



# Shanghai Lingang Economic Development (Group) Co., Ltd.

**Second-Party Opinion | Sustainable Financing Framework** 

#### **Report Type**

Sustainable Financing 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** 

6 June 2024

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# **Summary**

Lianhe Green has reviewed a series of documents including the "Sustainable Financing Framework of Shanghai Lingang Economic 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. 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), 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**

Established in 2003, Shanghai Lingang Economic Development (Group) Co., Ltd. ('Lingang Group', 'Lingang' or 'the Group') is a large state-owned enterprise group of Shanghai SASAC, which focuses on the development of industrial parks, support services and industrial investment. It is a major construction body of the Lin-gang Special Area of China (Shanghai) Pilot Free Trade Zone ('Lingang Special Area'). Lingang Group has a domestic credit rating of AAA and international credit ratings of A- assigned by Fitch, BBB+ assigned by S&P and Baa1 assigned by Moody's. By end of 2023, the company's total asset reached RMB 218.372 billion; In 2023, the company achieved total revenue of RMB 13.256 billion, profit before tax of RMB 2.715 billion and net income of RMB 1.868 billion.

Adhering to national strategies such as the development of Lingang Special Area, the construction of Shanghai Technology Innovation Center (STIC), the integration of Yangtze River Delta, and the industrial cooperation between the eastern and western regions of China, Lingang Group has forged an industrial park layout that specializes in Lingang Special Area, lays roots in Shanghai, integrates into the Yangtze River Delta, provides national-wide services and explores overseas market. The Group is committed to be a world-class industrial park developer and asset operating group under high-quality development, contributing to the implementation of national strategies and overall development of Shanghai.

After nearly 40 years of development, Lingang Group owns four major brands, 'Lingang', 'Caohejing', 'Lingang Industry Clusters' and 'Innovation Galaxy'. After years of developing first-rate industrial parks and cultivating world-class industrial clusters, multiple enterprises incorporated in Lingang have grown into top-notch players in China and even around the globe. With initial focus on highend equipment industry, Lingang Group is committed to serving biopharma, intelligent manufacturing, new materials, high-end equipment and other industries, and promoting





development of strategic emerging industrial clusters under Shanghai's '3+6'1 and Lingang Special Area's '4+2+2'2 modern industry strategy. At present, the Group has developed 14 specialized industrial parks, serving more than 16,000 domestic and foreign high-tech enterprises, which includes more than 200 listed companies and subsidiaries, and more than 200 Fortune 500 companies and related entities. With the vision of 'cultivating excellent sci-tech innovation parks and becoming an outstanding developer', Lingang Group has made continuous efforts in developing the 'Six Innovations' system to empower innovations in tech, digitalization, green economy, services, finance, and overseas markets aspects, offering comprehensive, full-cycle innovative solutions to enterprises and creating favorable business environment for talents.

Facing the future, Lingang Group adheres to the development concept of 'Specialization, High quality and Sustainability'. As early as 2003, the Group put forward the construction concept of 'ecological industrial park' and constantly enriched and improved it in practice. In recent years, focusing on the construction of green industrial parks, industrial transformation and upgrading, efficient use of energy and improvement of ecological environment, the Group has continuously deepened the adjustment of industrial, energy and service structure, accelerated the construction of ecological civilization, and achieved remarkable results in green development. Meanwhile, as a large state-owned enterprise with social functions, Lingang Group is deeply committed to social responsibility. The Group empowers the industrial ecosystem and builds world-class industrial clusters by actively adopting multi-dimensional measures such as industrial-urban development integration, industry-finance integration, industry-university research integration, industryeducation integration, etc. Besides, the Group continuously feeds back to the society through eastwest collaboration, rural revitalization, public welfare and charity activities. Till now, various achievements have been made in related fields, including the selection of Lingang case as a paradigm in the Blue Book on Social Responsibilities of State-owned Assets and State-owned Enterprises (2023), the inclusion of Lingang Group in the Social Responsibilities of State-owned Enterprises · Pioneer 100 Index (2023), and the inclusion of Shanghai Lingang (600848.SH) in the ESG-Pioneer 100 Index of Listed State-owned Enterprise (2023).

# **About the Framework of Lingang Group**

Lingang Group has prepared the Sustainable Financing Framework for Shanghai Lingang Economic Development (Group) Co., Ltd. (hereinafter referred to as the "Framework"), which is intended to provide overarching principles and guidelines for all sustainable development financing opportunities for Lingang Group.

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 sustainable financing framework but has not reviewed any transaction-specific legal documents or marketing materials.

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<sup>&</sup>lt;sup>1</sup> '3+6' refers to 3 frontier industries (namely integrated circuit, biopharma, and artificial intelligence) and 6 key industries (namely electronic information, automotive, high-end equipment, advanced material, life and health, and fashion consumer goods)

<sup>&</sup>lt;sup>2</sup> '4+4+2' refers to 4 core industries (namely biopharma, integrated circuit, civil aviation, and artificial intelligence), 2 advantageous industries (namely NEV, and high-end equipment manufacturing), and 2 promising industries (namely green remanufacturing and hydrogen energy)





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 net proceeds raised by Lingang Group under this Framework or an amount equal to these net proceeds will be exclusively used to finance and/or refinance in whole or in part, one or more new or existing Eligible Projects, including Eligible Green Projects and Eligible Social Projects, with eligibility criteria set out below. Refinancing of Eligible Projects will have a look-back period of no longer than 36 months from the time of issuance. Lingang commits to fully allocating the net proceeds of each Sustainable Financing Instruments ("SFIs") on a best effort basis within 24 months of issuance.

Table 1: Qualified Green Projects

Eligible Green Project Categories	Qualified Green Projects
Green Buildings	Design, development, construction, refurbishment, redevelopment, maintenance, operations of buildings that meet national or international third-party environmental certifications, such as but not limited to,  • Chinese Green Building Evaluation Label: '3-Star' (Within one year after completion acceptance of construction);  • Leadership in Energy and Environmental Design (LEED) - minimum certification of Gold  • BEAM Plus - minimum certification of Excellent
Energy Efficiency	Development, purchase, operation, and maintenance of smart technologies and/or systems, for tracking, monitoring and managing energy usage, and energy-efficient facilities which improve energy efficiency by at least 30%. Example projects include,  • Installation of smart meters • Improvement of energy efficiency of heating ventilation and air conditioning systems • Installation of auto or LED lighting • Investment in energy storage technologies
Renewable Energy	Investments and expenditures in solar, wind farms and energy storage projects in the Group's industrial parks  Construction of International Hydrogen Energy Valley ('Valley') and implementation of green hydrogen energy related manufacturing projects in the Valley
Sustainable Water and Wastewater Management	Construction, development, installation, operation and maintenance of energy-efficient infrastructure or equipment for





	collection, treatment, recycling or reuse water, rainwater or wastewater
Clean Transportation	Construction, development, installation of infrastructure or equipment that supports low carbon transportation, such as charging ports for electric vehicles (EV)

Table 2: Qualified Social Projects

Eligible Social Project Categories	Qualified Social Projects
Affordable housing	Construction, refurbishment, and acquisition of safe, affordable and inclusive housing, such as subsidized rental housing  Target populations: Communities with housing difficulties, as defined by local government, such as newly employed graduates and migrant workers
Access to essential services - Education and vocational training	<ul> <li>Education and vocational training projects to target populations including,</li> <li>Courses, trainings and scholarships to children and teenagers with limited access to basic education or with special educational needs such as,         <ul> <li>Student aid programs in the regions paired-up for assistance</li> <li>Basic music courses for autistic children</li> </ul> </li> <li>Vocational trainings provided by Lingang Industrial College for workers and technicians in Lingang Special Area on modern technology and skills in industrial sectors such as intelligent manufacturing, intelligent logistics, advanced optics, biopharmaceuticals, etc.</li> <li>Target populations:         <ul> <li>Underserved communities residing in China's mountainous areas, rural areas, key counties for national rural revitalization, with limited access to basic education or those with special educational needs</li> <li>Workers and technicians from the first production line in Lingang Special Area</li> </ul> </li> </ul>
Access to essential services – Healthcare	<ul> <li>Medical support and health management projects with preventive and/or curative functions, such as,</li> <li>Medical and rehabilitation supports for disabled people, critically ill patients, and cancer survivors</li> <li>Development of health management system for construction workers</li> </ul> Target population: Disabled people, critically ill patients, and cancer survivors, industrial workers





Affordable Basic Infrastructure	Renovation projects of living facilities for the elderly living alone in rural areas,  • 'Happiness Ten Squares' kitchen and bathroom renovation  • Power line reconstruction  Target populations: Aged population in rural areas
Employment generation and programmes designed to prevent and/or alleviate unemployment stemming from	<ul> <li>Loans or financial support to small and medium enterprises (SMEs)<sup>3</sup>, including sci-tech start-up companies, tackling their financing difficulties</li> <li>Science and technology park projects that promote rural revitalization and industrial upgrading through scitech development, which support SMEs and create jobs for residents in China's mountainous areas, rural areas, key counties for national rural revitalization, such as Shanghai-Yunnan Lingang Kunming Sci-tech Park, Zunyi Lingang Sci-tech Park, etc.</li> </ul>
socioeconomic crises	<ul> <li>Target populations:</li> <li>Small and medium enterprises (SMEs), including sci-tech start-up companies</li> <li>Residents in China's mountainous areas, rural areas, key counties for national rural revitalization</li> </ul>

The Group commits not to invest the net proceeds to high carbon intensive activities or ineligible projects. The following sectors and activities will be excluded from Eligible Projects:

- activities that violate national laws and regulations, international conventions and agreements, or are subject to international bans and sanctions;
- production or trade of weapons and ammunition;
- production or trade of alcoholic beverages (except for beer and wine);
- production or trade of tobacco;
- enterprises engaged in gambling or casino operations or similar businesses;
- production or trade of radioactive materials (excluding equipment which radioactive source is considered insignificant and/or adequately shielded, for example, quality control equipment);
- production or activities involving harmful or exploitative forced labour or child labour.

### **Opinion of Lianhe Green**

Lianhe Green has reviewed a number of documents, including the Sustainable Financing Framework, and has conducted a comprehensive review of Lingang Group's policy.

Lianhe Green has compared the eligible green projects listed in this framework with the *Green Bond Endorsed Projects Catalogue (2021 Edition), Green Bond Principles (GBP) (June 2021 Edition), Green Loan Principles (GLP) (February 2023 Edition), EU Taxonomy and the United Nations Sustainable Development Goals (SDGs) accordingly. Besides, Lianhe Green also has compared the eligible social projects listed in this framework with the <i>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

<sup>&</sup>lt;sup>3</sup> The definition of SME should be referred to the Criteria for Classifying Small and Medium-sized Enterprises by China's Ministry of Industry and Information Technology, National Bureau of Statistics, National Development and Reform Commission, and Ministry of Finance





#### **Eligible Green Projects**

Design, development, construction, refurbishment, redevelopment, maintenance, operations of buildings that meet national or international third-party environmental certifications, such as but not limited to,

- Chinese Green Building Evaluation Label: '3-Star' (Within one year after completion acceptance of construction);
- Leadership in Energy and Environmental Design (LEED) minimum certification of Gold
- BEAM Plus minimum certification of Gold
- BREEAM minimum certification of Excellent

#### **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**

On November 3, 2021, Shanghai Housing and Urban-Rural Construction Management Commission issued the "Shanghai Green Building" 14th Five-Year Plan "(Hujian Building Materials (2021) No. 694). The "Plan" pointed out that the "13th Five-Year Plan" green building development goals have been fully completed, and out of the road of high-quality green building development, and put forward the overall requirements and development goals for the "14th Five-Year Plan". The plan mentions that new civil buildings should be built in accordance with green building basic level and above standards. Among them, the office buildings of state-owned, large public buildings and other government investment projects of more than 5,000 square meters shall be built in accordance with the two-star standard of green buildings and above. The super high-rise building and five new large public buildings in the new city should implement the three-star green building standard. Green eco-city area, green building stars should meet the requirements of the urban green ecological professional planning. Implement the carbon peak action for urban and rural construction, and control the carbon emissions of the city's construction sector at about 45 million tons by 2025. Establish a comprehensive renewable energy utilization accounting management system for buildings, and from 2022, new public buildings, residential buildings and industrial plants will all use one or more renewable energy sources. Promote the installation of photovoltaics in suitable new buildings.

On April 29, 2024, Shanghai Municipal Development and Reform Commission issued the "Shanghai 2024 Carbon Peak Carbon neutrality, energy conservation and emission reduction Key work Arrangement". The document mentions the need to promote the large-scale development of ultra-low energy consumption buildings, and implement ultra-low energy buildings of no less than 2 million square meters. The government will strengthen the energy-saving renovation of existing buildings, and implement the energy-saving renovation of no less than 1 million square meters of public buildings with energy consumption per unit building area reduced by more than 15%. Continue to promote the city's green community, conservation-oriented institutions, green shopping malls, ecological civilization demonstration schools, "waste free cells" and other demonstrations to promote the recycling of hotel resources.

According to Lingang Group's 20th Anniversary Social Responsibility (ESG) <u>report</u> published in 2024, green buildings are an important carrier of low-carbon ecological cities. Lingang Group actively advocates and disseminates the concept of green building, implements the high-quality





construction concept of saving resources, protecting the environment, reducing pollution, and maximizing the harmonious coexistence between man and nature, insists on the use and promotion of green building technology in the construction process, and ensures that key construction projects are 100% in line with the national two-star green building design standard. On May 30, 2023, Shanghai International Green Building Forum Lingang Sub-Forum was held in Dishui Lake Financial Bay, at which the first zero carbon building in Lingang New Area - C1 Cultural Building located in the first phase of Dishui Lake Financial Bay was officially launched. The Zero carbon building applies the development concept of "smart, low-carbon and resilient" to the development and construction of the project, and strives to build a smart city model room with high starting point industrial positioning, high-quality ecological environment and high-quality livable life.

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 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 Green Projects: Energy Efficiency

#### **Eligible Green Projects**

Development, purchase, operation, and maintenance of smart technologies and/or systems, for tracking, monitoring and managing energy usage, and energy-efficient facilities which improve energy efficiency by at least 30%. Example projects include,

- Installation of smart meters
- Improvement of energy efficiency of heating ventilation and air conditioning systems
- Installation of auto or LED lighting
- Investment in energy storage technologies

#### **Green Standards**

- » GBP: Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, relevant equipment and products)
- » GLP: Energy efficiency (such as in new and refurbished buildings, energy storage, district heating, smart grids, relevant equipment and products)
- » SDGs: Goal 13 Climate Action

#### **Lianhe Green Findings / Suggestions**

On April 29, 2024, Shanghai Municipal Development and Reform Commission <u>issued</u> the "Shanghai 2024 Carbon Peak Carbon neutrality, energy conservation and emission reduction Key work Arrangement". The document mentions that it is necessary to carry out the annual responsibility evaluation of the district-level government's carbon peak carbon neutrality and energy conservation goals, the assessment of the responsibility of key energy use units, and the report and verification of the energy utilization status of key energy use units. Organize all areas and districts to promptly issue annual energy conservation and carbon reduction targets for key





energy use units, and reduce the total annual energy consumption of "100" and "1,000" industrial key energy use units by more than 1% in principle, and reduce the annual energy intensity of "100" and "1,000" transportation key energy use units by more than 1% in principle. Accelerate the overall transformation of key regions such as Wujing, promote the construction of major projects such as Caojing Comprehensive Energy Phase II, and promote the concentration of chemical industry to the Hangzhou Bay area. The government intensified efforts to adjust backward production capacity and implemented 450 adjustment projects. Accelerate the layout and cultivation of green and low-carbon new track industry development, and promote the high-quality development of new energy storage, hydrogen energy, and remanufacturing industries. Accelerate digital empowerment, and promote the construction of energy management centers for energy-using enterprises with annual comprehensive energy consumption of more than 2,000 tons of standard coal. The government will implement the "100" action Plan and encourage 100 key energy-using units to complete energy audits.

Lianhe Green believes that these types of projects align with the "Green Bond Endorsed Project Catalogue (2021 Edition)":

- Category 1: Energy Saving and Environmental Protection Industry 1.1 Energy Efficiency Improvement - 1.1.3 Energy Conservation of Power Facilities - 1.1.3.1 Renovation of Green Lighting
- 2. Category 5: Sustainable Upgrade of Infrastructure 5.1 Energy Efficiency Improvement 5.1.1 Energy Efficiency and Energy Use in Urban Power Facilities 5.1.1.1 Operation and Upgrade of Cleaning construction of Urban Central Heating Systems
- 3. Category 5: Sustainable Upgrade of Infrastructure 5.1 Energy Efficiency Improvement 5.1.1 Energy Efficiency and Energy Use in Urban Power Facilities 5.1.1.2 Operation and Upgrade of Urban Power Facilities into Smart Power Facilities
- 4. Category 3: Clean Energy Industry 3.2 Clean Energy 3.2.3 Efficient Operation of Clean Energy 3.2.3.2 Operation and Construction of Energy Efficient Storage Facilities

Lianhe Green generally considers these types of projects to positively contribute to the environment, as installation, maintenance and repair of energy efficiency equipment and storage of electricity are included in the EU taxonomy. 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.

#### 3) Eligible Green Projects: Renewable Energy

### **Eligible Green Projects**

Investments and expenditures in solar, wind farms and energy storage projects in the Group's industrial parks

Construction of International Hydrogen Energy Valley ('Valley') and implementation of green hydrogen energy related manufacturing projects in the Valley

#### **Green Standards**

- » GBP: Renewable energy (including production, transmission, appliances and products)
- » GLP: Renewable energy (including production, transmission, appliances and products)





» SDGs: Goal 7 - Affordable and Clean Energy

#### **Lianhe Green Findings / Suggestions**

On April 29, 2024, Shanghai Municipal Development and Reform Commission <u>issued</u> the "Shanghai 2024 Carbon Peak Carbon neutrality, energy conservation and emission reduction Key work Arrangement". The document calls for strict and reasonable control of total coal consumption. Promote the preliminary work of Mongolia Power into Shanghai, accelerate the introduction of green power resources outside the city, and purchase 4 billion KWH of non-fossil energy power outside the city during the year. Promote the construction of new energy in the city, strive to add more than 600,000 kilowatts of photovoltaic installed capacity, organize a new round of offshore wind power competition configuration, and accelerate the construction of offshore wind power such as Jinshan Phase I. Accelerate the establishment of a market system and long-term mechanism to promote green electricity production and consumption.

According to Lingang Group's 20th Anniversary Social Responsibility (ESG) report released in 2024, Lingang Group adheres to sustainable development, vigorously supports the development of green industry, actively cultivates and strengthens the new momentum of green development, and promotes green, low-carbon and sustainable development. The total installed capacity of photovoltaic motors of Lingang Group is 30 MW and the annual photovoltaic power generation is 31.11 million KWH. "International Hydrogen Energy Valley" is the core carrying area of the hydrogen energy industry in Lingang New Area, and it is also an important carrier for Lingang Group to deeply implement the national development strategy of "carbon peak, carbon neutrality" and lay out a green and low-carbon track. In 2022, the "International Hydrogen Energy Valley" was selected as a characteristic industrial park in Shanghai, gathering more than 30 upstream and downstream enterprises of the hydrogen energy industry chain, and is one of the most representative hydrogen energy industry development clusters in China. In November 2021, the Lingang New Area Management Committee promulgated the "Several Measures for Accelerating the Development and Demonstration Application of Hydrogen Energy and Fuel cell Vehicle Industry in the Lingang New Area of China (Shanghai) Pilot Free Trade Zone", which made a comprehensive deployment for the development of the "International Hydrogen Energy Valley" industry. In August 2022, the Shanghai Municipal Development and Reform Commission studied and formed the "Several Policies on Supporting the High-quality Development of Hydrogen Energy Industry in Lingang New Area of China (Shanghai) Pilot Free Trade Zone", and issued a series of supporting opinions on the direction of technological research, industrial development, demonstration application, infrastructure, strengthening policy innovation and pre-testing, and building a high-level hydrogen energy industrial park in Lingang New Area. Lingang Group timely grasped the development opportunities of the hydrogen energy industry, and actively created the "International Hydrogen energy Valley" to promote green and low-carbon development.

Lianhe Green believes that these types of projects align with the "Green Bond Endorsed Project Catalogue (2021 Edition)":

- 1. Category 3: Clean Energy Industry 3.2 Clean Energy 3.2.1 Production of New Energy Equipment and Clean Energy Equipment 3.2.1.1 Production of Wind Generators
- 2. Category 3: Clean Energy Industry 3.2 Clean Energy 3.2.1 Production of New Energy Equipment and Clean Energy Equipment 3.2.1.2 Production of Solar Generators
- 3. Category 3: Clean Energy Industry 3.2 Clean Energy 3.2.2 Construction and Operation of Renewable Energy Facilities 3.2.2.1 Construction and Operation of Wind Power Facilities
- 4. Category 3: Clean Energy Industry 3.2 Clean Energy 3.2.2 Construction and Operation of





Renewable Energy Facilities - 3.2.2.2 Construction and Operation of Solar Energy Utilization Facilities

- 5. Category 3: Clean Energy Industry 3.2 Clean Energy 3.2.3 Efficient Operation of Clean Energy 3.2.3.2 Operation and Construction of Energy Efficient Storage Facilities
- 6. Category 3: Clean Energy Industry 3.2 Clean Energy 3.2.2 Construction and Operation of Renewable Energy Facilities 3.2.2.8 Construction and Operation of Hydrogen Energy Utilization Facilities

Lianhe Green considers these types of projects are eligible for the EU taxonomy, as electricity generation using solar photovoltaic technology and electricity generation from wind power both meet the substantial contribution (or technical screening) criteria for the climate change mitigation objective under EU taxonomy. For energy storage projects, construction of International Hydrogen Energy Valley ('Valley') and implementation of green hydrogen energy related manufacturing projects in the Valley, Lianhe Green generally considers these types of projects to positively contribute to the environment, as storage of electricity and manufacture of hydrogen are included in the EU taxonomy. 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.

4) Eligible Green Projects: Sustainable Water and Wastewater Management

#### **Eligible Green Projects**

Construction, development, installation, operation and maintenance of energy-efficient infrastructure or equipment for collection, treatment, recycling or reuse water, rainwater or wastewater

#### **Green Standards**

- » GBP: Sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation)
- » GLP: Sustainable water and wastewater management (including sustainable infrastructure for clean and/or drinking water, wastewater treatment, sustainable urban drainage systems and river training and other forms of flooding mitigation)
- » SDGs: Goal 6 Clean water and sanitation

#### **Lianhe Green Findings / Suggestions**

On April 29, 2024, Shanghai Municipal Development and Reform Commission <u>issued</u> the "Shanghai 2024 Carbon Peak Carbon neutrality, energy conservation and emission reduction Key work Arrangement". The document mentioned that it is necessary to carry out the revision of regulations and standards such as the "Shanghai Municipal Water Conservation Management Measures" and the "General Rules for Cleaner Production Audit, Evaluation and Acceptance", and launch a number of new local standards in the field of carbon peak carbon neutrality and energy conservation and emission reduction. Policies will be revised to support comprehensive utilization of straw, classification of domestic waste, and building energy conservation, and formulate policies to support peaking carbon neutrality, restoration and renovation of sewage, water conservation and emission reduction, and upgrading of coal-fired power plants.





Differential electricity price mechanism will be revised and improved, and office buildings in its implementation and scope will be explored.

Lianhe Green believes that these types of projects align with the "Green Bond Endorsed Project Catalogue (2021 Edition)":

- 2. Category 1. Energy Saving and Environmental Protection Industry 1.4 Water Conservation and Unconventional Water Resources 1.4.1 Unconventional Water Resources Utilization 1.4.1.2 Rainwater Collection, Treatment, and Utilization
- 3. Category 1. Energy Saving and Environmental Protection Industry 1.5 Comprehensive Utilization of Resources 1.5.1 Manufacturing of Resources Recycling Facilities 1.5.1.7 Manufacturing of Facilities for the Use of Unconventional Water Resources
- 4. Category 5. Sustainable Upgrade of Infrastructure 5.4 Water Saving and Non-conventional Water Resources 5.4.2 "Sponge" City for Flood Prevention 5.4.2.4 Construction, Operation and Renovation of Up-to-standard Urban Drainage Facilities

Lianhe Green generally considers these types of projects to positively contribute to the environment, as water supply, sewerage, waste management and remediation sector is included in the EU taxonomy. 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.

#### 5) Eligible Green Projects: Clean Transportation

#### **Eligible Green Projects**

Construction, development, installation of infrastructure or equipment that supports low carbon transportation, such as charging ports for electric vehicles (EV)

#### **Green Standards**

- » GBP: Clean transportation (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions)
- » GLP: Clean transportation (such as electric, hybrid, public, rail, non-motorised, multi-modal transportation, infrastructure for clean energy vehicles and reduction of harmful emissions)
- » SDGs: Goal 11 Sustainable Cities and Communities

#### **Lianhe Green Findings / Suggestions**

On April 29, 2024, Shanghai Municipal Development and Reform Commission <u>issued</u> the "Shanghai 2024 Carbon Peak Carbon neutrality, energy conservation and emission reduction Key work Arrangement". The document mentioned the need to improve the comprehensive low-carbon transport structure and promote the construction and improvement of railways and waterways. Build a low-carbon urban transportation system, and promote rail transit





construction, bus line optimization, and slow traffic network construction. The government will promote low-carbon upgrading of transport equipment and accelerate the full electrification of vehicles in urban public areas. The government will promote the construction of a green and smart shipping center, the use of sustainable fuels in aviation and shipping, the construction of low-carbon facilities system, deeply tap the potential of photovoltaic applications in the transportation sector, and accelerate the construction of ship shore power and charging piles.

According to the 20th anniversary Social Responsibility (ESG) <u>report</u> published by Lingang Group in 2024, Lingang Group has integrated the green concept into its business activities, encouraged park employees and enterprise employees to travel green and low-carbon by purchasing new energy vehicles and installing new energy vehicle charging piles, effectively promoted green office, and implemented green and low-carbon life.

Lianhe Green is in view that this type of project meets the "1. Energy Saving and Environmental Protection Industry - 1.6 Green Transportation - 1.6.1 Manufacturing of New Energy Vehicles and Green Ships - 1.6.1.2 Manufacturing of Facilities for Charging, Battery Replacement, and Hydrogenation" under the Green Bond Endorsed Projects Catalogue (2021 Edition).

Lianhe Green considers these types of projects are eligible for the EU taxonomy, as Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings) meet the substantial contribution (or technical screening) criteria for the climate change mitigation objective under EU taxonomy.

#### 1) Eligible Social Projects: Affordable Housing

#### **Eligible Social Projects**

Construction, refurbishment, and acquisition of safe, affordable and inclusive housing, such as subsidized rental housing

Target populations: Communities with housing difficulties, as defined by local government, such as newly employed graduates and migrant workers

#### **Social Standards**

- » SBP: Affordable housing;
- » SLP: Affordable housing;
- » SDGs: Goal 1 No Poverty; Goal 11 Sustainable Cities and Communities

# **Lianhe Green Findings / Suggestions**

According to the Shanghai Municipal Commission of Housing and Urban-Rural Development, during the "14th Five-Year Plan" period, Shanghai plans to raise more than 470,000 units (rooms) of affordable rental housing; By the end of the 14th Five-Year Plan period, the total amount of low-income rental housing raised for construction reached more than 600,000 units (rooms), of which about 400,000 units (rooms) were supplied. According to reports, Shanghai affordable rental housing projects are distributed in the city's 16 administrative districts and Lingang new areas, of which the central city accounts for about 61%; Focus on the layout of commercial and commercial agglomeration areas, industrial parks and their surrounding areas, and near rail transit stations, strengthen the adaptation of supply and demand, promote the integration of industry and city, and balance between jobs and housing. Shanghai takes out high-quality land resources through directional listing and negotiated transfer, and promotes the construction of





affordable rental housing at a land price significantly lower than that of commercial housing in the same lot. Up to now, Shanghai has provided 222 rental housing sites with a total floor area of nearly 19 million square meters, which can provide more than 250,000 rental housing, most of which are affordable rental housing. At the same time, detailed land support policies for affordable rental housing planning, through focusing on new construction, commercial housing construction, transformation and transformation of non-residential housing, enterprise self-financing and other channels, a total of 453,000 units (rooms) of various types of affordable rental housing construction (rooms), supply 267,000 units (rooms), respectively completed the "14th Five-Year Plan" at the end of the total amount of 75% and 67%.

Lianhe Green is in view that this type of project can increase the number of affordable housing and apartments, and solve the housing problems of graduates and migrant workers, which is an urgent need for China's real estate industry and social and economic development. It not only can meet the housing needs of special communities, but also promote sustainable economic and social development.

2) Eligible Social Projects: Access to essential services – Education and vocational training

#### **Eligible Social Projects**

Education and vocational training projects to target populations including,

- Courses, trainings and scholarships to children and teenagers with limited access to basic education or with special educational needs such as,
  - Student aid programs in the regions paired-up for assistance
  - Basic music courses for autistic children
- Vocational trainings provided by Lingang Industrial College for workers and technicians in Lingang Special Area on modern technology and skills in industrial sectors such as intelligent manufacturing, intelligent logistics, advanced optics, biopharmaceuticals, etc.

#### Target populations:

- Underserved communities residing in China's mountainous areas, rural areas, key counties for national rural revitalization, with limited access to basic education or those with special educational needs
- Workers and technicians from the first production line in Lingang Special Area

#### **Social Standards**

- » SBP: Access to essential services (e.g. health, education and vocational training, healthcare, financing and financial services)
- » SLP: Access to essential services (e.g. education and vocational training, public health/healthcare, public health emergency response energy (including electricity), financing and financial services, other governmental offices servicing select populations (and/or in low /low-middle income countries))
- » SDGs: Goal 4 Quality Education

#### **Lianhe Green Findings / Suggestions**

According to the 20th anniversary Social Responsibility (ESG) report <u>published</u> by Lingang Group in 2024, since 2018, in the poor areas assisted by Shanghai Municipal Government and Lingang Group, a "Lingang class" has been set up in local key high schools, targeting to recruit outstanding junior high school graduates from poor families to carry out "3-year study and 4-year help"





financial aid. As of October 2023, 21 classes have been set up in 5 schools, with a total investment of 10.68 million yuan, 1,068 students have been assisted, and 8 "Lingang classes" have successfully graduated. Lingang Group offers music courses, such as singing, dancing and electronic piano, as well as activities such as salons and performances, for children with autism through the Angel Zhiyin Music basic course. Since 2019, a total of 1.83 million yuan has been invested in 11 courses, with a total of 4,197 class hours, to help 252 children with autism.

According to the 2022 Social Responsibility (ESG) report of Lingang Group, Shanghai Lingang University of Technology has successively established eight secondary schools of intelligent manufacturing, intelligent logistics, advanced optics, integrated circuits, artificial intelligence, biomedicine, green security and cyber space security through the form of "training base + operation team + co-construction unit", and built the school on the industrial training base. The professional is built on the industrial chain and the demand chain, and the comprehensive education system is built from the joint training of college students, technical education and continuing education of on-the-job personnel to pre-job training of social job-seekers. By the end of 2022, the eight secondary colleges of Shanghai Lingang University of Technology have been equipped with training capabilities for 71 projects. Among them, 43 can issue various certificates including technical ability, professional title, education, and so on, with a total of 35,603 people/time trained.

Lianhe Green is in view that these types of projects will contribute to improving the quality of education for vulnerable groups with limited access to education or special educational needs, thereby contributing to sustainable economic and social development.

#### 3) Eligible Social Projects: Access to essential services - Healthcare

#### **Eligible Social Projects**

Medical support and health management projects with preventive and/or curative functions, such as,

- Medical and rehabilitation supports for disabled people, critically ill patients, and cancer survivors
- Development of health management system for construction workers

Target population: Disabled people, critically ill patients, and cancer survivors, industrial workers

#### Social Standards

- » SBP: Access to essential services (e.g. health, education and vocational training, healthcare, financing and financial services)
- » SLP: Access to essential services (e.g. education and vocational training, public health/healthcare, public health emergency response energy (including electricity), financing and financial services, other governmental offices servicing select populations (and/or in low /low-middle income countries))
- » SDGs: Goal 3 Good Health and Well-being

#### **Lianhe Green Findings / Suggestions**

According to Lingang Group's 20th anniversary Social Responsibility (ESG) <u>report</u> published in 2024, in 2023, under the support and guidance of Lingang New Area Management Committee, the Group cooperated with Shanghai Intelligent Manufacturing Function Platform Co., LTD., a





subsidiary of Jiao Tong University, to develop the "Construction industry Workers Health Management System". More than 30,000 workers can receive professional medical examination services without leaving the construction site, and build another occupational health barrier for builders. Relying on the information data platform, the company establishes an exclusive health file for the elderly living alone in rural areas of Fengxian Situan Town, Shanghai. It comes to the house every week to measure blood pressure, heart rate and other indicators for the elderly, establishes an electronic health file, updates relevant data in real time, and regularly tracks their health status. Since September 2019, it has invested more than 1.2 million yuan. It covers 2,280 senior citizens over the age of 90. Since March 2019, the company has focused on cancer rehabilitation patients in Lingang parks and surrounding street towns, helping them improve their five-year survival rate and life value, invested a total of more than 1.6 million yuan, established 16 interest communities, and set up cloud class open classes for 1 month/time, covering 1630 patients.

Lianhe Green is in view that these types of projects will help promote people's health and wellbeing, which in turn promotes sustainable economic and social development.

#### 4) Eligible Social Projects: Affordable Basic Infrastructure

#### **Eligible Social Projects**

Renovation projects of living facilities for the elderly living alone in rural areas,

- 'Happiness Ten Squares' kitchen and bathroom renovation
- Power line reconstruction

Target populations: Aged population in rural areas

#### **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**

According to Lingang Group's 20th anniversary Social Responsibility (ESG) <u>report</u> released in 2024, Shanghai Lingang Foundation has carried out projects of "Ten square of Happiness", "Good-neighborly wheelchairs", "toilet handrails" and "free renovation of power lines" in some areas of rural Shanghai to help elderly people living alone eliminate the safety hazards of their daily living environment.

Lianhe Green believes that such projects will help promote the health and well-being of the elderly in rural areas, thereby contributing to sustainable economic and social development.

5) Eligible Social Projects: Employment generation and programmes designed to prevent and/or alleviate unemployment stemming from socioeconomic crises





#### **Eligible Social Projects**

- Loans or financial support to small and medium enterprises (SMEs)<sup>4</sup>, including sci-tech start-up companies, tackling their financing difficulties
- Science and technology park projects that promote rural revitalization and industrial
  upgrading through sci-tech development, which support SMEs and create jobs for
  residents in China's mountainous areas, rural areas, key counties for national rural
  revitalization, such as Shanghai-Yunnan Lingang Kunming Sci-tech Park, Zunyi Lingang
  Sci-tech Park, etc.

#### Target populations:

- Small and medium enterprises (SMEs), including sci-tech start-up companies
- Residents in China's mountainous areas, rural areas, key counties for national rural revitalization

#### **Social Standards**

- » SBP: Employment generation and programmes designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, climate transition projects and/or other considerations for a "just transition" (such provision and/or promotion could include SME financing and microfinance)
- » SLP: Employment generation and programmes designed to prevent and/or alleviate unemployment stemming from socioeconomic crises, climate transition projects and/or other considerations for a "just transition" (such provision and/or promotion could include SME financing and microfinance)
- » SDGs: Goal 8 Decent Work and Economic Growth

#### **Lianhe Green Findings / Suggestions**

According to the 2022 Social Responsibility (ESG) report of Lingang Group, in order to support the chain formation of small, medium and micro enterprises in the new area, promote the development of characteristic supply chain finance, encourage financial institutions to deepen supply chain financing services, build a financial factor service platform, study and form a plan to establish a joint venture supply chain finance platform in the new area, and accumulate a good service reputation. Attract more business types, financial institutions, financial technology companies, leading enterprises to settle in the park. The Group also supports the industrial cooperation between the east and the west. As a landmark project of the cooperation between Shanghai and Yunnan, Shanghai-Yunnan Lingang Kunming Sci-tech Park was officially started in August 2022, focusing on advanced manufacturing, biomedicine and high-end productive services (inspection and testing), industrial interconnection, etc. It is expected that after fully mature operation, the park will gather more than 200 high-tech enterprises and well-known enterprises. The annual tax contribution will be 150 million yuan, 3,000 new jobs will be created, and the output value and revenue of enterprises in the park will reach 10 billion yuan, forming a new model of industrial cooperation between Shanghai and Yunnan.

Lianhe Green believes that such projects will help solve the financing problems of small and medium-sized enterprises and create jobs through scientific and technological development, thereby promoting sustainable economic and social development.

<sup>&</sup>lt;sup>4</sup> The definition of SME should be referred to the Criteria for Classifying Small and Medium-sized Enterprises by China's Ministry of Industry and Information Technology, National Bureau of Statistics, National Development and Reform Commission, and Ministry of Finance





# **B. Project Evaluation and Selection Process**

### **Company Materials**

Lingang Group suits strict internal requirements on green and social projects in the planning, and implementation stages. Finance Development Department will take lead, together with representatives from Green Development and Standard Innovation Office, Business Management Department, Finance Management Department, be responsible for project evaluation and selection, management of proceeds and post-issuance disclosure. Green Development and Standard Innovation Office is responsible for setting up Eligibility Criteria to make sure the projects meet the green and/or social development goal, the Business Management Department holds an Operational Project Investment Assessment Meeting ('OPIAM') every month to discuss and select Eligible Projects. Based on the Eligibility Criteria defined in section 2.1 of the Framework, the participant will assess the background, business model, and potential environmental and/or social impacts of projects to select the Eligible Projects during the OPIAM. The shortlisted projects selected by OPIAM will be presented to the Group's General Management Meeting for final approval. After the Group's General Management Meeting having approved the Eligible Projects, special project company or working group will be set up to implement each Eligible Project to ensure that the project meets the requirements of applicable Principles, and other laws, policies, and regulations enforcing sustainability considerations including but not limited to Environmental Protection Law of the People's Republic of China, Environmental Impact Assessment Law of the People's Republic of China, Regulations on Environmental Protection Management of Construction Projects, Water Pollution Prevention and Control Action Plan.

Additionally, during the planning stage, environmental and social impact assessments will be conducted by external experts or relevant internal departments according to application policies to identify the environmental and/or social impacts. The identification and management of environmental and social risks will be covered by the environmental and social impact assessments, and controls and mitigation measures will be made to minimize the environmental and social risks. During the implementation stage, mitigation measures of the negative environmental and social impact are strictly followed and monitored. The Company also has a robust internal control and policy framework to ensure that environmental and social risks encountered in the course of the Company's operation are mitigated.

The abovementioned departments will meet at least once a year and monitor the Eligible Projects in each reporting period. It is also responsible for:

- The exclusion and replacement of projects which no longer fulfil the eligibility criteria or are associated with environmental and/or social risks
- Updating this Framework to take into consideration changes in corporate strategy, technology and market developments.

# **Opinion of Lianhe Green**

Lianhe Green has reviewed the Sustainable Financing Framework and other series of documents, and Lingang Group's policies on project assessment and screening process.

Lingang Group has established a robust evaluation process for selecting and identifying green and social responsibility projects, as well as a robust communication mechanism for project





evaluation and screening. The department responsible for sustainable development financing will hold a meeting at least once a year to supervise qualified projects during each reporting period. It is also responsible for the exclusion and replacement of projects that no longer meet the eligibility criteria and projects with potential environmental and/or social risks.

After the assessment, Lianhe Green considers that Lingang Group has established a robust project assessment and screening system, which meets the requirements of the assessment criteria.

# C. Management of Proceeds

#### **Company Materials**

The Group commits to allocate, an amount equal to the net proceeds over time to finance and/or refinance the Eligible Projects, which are selected according to the Eligibility Criteria, and using the evaluation and selection process outlined above.

The net proceeds from each Sustainable Financing Instruments ('SFIs') will be managed by the Group's Finance Management Department and Finance Development Department and the proceeds from each SFI will be deposited in bank accounts and be used for the Eligible Projects. The Finance Management Department will be in charge of transferring the proceeds to the eligible projects and recording for accounting purposes, and the Finance Development Department will set up an internal management account register to keep track of the use of proceeds for each SFI.

The internal management account will contain the following information:

- 1. Type of Funding Transaction
  - Key information includes issuer/borrower entity, transaction date, tranche(s) information, the principal amount of proceeds, repayment or amortization profile, maturity date, and interest or coupon (and in the case of bonds, the ISIN number)
- 2. Allocation of Use of Proceeds
  - Name and description of Eligible Projects to which the proceeds of the SFI have been allocated in accordance with the Framework
  - Amount and date of SFI proceeds allocated to each Eligible Project
  - The outstanding balance of unallocated proceeds is yet to be earmarked for Eligible Projects
  - Other relevant information

When the proceeds are used, the project entity must submit an application and plan for use to the Financing Development Department of the Company for approval. The approval of the application will follow the Group's procedure, after which the proceeds will be allocated by the Financing Management Department.

The Group will monitor the net proceeds of all outstanding SFIs, which includes appropriately tracking the proceeds and adjusting the balance of net proceeds to match allocations to Eligible Projects. Any balance of issuance proceeds that are not yet allocated to Eligible Projects will be held for short-term cash deposits. The Group will disclose to investors the types of temporary placement they use for unallocated proceeds. The Group commits not to invest unallocated





proceeds to any high pollution or socially harmful activities.

During the life of the SFIs issued, if the designated Eligible Projects cease to fulfil the Eligibility Criteria, the net proceeds or an amount equal to these net proceeds will be re-allocated to replacement Eligible Projects that comply with the Eligibility Criteria, as soon as reasonably practicable. The Group strives to maintain an amount of Eligible Projects at least equal to the total net proceeds of all SFIs outstanding.

Additionally, if the investment of proceeds changes, the change must be reviewed and approved by the Company's board of directors. After that, the proceeds will still be used for Eligible Projects.

If the use of the proceeds is changed, the Group will disclose the interim report to the market on time through channels approved by the regulatory authorities. The interim report includes, but not limited to, the progress of the fund-raising projects, the reasons for changes and the adjusted investment plan of the proceeds.

### **Opinion of Lianhe Green**

Lianhe Green has reviewed a series of documents such as the Sustainable Financing Framework and Lingang Group's policies on the management of proceeds.

The net proceeds from each SFI will be managed by the Group's Finance Management Department and Finance Development Department and the proceeds from each SFI will be deposited in bank accounts and be used for the Eligible Projects. The Finance Management Department will be in charge of transferring the proceeds to the eligible projects and recording for accounting purposes, and the Finance Development Department will set up an internal management account register to keep track of the use of proceeds for each SFI.

In addition, during the horizon of existing green bonds/loans and the social bonds/loans, the company will track and regularly allocate and adjust the balance of the proceeds according to the status of the green and social projects, and will track and record and manage the unused proceeds. The Group will disclose to investors the types of temporary placement they use for unallocated proceeds. The Group commits not to invest unallocated proceeds to any high pollution or socially harmful activities.

Upon assessment, Lianhe Green considers that Lingang Group has established a robust system on management of proceeds, which is in line with the requirements of the assessment criteria.

# D. Reporting

#### **Company Materials**

Lingang Group will provide information on the allocation of the net proceeds from each SFI and impact reporting on the environmental and/or social benefits of the Eligible Projects. Such information will be publicly available on the Group's website (https://www.shlingang.com), social media, or in the Group's ESG Report on an annual basis until all the net proceeds or an amount equal to these net proceeds have been allocated and in the event of any material changes until the relevant maturity date.

Allocation Reporting should contain the following information:





- Details of each SFI that is outstanding;
- Aggregate amount of proceeds from each SFI that has been allocated to Eligible Projects;
- A list of Eligible Projects to which proceeds from each SFI have been allocated, summary
  information on such projects, including information necessary to determine alignment
  with the Eligibility Criteria such as energy performance data;
- Balance of unallocated proceeds from each SFI and its temporary treatment;
- Share of financing vs. refinancing.

If the detailed information that can be disclosed is limited due to confidentiality reasons, the Group may choose to present the information in summary or a consolidated form.

The Company will provide Impact Reporting on the expected and actual environmental and/or social impacts resulting from Eligible Projects potentially with the following impact indicators subject to the data availability. Calculation methodologies and key assumptions will be disclosed. In addition, the Company will disclose in the Impact Reporting in time if there is any material issue or controversy related to the Eligible Projects.

Table 3: Impact Indicators

Eligible Project Categories	Impact Indicators
Green Buildings	<ul><li>Level of certification by building</li><li>Gross building area ('GBA') with green building</li></ul>
Green bunuings	certification
Enormy Efficiency	<ul><li>Annual energy savings (in MWh)</li><li>Annual GHG emissions reduced/avoided (in tonnes</li></ul>
Energy Efficiency	• Affidal GHG emissions reduced/avoided (in tonnes of CO <sub>2</sub> equivalent)
Donoughla Frage	<ul><li>Renewable energy capacity installed (in MW)</li><li>Annual GHG emissions reduced/avoided (in tonnes</li></ul>
Renewable Energy	<ul> <li>Annual GHG emissions reduced/avoided (in tonnes of CO2 equivalent)</li> </ul>
Sustainable water and	Amount of rain water collected and re-used (in m³)     Appual absolute (grass), amount of wastewater.
wastewater management	<ul> <li>Annual absolute (gross) amount of wastewater treated in tonnes per annum</li> </ul>
	Number of parking lots for electric vehicle
Clean Transportation	<ul><li>Number of electric vehicle charging points installed</li><li>Number of people with access to clean transport</li></ul>
	systems
	<ul> <li>Number of subsidized rental housing units constructed/refurbished/acquired</li> </ul>
Affordable housing	Number of individuals benefiting from subsidized
Access to essential services –	rental housing  Number of students reached
Education and vocational	<ul> <li>Number of students reached</li> <li>Number of people provided with skill development</li> </ul>
training	and/or vocational training
Access to essential services -	<ul> <li>Number of patients benefitting from healthcare or medical treatment</li> </ul>
Healthcare	Number of health-related R&D programs funded
Affordable Basic Infrastructure	<ul> <li>Number of residents benefitting from basic infrastructure/facilities upgraded</li> </ul>
Employment generation and	
programmes designed to prevent and/or alleviate	Number/value of loans to SMEs
unemployment stemming from	Number of jobs created, supported and/or retained
socioeconomic crises	





Further to the above indicators, the Group will, to the extend where is appropriated, consider to align impact indicators with the recommendations in ICMA's Harmonized Framework for Impact Reporting. The impact reporting will be aggregated at a portfolio level and disclosed annually.

#### **Opinion of Lianhe Green**

Lianhe Green has reviewed a series of documents, including the Sustainable Financing Framework and Lingang Group's policy.

Lingang Group will regularly disclose the annual report of each SFI until the proceeds come to maturity. The disclosure indicators for environmental and social benefits comply with the requirements of ICMA's "Handbook – Harmonised Framework for Impact Reporting (2023)" and Harmonised Framework for Impact Reporting for Social Bonds (2023)" subject to the availability of suitable information and data.

Upon assessment, Lianhe Green considers that Lingang Group has established a robust information disclosure and reporting system, which meets the requirements of the assessment criteria.

#### E. External Review

#### **Company Materials**

Lingang Group has engaged Moody's Investor Service and Lianhe Green Development to provide Second Party Opinions ('SPOs') on its Sustainable Financing Framework. The SPOs, together with the Framework will be available on the Group's website:

https://www.shlingang.com/lg1/lingangjituan/xxpl/.

### **Opinion of Lianhe Green**

Lingang Group 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, Lingang Group has established a robust management system for external evaluation and meets the requirements of the assessment standards.

# **Analysis of Environmental Benefits and Social Benefits**

# **Eligible Green Project: Green Building**

#### **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 Green Project: Energy Efficiency**

#### **Environmental Benefits**

Smart meters can promote more efficient energy use and significantly reduce greenhouse gas emissions by providing real-time data to consumers and utilities, which helps optimize electricity consumption. Upgrading heating, ventilation and air conditioning (HVAC) systems to more energy-efficient models can significantly reduce energy use, which directly translates into lower carbon emissions. LED lighting consumes less energy than traditional bulbs, lasts longer, and reduces energy consumption and waste. Finally, investing in energy storage technology can store excess energy during times of high energy production and release it during times of peak demand, thereby reducing dependence on fossil fuels, lowering carbon emissions, and boosting the use of renewable energy.

# **Eligible Green Project: Renewable Energy**

#### **Environmental Benefits**

Solar and wind energy have great potential for development in new energy due to their renewable and pollution-free characteristics. Solar and wind power generation does not produce atmospheric pollutants, reducing emissions of pollutants such as SO2, NOX and dust. At the same time, it saves fossil fuels and achieve energy conservation and emission reduction. Solar energy, as the most abundant renewable energy source, is more evenly distributed across the globe compared to other energy sources. During peak daylight hours, which typically coincide with the highest electricity demand, solar power plants can significantly contribute to the grid, alleviating stress on electrical networks during these critical periods. By aligning energy production with peak usage times, solar energy provides an efficient solution to meet energy demands while minimizing the need for energy storage or additional grid infrastructure. Wind energy also plays a crucial role in sustainable power generation. Wind farms have a relatively small land footprint, as the space between turbines can be used for agricultural or recreational purposes. Additionally, offshore wind farms have the potential to generate large amounts of energy and can be located closer to areas with high energy demand, reducing transmission losses and visual impact on land.





Green hydrogen is produced by electrolysis of water using renewable energy sources and has significant environmental benefits. It is a clean energy carrier that releases only water vapor when used, eliminating greenhouse gas emissions from production and consumption. This makes it a sustainable alternative to fossil fuels in various sectors, including transport, industry and heating. In addition, green hydrogen can be stored and transported over long distances, providing a flexible solution for integrating renewable energy into the grid and balancing supply and demand. Its role is particularly important in decarbonizing heavy industry and long-haul transport, which are more difficult to electrify.

# Eligible Green Project: Sustainable Water and Wastewater Management

#### **Environmental Benefits**

With economic development, urban population continues to grow, urbanization levels continue to increase, and water scarcity issues in many cities are becoming more and more prominent. Sustainable water resources and wastewater management projects, by constructing and installing sewage treatment plants and building supporting sewage collection pipelines, can reduce the possibility of sewage being randomly discharged and polluting groundwater. By collecting and utilizing rainwater and sewage through reuse systems, urban runoff can be reduced, and water use efficiency improved, achieving water resource conservation and water saving. Such projects can effectively alleviate urban drainage pressure, improve water supply capacity, enhance water landscapes, while promoting sustainable water circulation and reuse, effectively reducing combined rainwater-sewage overflows, improving sewage treatment efficiency, and increasing the assurance rate of quality water sources for living and production.

# **Eligible Green Project: Clean Transportation**

#### **Environmental Benefits**

On one hand, energy and environmental issues are becoming increasingly severe. Vigorously developing new energy vehicles is an effective way to solve energy and environmental problems. Compared with traditional fuel vehicles, new energy vehicles have relatively lower carbon emission per unit of transportation, which is conducive to better promoting low-carbon development in cities. In addition, the new energy vehicle industry is a high-tech emerging industry. Its rapid development will inevitably drive the development of other emerging industries such as maintenance, energy conservation and environmental protection, information technology, parts and supporting infrastructure. At the same time, compared with traditional fuel vehicles, new energy vehicles have low noise during operation. Large-scale promotion of new energy vehicles will greatly reduce urban noise, which has a positive impact on reducing urban noise pollution. In the long run, it will help improve the living environment of urban residents.

#### **Eligible Social Project: Affordable Housing**

#### **Social Benefits**

The affordable housing built in this type of project aims to provide housing for individuals across various demographics, addressing housing difficulties and contributing to enhanced living





conditions. This initiative fosters the development of diverse communities, promoting environmental sustainability, health, and a sense of belonging. Moreover, expediting the construction of affordable housing will not only stimulate related industries but also drive the growth of supply chain industries associated with such projects, thereby creating favorable conditions for future consumption. By prioritizing cost reduction and control in construction, this project significantly impacts livelihood improvement and contributes to societal harmony and stability, benefiting a broad spectrum of individuals and families across China.

# Eligible Social Project: Access to essential services – Education and vocational training

#### **Social Benefits**

Education and vocational training programs provide substantial social benefits, especially for vulnerable groups. These projects can provide important opportunities for personal development and future employment prospects for children and young people with limited access to education or special educational needs. Student assistance programs and specialized programs, such as music lessons for children with autism, can promote inclusion, meet diverse learning needs, promote social cohesion, and reduce inequality. Vocational training, especially in modern technologies and skills related to industrial sectors such as smart manufacturing and biopharmaceuticals, equips workers and technicians with the competencies needed to thrive in a rapidly evolving job market. This not only improves individual livelihoods, but also contributes to the economic development of the region. By focusing on areas with limited educational resources, such as rural and mountainous areas in China, these initiatives can play a key role in the country's rural revitalization efforts, fostering a workforce that can support the transition to a digital economy, thereby fostering sustainable growth.

# **Eligible Social Project: Access to essential services - Healthcare**

#### **Social Benefits**

The medical support and health management project provides a range of social benefits, especially for target groups such as persons with disabilities, critically ill patients, cancer survivors and industrial workers. For people with disabilities or recovering from a critical illness, medical and rehabilitation support can significantly improve quality of life, promote independence, and reduce feelings of isolation.

For construction industry workers, the development of health management systems can improve safety and well-being at work. These systems are designed to identify risks and implement safety measures that not only protect workers, but also improve morale and reduce costs associated with workplace accidents. In addition, they can enhance a company's reputation and attract more skilled workers, resulting in a stronger and more sustainable workforce. Collectively, these programs can create a supportive environment that meets the medical and social needs of their target populations, resulting in better health outcomes and a stronger sense of community.

# **Eligible Social Project: Affordable Basic Infrastructure**

#### **Social Benefits**

Renovation projects in rural areas, especially those aimed at improving living facilities for the elderly, provide significant social benefits. The "Happiness Ten Squares" kitchen and bathroom renovation project focuses on the renovation of the kitchen and bathroom, which can greatly improve the daily





life of the elderly by making these basic Spaces more convenient, safer and better meet the needs of the elderly. This can improve independence and quality of life, and reduce the risk of accidents and injuries. Power line reconstruction is equally important because reliable power improves the overall safety and comfort of the home. It ensures the proper functioning of heating, cooling and medical equipment, which is essential for the well-being of the elderly population. In addition, these projects foster a sense of community and belonging, as they often involve local workers and volunteers, thereby strengthening social ties and providing a support network for older persons. These improvements not only benefit individual residents, but also contribute to the economic and social vitality of rural areas and support the elderly population to live with dignity in their own homes.

Eligible Social Project: Employment generation and programmes designed to prevent and/or alleviate unemployment stemming from socioeconomic crises

#### **Social Benefits**

The social benefits of providing loans or financial support to SMEs, including tech startups, are manifold. This support can enable these enterprises to overcome financial difficulties, innovate and expand, thereby making a significant contribution to economic growth. SMEs are vital to the economy as they account for a large proportion of employment and GDP in many countries. Providing financial assistance to small and medium-sized enterprises can create jobs, increase productivity and promote entrepreneurship. In addition, technology park projects that revitalize villages can have a transformative impact on local communities. These projects are often hubs for innovation and industrial upgrading, which can attract investment, improve the competitiveness of small and medium-sized enterprises, and create jobs for rural and mountain residents. By fostering an environment conducive to science and technology development, these parks can also facilitate the transfer of technology and skills, leading to sustainable economic development and improving the quality of life of the target population. In China, these measures, combined with the national strategy to revitalize key counties and the Urban-Rural integration development strategy, are conducive to narrowing regional disparities and promoting coordinated regional development.





# **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 Lingang Group to provide an assessment of the company's Sustainable Financing Framework. The assessment is to provide a professional second-party opinion of the compliance of the Sustainable Financing Framework and does not provide any financial indicators or judgement on the investment values of the company's issuance.

#### Responsibilities

#### The Company

Lingang 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 Lingang Group. Lianhe Green will review all important data and documents, and issue conclusions. In addition, Lianhe Green will disclose information collected from Lingang Group and relevant parties to demonstrate whether its Sustainable Financing 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 Lingang Group's policies and processes;
- » Review the Sustainable Financing Framework developed by Lingang 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 a 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.

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