Airport Economic Demonstration Zone (青島膠東臨空經濟示範區) (the “Jiaodong Demonstration Zone”). Leveraging strong government support, the Group has played an important role in furthering the social and economic development of Jiaozhou City by undertaking and completing a number of infrastructure construction projects. The Group is directly and wholly owned by Jiaozhou Municipal State-owned Assets Service Centre, a governmental organ of the Jiaozhou Municipal Government.

In accordance with the State Council’s overall guidance on green development, the Group is committed to ensuring that its economic performance is conducive to the green development of the environment. The Group regards green development as its business foundation and ensures that its economic development is beneficial to the environment. The Group adheres to a positive sense of environmental responsibility, and integrates the spirit of green development into its rules, regulations and business development plans. The Group actively integrates green principles into the economic development of Qingdao City and is committed to making contributions in the fields of Renewable Energy and Energy Efficiency. Meanwhile, the Group also insists on reducing the negative impact on the environment during the engineering design and construction process, in doing so, ensuring it applies its principle of environmental protection to every work stage.

## Company Sustainability Strategy

### Company Materials

Qingdao Jiaozhou Urban Development and Investment Co., Ltd. is located in Jiaozhou, Shandong, an area of significant economic importance. The company adopts a robust sustainable development strategy, integrating green principles into its core business, focusing on renewable energy and energy efficiency projects, which align with its commitment to reducing environmental impact. National policies advocate for green development, and the company’s green projects, such as renewable energy systems and energy-saving building technologies, support carbon reduction and low-carbon transformation. Its green financing instruments also contribute to sustainable development.

### Opinion of Lianhe Green

Lianhe Green believes that, as a state-owned enterprise, the Group’s renewable energy and energy efficiency projects align with local and central government’s strategy and policies, and they identified the environmental mitigation measures in their existing projects. These contribute to the country’s commitment to reach peak carbon emissions by 2030 and achieve carbon neutrality by 2060.

After media review, Lianhe Green did not find any significant negative ESG news or controversial issues about the Group.

## About the Framework of the Group

### Company Materials

The Framework has been developed to demonstrate how the Group and its affiliates intend to enter into the Green Finance Transactions (“GFT”) to fund projects that will deliver environmental benefits to



support the Group's business strategy and vision. Fundraising will include bonds, loans and other debt instruments, and GFT with structures tailored to contribute to green development by application of the proceeds to Eligible Projects as defined in the Framework.

- With respect to bonds, bonds issued under Green Finance Framework (GFF) will be in alignment with the Green Bond Principles (GBP) 2021<sup>2</sup> released by International Capital Market Association (ICMA) or the Climate Bonds Standard V3.02 issued by Climate Bonds Initiative (CBI)<sup>3</sup>, or the Green Bond Endorsed Projects Catalogue (2021 Edition)<sup>4</sup> jointly announced by the People's Bank of China (PBOC), the National Development and Reform Commission (NDRC) and the China Securities Regulatory Commission (CSRC) or as they may be subsequently amended.
- With respect to loans, loans issued under GFF will be in alignment with the Loan Market Association ("LMA") Green Loan Principles ("GLP") 2023<sup>5</sup> or as they may be subsequently amended.
- Other forms of financing may conform to other green finance principles as may have been established at the time of such financing transaction being undertaken.

In aligning with the above principles and guidelines, the Group's GFF is presented through the GBP's/GLP's four core components as well as its recommendation for external review:

- 1) Use of Proceeds
- 2) Process for Project Evaluation and Selection
- 3) Management of Proceeds
- 4) Reporting
- 5) External Review

Bond(s) issued under the Framework may take the form of public transactions or private placements, in bearer or registered format, and may take the form of senior unsecured or subordinated issuances. Such bonds and loans entered into under the Framework will be standard recourse-to-the-issuer obligations and investors will not bear the credit risk of the underlying allocated eligible asset exposures.

GFTs may be done in any jurisdiction and market reflecting the Group's current and future business needs.

## A. Use of Proceeds

### Company Materials

The Group will allocate an amount at least equivalent to the net proceeds of the Green Financing Instruments issued under the Framework to finance and/or re-finance, in whole or in part, projects which meet the eligibility criteria of the following Eligible Green Project categories ("Eligible Green Projects"), as defined as below.

A maximum 3-year look-back period would apply for refinanced projects and the Group is committed to fully allocate the net proceeds of each issuance under the Framework within 24 months from issuance/borrowing.

<sup>2</sup> In alignment with ICMA Green Bond Principles, June 2021, <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

<sup>3</sup> In alignment with the Climate Bond Standard V3.0, <https://www.climatebonds.net/climate-bonds-standard-v3>

<sup>4</sup> In alignment with the Green Bond Endorsed Projects Catalogue (2021 Edition), [http://www.gov.cn/zhengce/zhengceku/2021-04/22/content\\_5601284.htm](http://www.gov.cn/zhengce/zhengceku/2021-04/22/content_5601284.htm)

<sup>5</sup> In alignment with LMA Green Loan Principles, February 2023, <https://www.lsta.org/content/green-loan-principles/>



**i. Eligible Green Projects Categories and Description/Condition of Eligible Green Projects**

Eligible Green Project Category	Description/Condition of Eligible Green Projects
<p><b>Renewable Energy</b> <b>Key Objectives:</b> <b>Climate Change Mitigation</b></p>	<p>Investment, acquisition and expenditures related to design, manufacture, construction, installation, and operation of renewable energy systems, including photovoltaic solar and wind power facilities, and renewable energy storage system.</p>
<p><b>Energy Efficiency</b> <b>Key Objectives:</b> <b>Climate Change Mitigation</b></p>	<p>Increase energy efficiency and reduce building and facility energy consumption by at least 15 per cent. By investing in and spending on projects such as, but not limited to:</p> <ul style="list-style-type: none"> <li>• In the design and construction process, in accordance with the requirements of “Intelligent Building Design Standards (GB/T 50314-2015)”, adopt timely and feasible intelligent technology to realize the functions of saving resources and optimizing environmental quality management, including but not limited to effective utilization and management of renewable energy based on building equipment monitoring systems, Building Information Modeling (BIM) technology, etc.; or</li> <li>• Install energy-efficient equipment, replace and/or maintain existing equipment to reduce energy consumption or avoid greenhouse gas emissions, including but not limited to smart metering systems, high-efficiency HVAC systems, etc. Relevant products should comply with the current national standards “Energy-saving Design Standards for Public Buildings” (GB50189-2015), “Energy-saving Domestic Water Appliances” (CJ/T164-2014) and other standards; or</li> <li>• Renovation of green lighting, using LED lamps, high/low pressure sodium lamps, metal halide lamps, tri-color double-ended straight fluorescent lamps (Type T8, T5), etc., as well as the use of natural light sources, intelligent lighting control systems, etc. Relevant lighting products should meet the first-level energy efficiency requirements of relevant national and/or regional energy efficiency standards; or</li> <li>• Energy Conservation and Environmentally-friendly Renovation of Existing Buildings: Technical indicators of the building meet relevant national or local energy conservation standards for existing buildings and relevant requirements for energy-saving renovation activities of building energy systems after renovation. Renovation, operation and purchase of the existing buildings which have obtained relevant national green building star-level within the validity period; and the renovation, operation and purchase of existing buildings that have reached the national-relevant green building star-level within the validity period after renovation. For example, the building technology complies with technological standards such as the “Statistical Standard for Civil Buildings” (GB 50352), the “Standard for Energy-Saving in Public Buildings” (GB 50189) and the “Standard for the Evaluation of Green Retrofit of Existing Buildings” (GBT 51141).</li> </ul>

**Exclusion Criteria**



The Group commits that any activities, assets and technologies related to the below will be excluded from Eligible Green Projects:

- activities that violate national laws, regulations or international conventions and agreements, or are subject to international bans;
- production or trade in arms and ammunition;
- production or trade in alcoholic beverages (other than beer and wine);
- production or trade in tobacco;
- gambling, casinos and equivalent businesses;
- production or trade in radioactive materials (radioactive sources considered insignificant and/or adequately shielded, such as quality control equipment, are not covered);
- production or activities involving harmful or exploitative forms of forced labor or harmful child labor.

### Opinion of Lianhe Green

Not Aligned	Aligned	Good	Excellent
-------------	---------	------	-----------

Lianhe Green, in accordance with the relevant assessment criteria, reviewed the Framework and other related documents, and the issuer's policies on Use of Proceeds.

Lianhe Green compared the Green Project Category listed in this framework with the *Green Bond Principles (GBP) (June 2021 Edition (with June 2022 Appendix 1))*, 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<sup>6</sup> respectively.

After the assessment, Lianhe Green believes that the eligible green project categories align with *China's Green Bond Endorsed Projects Catalogue (2021 Edition)*. These eligible green project categories positively contribute to the environment and partially align with the *Hong Kong Taxonomy* and *EU Taxonomy*. In addition, these categories contribute to the achievement of the United Nations' Sustainable Development Goals (SDGs). The detailed analysis will be elaborated in the following sections.

Considering that the look-back period is longer than the market's best practices, and the exclusion project list has less coverage than market practices. Lianhe Green's assessment of the Group's Use of Proceeds is "Good", which meets the requirements of the assessment criteria.

### 1) Eligible Green Projects: Renewable Energy

#### Eligible Green Project Categories Under Principles

Lianhe Green considers that this project category under the Framework is most relevant to the eligible Green Projects Category "Renewable energy (including production, transmission, appliances and products)" under both GBP and GLP.

#### Relevant Government Policies

In recent years, Jiaozhou City has been continuously strengthening pollution control and deeply adjusting its energy structure to promote a comprehensive green transformation of economic and

<sup>6</sup> Based on the Lianhe Green's methodology, we evaluate each eligible project category of the issuer against the United Nations Sustainable Development Goals, and selected goals with a clear contribution to the United Nations Sustainable Development Goals. In addition, the issuer's Green Project Categories may also contribute to other goals of the United Nations Sustainable Development Goals.



social development.

The [Jiaozhou government](#) has issued the “Jiaozhou City’s New Energy Industry Development Plan” (2021-2025) and has preliminarily completed the “Jiaozhou City’s Carbon Peak Plan and Ecological Product Value Accounting Project before 2030”. It adheres to the coordinated reduction of pollution and carbon emissions, with equal emphasis on mitigation and adaptation, and continuously optimizes the industrial and energy structures. In the field of wind power, two centralized wind power projects and four distributed wind power projects have been built, achieving a wind power generation capacity of 270,600 kilowatts. From 2022 to 2030, 40 wind turbine sites with an installed capacity of 240,000 kilowatts are planned for construction. In the field of photovoltaics, Jiaozhou City has successfully secured the pilot county for the whole county (city, district) roof distributed photovoltaic development, and the cumulative capacity of photovoltaic projects that have been built and connected to the grid is 240,000 kilowatts.

**Alignment with *Green Bond Endorsed Project Catalogue (2021 Edition)*, *Hong Kong Taxonomy for Sustainable Finance* and *EU Taxonomy***

Lianhe Green believes the Framework’s description on “Investment, acquisition and expenditures related to design, manufacture, construction, installation, and operation of renewable energy systems, including photovoltaic solar and wind power facilities” is aligned with the description of “3.2.2.2 Construction and Operation of Solar Energy Utilization Facilities” and “3.2.2.1 Construction and Operation of Wind Power Facilities” under *Green Bond Endorsed Project Catalogue (2021 Edition)*, which states that “Construction and operation of facilities that generate electricity with solar energy, including facilities for solar photovoltaic power generation, solar thermal power generation, and solar thermal power utilization” and “Construction and operation of facilities that utilize wind energy to generate electricity” respectively.

In addition, the description of “Investment, acquisition and expenditures related to design, manufacture, construction, installation, and operation of ... renewable energy storage system” in the Framework is consistent with the description of “3.2.3.2 Operation and Construction of Energy Efficient Storage Facilities” in the *Green Bond Support Project Catalogue (2021 Edition)*, which stipulates that “Construction and operation of energy-efficient storage and peak-shaving facilities, using physical energy storage, electromagnetic energy storage, electrochemical energy storage and phase change energy storage technologies to improve the flexibility, stability and reliability of renewable energy power generation, distributed energy, new energy microgrid and other systems”.

Lianhe Green believes that this type of projects partially meet the activity description of “Construction or operation of electricity generation facilities that produce electricity using solar photovoltaic (PV) technology” in the *Hong Kong Taxonomy*, which requires that components and products used in solar PV power generation facilities meet certain photovoltaic conversion efficiency requirements.

Lianhe Green assesses that this type of projects are eligible for the activities and satisfy the substantial contribution criteria for both “Electricity generation using solar photovoltaic technology” and “Installation, maintenance and repair of renewable energy technologies” under the *EU Taxonomy*. Therefore, this project significantly contributes to climate change mitigation objectives.

**Relevant Key United Nations Sustainable Development Goals**

Lianhe Green believes this qualified Green Project Category contributes positively to the United Nations Sustainable Development Goals, in particular, there is significant contributions to Target 7.2 of Goal 7 (Affordable and Clean Energy) “By 2030, increase substantially the share of renewable energy in the global energy mix”.

**Environmental Benefits**

The [United Nations](#) has pointed out that energy is at the core of climate challenges and is also the key to solving climate issues. Fossil fuels, such as coal, oil, and natural gas, are by far the largest



contributors to global climate change, accounting for more than 75% of global greenhouse gas emissions and nearly 90% of all carbon dioxide emissions.

To curb the negative impacts of climate change, we need to end our dependence on fossil fuels and invest in clean, accessible, affordable, sustainable, and reliable alternative energy sources. Photovoltaic power generation is one of the most important channels for achieving clean power generation. Research by the [Shenzhen Institute of Sustainable Development](#) shows that compared with conventional coal-fired power stations, a 1MW photovoltaic power station can save 405-630 tons of standard coal per year, reduce 1036-1600 tons of carbon dioxide, 9.7-15.0 tons of sulfur dioxide, and 2.8-4.4 tons of nitrogen oxides. In the field of heating, [China Low-Carbon Power Generation Technology Innovation and Development Report 2023](#) indicated that solar thermal utilization and geothermal energy utilization have tremendous potential and unique advantages in heating. The coupling of solar or geothermal energy with thermal storage, fossil fuels, or other forms will become the main development model for achieving low-carbon heating in the future.

The [International Renewable Energy Agency \(IRENA\)](#) estimates that by 2030, cheap electricity from renewable sources will provide 65% of the world's total electricity supply, and by 2050, 90% of the world's electricity can and should come from renewable sources. To promote the large-scale, high-proportion, market-oriented, and high-quality development of renewable energy, in September 2023, the National Energy Administration issued the [Notice on Organizing Renewable Energy Development Pilot Demonstrations](#), which clearly supports the cultivation of new technologies, new models, and new forms of renewable energy through organizing renewable energy pilot demonstrations. It aims to expand the application scenarios of renewable energy, and focuses on promoting technological progress, cost reduction, efficiency improvement, and mechanism perfection of renewable energy to provide strong support for the development of renewable energy and the timely realization of carbon peak and carbon neutrality goals.

Overall, the Company's eligible green projects will help reduce air pollution and improve public health in Jiaozhou city by reducing reliance on fossil fuels.

## 2) Eligible Green Projects: Energy Efficiency

### Eligible Green Project Categories Under Principles

Lianhe Green considers that this project category under the Framework is most relevant to the eligible Green Projects Category "Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, appliances and products)" under both GBP and GLP.

### Relevant Government Policies

In 2021, the People's Government of Jiaozhou City released the [Outline of the 14<sup>th</sup> Five-Year Plan for National Economic and Social Development of Jiaozhou City and the Long-Range Objectives for the Year 2035](#). The document mentioned that it is essential to promote advanced and efficient energy-saving and energy technologies, and encourage enterprises to increase their investment in the production and utilization of renewable energy. Jiaozhou City will comprehensively promote the efficient use of resources, and implement the control of total energy consumption and intensity as well as the total coal consumption.

In recent years, significant achievements have been made by [Jiaozhou City](#) in energy conservation and emission reduction. The local government actively created a new benchmark for green public institutions under the dual carbon goals. From 2021 to 2023, Jiaozhou City carried out energy efficiency improvement renovations in various government offices, hospitals, schools, and other public institutions.

During the past 3 years, Jiaozhou City has invested a total of 25.078 million yuan in energy-saving renovations for public institutions, covering 783,700 square meters of buildings. The energy



efficiency of the related buildings has been comprehensively improved, with a comprehensive energy saving rate of 21.78%. This results in an annual reduction of about 5,920 tons of carbon dioxide emissions and a savings of over 3.8 million yuan in energy costs.

**Alignment with *Green Bond Endorsed Project Catalogue (2021 Edition)*, *Hong Kong Taxonomy for Sustainable Finance* and *EU Taxonomy***

Lianhe Green believes the Framework's description on "Renovation of green lighting, using LED lamps, high/low pressure sodium lamps, metal halide lamps, tri-color double-ended straight fluorescent lamps (Type T8, T5), etc., as well as the use of natural light sources, intelligent lighting control systems, etc. Relevant lighting products should meet the first-level energy efficiency requirements of relevant national and/or regional energy efficiency standards" is aligned with the description of "1.1.3.1 Renovation of Green Lighting" under *Green Bond Endorsed Project Catalogue (2021 Edition)*, which states that "Energy-saving technology upgrading of high-efficient lighting products using LED, high/low pressure sodium lamps, metal halide lamps, three primary color double-ended tubular fluorescent lamps (Type T8 and T5), and other lighting facilities using natural light sources, both indoors and outdoors."

In addition, the Framework's description on "Energy Conservation and Environmentally-friendly Renovation of Existing Buildings: Technical indicators of the building meet relevant national or local energy conservation standards for existing buildings and relevant requirements for energy-saving renovation activities of building energy systems after renovation. Renovation, operation and purchase of the existing buildings which have obtained relevant national green building star-level within the validity period; and the renovation, operation and purchase of existing buildings that have reached the national-relevant green building star-level within the validity period after renovation. For example, the building technology complies with technological standards such as the 'Statistical Standard for Civil Buildings' (GB 50352), the 'Standard for Energy-Saving in Public Buildings' (GB 50189) and the 'Standard for the Evaluation of Green Retrofit of Existing Buildings' (GBT 51141)" is aligned with and the same as the description of "5.2.1.5 Energy Conservation and Environmental-friendly Renovation of Existing Buildings" under *Green Bond Endorsed Project Catalogue (2021 Edition)*.

Lianhe Green considers the criteria set by the *Hong Kong Taxonomy* for the renovation of existing buildings to be more stringent compared to the Framework requirements. According to the *Hong Kong Taxonomy*, the building renovation should lead to a reduction of primary energy demand, energy consumption, or direct GHG emissions of at least 30% against the building's historic average for both existing commercial buildings and residential buildings. For existing commercial buildings, buildings may also use HKGBC's Zero-Carbon-Ready Building, with at least Extra Low or Level 2 improvement (i.e., 25% reduction) according to the Zero-Carbon-Ready building Certification Scheme. However, the Framework only requires an increase in energy efficiency and reduce building and facility energy consumption by at least 15%.

Lianhe Green also considers the criteria set by the *EU taxonomy* for the activity "Renovation of existing buildings" to be more stringent compared to the Framework requirements. The *EU taxonomy* has set energy performance indicators that lead to a reduction in primary energy demand of at least 30%.

**Relevant Key United Nations Sustainable Development Goals**

Lianhe Green believes this qualified Green Project Category contributes positively to the United Nations Sustainable Development Goals, in particular, there is significant contributions to Target 7.3 of Goal 7 (Affordable and Clean Energy) "By 2030, double the global rate of improvement in energy efficiency" and Target 9.4 of Goal 9 (Industry, Innovation and Infrastructure) "By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities".





### Environmental Benefits

According to [IEA](#), energy efficiency is called the “first fuel” in clean energy transitions, as it provides some of the quickest and most cost-effective CO<sub>2</sub> mitigation options while lowering energy bills and strengthening energy security. Energy efficiency is the single largest measure to avoid energy demand in the Net Zero Emissions by 2050 (NZE) Scenario.

In May 2024, the State Council issued the [Energy-saving and Carbon Reduction Action Plan for 2024-2025](#). The plan proposes that by the end of 2025, the energy-saving rates of residential and public buildings that have been renovated will be increased by 30% and 20% respectively. Lianhe Green believes that upgrading the heating, ventilation, and air conditioning (HVAC) systems to more energy-efficient models can significantly reduce energy usage, which directly translates to lower carbon emissions. This plays a crucial role in optimizing power consumption.

Overall, the Group’s investment and expenditure in intelligent technology, as well as the installation and renovation of energy-saving equipment, will help to improve the energy efficiency of Jiaozhou City, and reduce energy consumption and carbon emissions.

## B. Process for Project Evaluation and Selection

### Company Materials

The overall principle includes two parts as follows.

- 1) Select national and regional key green projects with a certain scale effect or demonstration effect.
- 2) Adhere to the principle of diversification in the selection of project types and regions.

Specific screening criteria: two-tier green project screening mechanism

Eligible green projects will be selected according to above eligibility criteria.

#### Stage 1 Evaluation Procedure:

Review and select green projects preliminarily in accordance with the Green Bond Principles (GBP) 2021 released by International Capital Market Association (ICMA), or the Climate Bonds Standard V3.0 issued by Climate Bonds Initiative (CBI), or the Green Bond Endorsed Projects Catalogue (2021 Edition) jointly announced by the People's Bank of China (PBOC), the National Development and Reform Commission (NDRC) and the China Securities Regulatory Commission (CSRC).

#### Stage 2 Evaluation Procedure:

Further review and confirm on the green projects based on the direct and indirect environmental KPIs.

- 1) Direct environmental KPIs: environmental KPIs disclosed in the supporting documents for the projects, which are expected to be quantitative.
- 2) Indirect environmental KPIs:
  - i. According to the supporting documents for the projects, energy-saving technologies or producing methods have been adopted in the projects.
  - ii. The projects are in line with the policies and initiatives on the sustainable development at low carbon emissions, energy-savings and emissions reduction in the national or international markets.

*Accountability Mechanisms for the Group’s Green Finance*



The Group's Green Finance Working Group ("GFWG") is responsible for the management of this GFF and the compliance of all financing instruments issued under the Framework. The GFWG consists of executive members of the Group and senior representatives from the following departments, including:

- Finance and Capital Department
- Financing Management Department
- Project Management Department

The GFWG may be supplemented from time to time, or expanded, by the inclusion of representatives from other relevant teams.

The GFWG will:

- Meet at least two times each year to select and evaluate green projects to invest in for the current year and the next year
- Ratify Eligible Green Projects, which are initially proposed by the constituent team members
- Undertake regular monitoring of the asset pool to ensure the eligibility of Green Projects with the criteria set out in the Group's GFF Section 1, Use of Proceeds, whilst replacing any ineligible Green Projects with eligible new Green Projects
- Ensure that projects comply with the Group's Environmental Risk Management framework as well as applicable local governmental regulations and ensure that projects no longer meeting the selection criteria detailed in the Framework will be removed and/or substituted on a best efforts basis throughout the life of the bond/loan
- Ensure that the proceeds of bonds/loans will be periodically adjusted to match allocation to eligible projects made during that period
- Facilitate regular reporting on any GFT in alignment with our Reporting commitments
- Manage any future updates to the Framework
- Ensure that the approval of Eligible Green Projects will follow the Group's existing credit/loan/investment approval processes

### Opinion of Lianhe Green

Not Aligned	Aligned	Good	Excellent
-------------	---------	------	-----------

Lianhe Green, in accordance with the relevant assessment criteria, reviewed the Framework and other related documents, and the issuer's policies on Process for Project Evaluation and Selection.

The Group has established a comprehensive process for screening, identifying, and evaluating green projects. The Group has a process to pre-select and evaluate the projects based on national and international standards. Direct and indirect environmental KPIs will be further reviewed, and the GFWG will meet at least two times each year to select and evaluate the green projects to invest in. Through communication, Lianhe Green noticed that the group also assessed the environmental impact of their projects, and identified mitigation measures correspondingly.

Considering that, compared with the best practice in the market, the Group's eligible green projects will not be submitted for approval by the board of directors. Lianhe Green's assessment of the Group's Process for Project Evaluation and Selection is "Good", which meets the requirements of the assessment criteria.

## C. Management of Proceeds

### Company Materials



The proceeds of each of the Group's GFT can be managed through using a designated account or keeping a GFT Register. Under the GFT Register method, the proceeds will be deposited in the general funding accounts, and earmarked for allocation towards the Eligible Green Projects. The Group will maintain a GFT Register to track the use of proceeds for the GFT. Green Finance Allocation Register will be established to ensure and monitor the allocation of green finance proceeds.

The Register will contain, for each GFT launched, information including:

1. GFT Details: ISIN (if applicable), Pricing Date, Maturity Date and etc.
2. Eligible Green Project Allocation List: Information including:
  - The Eligible Projects List, including for each Eligible Project, the Eligible Green Project category, project description, project location, Group's ownership percentage, total project cost, amount allocated, settled currency, etc.
  - Amount of unallocated Proceeds.

#### Management of the unallocated proceeds

It is the Group's intention to deploy proceeds of each of the Group's GFT to Eligible Green Projects within a 2-year period. If part of the proceeds cannot be allocated to Eligible Green Projects at the moment, the Group can deposit the unallocated proceeds into the designated account for the green bond, or invest the unallocated proceeds into qualified money market products or debt instruments according to the relevant rules and regulations set out by the competent authorities.

#### Opinion of Lianhe Green

Not Aligned	Aligned	<b>Good</b>	Excellent
-------------	---------	-------------	-----------

Lianhe Green, in accordance with the relevant assessment criteria, reviewed the Framework and other related documents, and the issuer's policies on Management of Proceeds.

The proceeds of each of the Group's GFT can be managed through using a designated account or keeping a GFT Register, and earmarked for allocation towards the Eligible Green Projects. Green Finance Allocation Register will be established to ensure and monitor the allocation of green finance proceeds. The unallocated proceeds may be deposited into the designated account for the green bond, or invest unallocated proceeds into qualified money market products or debt instruments according to the relevant rules and regulations set out by the competent authorities.

Considering that, compared with the best practice in the market, the Group's unallocated proceeds will not be invested in other eligible projects. Lianhe Green's assessment of the Group's Management of Proceeds is "Good", which meets the requirements of the assessment criteria.

## D. Reporting

### Company Materials

The Group will provide information on the allocation of the net proceeds of its Green Financing Instruments in a Green Finance Report. Such information will be provided on an annual basis until all the net proceeds have been allocated. According to the market needs, the information may contain the following details:

- 1) List of Eligible Green projects
- 2) The amount of Proceeds allocated to each Eligible Green Project category



- 3) When possible, descriptions of the Eligible Green Projects financed, such as project locations, amount allocated, etc.
- 4) Selected examples of projects financed
- 5) Percentage of financing vs. refinancing
- 6) Amount of unallocated Proceeds

Furthermore, the Group will confirm that the use of proceeds of the GFT conforms to this GFF and that report on a timely basis if any material development until full allocation.

### Impact Reporting

The Group will provide reporting on the environmental benefits of the Eligible Green Projects potentially with the following environmental impact indicators. In addition, calculation methodologies and key assumptions will be disclosed.

Eligible Green Project Categories	Impact Indicators
<b>Renewable Energy</b>	<ul style="list-style-type: none"> <li>• Annual renewable energy generation (GWh for electricity and GJ for other energy)</li> </ul>
<b>Energy Efficiency</b>	<ul style="list-style-type: none"> <li>• Amount of energy saved (in MWh)</li> <li>• Annual energy efficiency improvement in percentage</li> </ul>

The allocation and impact reporting mentioned above will be disclosed to the Group’s stakeholders (i.e., the Group’s interest-related parties, including investors, etc.).

### Opinion of Lianhe Green

Not Aligned	Aligned	Good	Excellent
-------------	---------	------	-----------

Lianhe Green has reviewed a series of documents, including the Green Finance Framework and the company’s policy based on the relevant assessment criteria.

The Group will provide green project category level disclosure reports annually until the proceeds of the GFTs have been fully allocated, and will also report on a timely basis if any material development until full allocation. Besides, the Group will report on the environmental benefits of the Eligible Green Projects potentially with the following environmental impact indicators.

Considering that, compared with the best practice in the market, the Group will not provide green project level disclosure report. Lianhe Green’s assessment of the Group’s Reporting is “Good”, which meets the requirements of the assessment criteria.

## E. External Reviews

### Company Materials

#### **Pre-issuance:**

The Group has engaged Lianhe Green Development Company Limited (“Lianhe Green”) and CCX Green Finance International Limited (CCXGFI) to provide Second Party Opinions on the Green Finance Framework to review and confirm its alignment with the GBP and GLP. Lianhe Green and CCXGFI have reviewed the Green Finance Framework and provided their Second Party Opinions. The objective of the Second Party Opinion is to provide investors with an independent assessment. The Second Party Opinion is a statement of opinion, not a statement of fact. No representation or assurance is given by the Issuer and the Joint Lead Managers as to the suitability or reliability of the Second Party Opinion or



any opinion or certification of any third party made available in connection with the Bonds issued as Green Bonds. The Second-Party Opinion together with the Green Finance Framework will be published on the Group's website. Neither the Green Finance Framework nor the Second Party Opinion is incorporated into this Offering Circular and neither the Green Finance Framework nor the Second Party Opinion forms part of this Offering Circular.

**Post-issuance:**

An independent third party may be engaged to review and verify the internal tracking and allocation of funds from the GFTs to Eligible Green Projects, as well as the Eligible Projects expected and actual impact that is disclosed in the Annual Reporting.

**Opinion of Lianhe Green**

Not Aligned	Aligned	<b>Good</b>	Excellent
-------------	---------	-------------	-----------

The company 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. An independent third party may be engaged to review and verify the internal tracking and allocation of funds from the GFTs to eligible green projects, as well as the Eligible Projects expected and actual impact that is disclosed in the Group's annual reporting.

Considering that, post issuance, ICMA recommends that an issuer's management of proceeds be supplemented by the use of an external auditor, or other third party, to verify the internal tracking and the allocation of funds from the Green Bond proceeds to eligible Green Projects. Lianhe Green's assessment of the Group's management system for External Reviews is "Good", which meets the requirements of the assessment standards.



## Appendix

### About Lianhe Green

Lianhe Green Development Company Limited (hereafter referred to as “Lianhe Green”) was established in 2023 and is a subsidiary of Lianhe Equator Environmental Assessment Co., Ltd. (hereafter referred to as “Lianhe Equator”) and Lianhe Credit Management Co., Ltd. (hereafter referred to as “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 the Group to provide an assessment of the company’s Green Finance Framework. The assessment is to provide a professional second-party opinion of the compliance of the Green Finance Framework and does not provide any financial indicators or judgement on the investment values of the company’s issuance.

### Responsibilities

#### The Company

The Group’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 the Group. Lianhe Green will review all important data and documents, and issue conclusions. In addition, Lianhe Green will disclose information collected from the Group and relevant parties to demonstrate whether its Green Finance Framework meets the relevant requirements of the above standards.

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.

### 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 the Group’s policies and processes;
- » Review the Green Finance Framework developed by the Group;
- » 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.

**Disclaimer**

A Lianhe Green SPO is an assessment of the green and sustainable financing frameworks of entities. It is not a credit rating.

Please note that individuals identified in an SPO report are not responsible for the opinions stated therein and are named for contact purposes only. Our report is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of financial instruments and securities.

Lianhe Green receives compensation from entities and other market participants for conducting this service. None of the aforementioned entities nor its related parties participated in the review process aside from providing information requested by Lianhe Green.

Our assessments are not considered investment advice and they are not and should not be considered as a replacement of any person's own assessment of the ESG factors related to a financial instrument or an entity. Lianhe Green does not represent, warrant or guarantee that our report will fulfill any of your or any other person's particular purposes or needs. Lianhe Green does not recommend the purchase or sale of financial instruments or securities or give investment advice or provide any legal, auditing, accounting, appraisal or actuarial services.

Lianhe Green does not audit or verify the accuracy of the information provided to issuers by any third party for the purpose of issuing this opinion. Lianhe Green does not represent, warrant or guarantee the accuracy, correctness, integrity, completeness or timeliness of any part of our opinion.

All published press releases and reports are the intellectual property of Lianhe Green. Any reproduction, redistribution, or modification, in whole or part, in any form by any means is prohibited unless such user has obtained prior written consent from us.

Copyright © Lianhe Green Development Company Limited 2025.