



# Chongqing Tongnan Construction Engineering (Group) Co., Ltd.

## Second-Party Opinion | Green Finance Framework

### Framework Type

Green

### Analytical Standards

- » Green Bond Principles (GBP) (June 2021 Edition)
- » Green Loan Principles (GLP) (February 2023 Edition)
- » United Nations Sustainable Development Goals (SDGs)

### Industry

Local Investment and Development Companies

### Country/Region

China

### Report Date

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## Summary

Lianhe Green has reviewed a series of documents including the "Green Finance Framework of Chongqing Tongnan Construction Engineering (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 *Green Bond Principles (GBP) (June 2021 Edition)* and the *Green Loan Principles (GLP) (February 2023 Edition)*. In addition, the eligible green projects listed in this Framework are in line with the *Green Bond Principles (GBP) (June 2021 Edition)* and the *Green Loan Principles (GLP) (February 2023 Edition)*, and the *United Nations Sustainable Development Goals (SDGs)*.

## About the Company

Chongqing Tongnan Construction Engineering (Group) Co., Ltd. (hereinafter referred to as "CTCE", the "Company", or the "client", together with its subsidiaries, the "Group") was established in December 2017. The Group is designated to carry out major infrastructure construction projects within Tongnan, Chongqing. In particular, the Issuer has undertaken a number of large-scale infrastructure construction projects within Chongqing city. Leveraging the development of Chongqing in recent years, strong shareholder's support and its diversified businesses, the Group has established itself as a leading state-owned company in Chongqing and plays an important role in the development of Chongqing. The Group has a diverse business portfolio and is primarily engaged in the following principal business segments, namely: (i) construction business, (ii) concrete sales, (iii) gravel sales, and (iv) other principal businesses.

The Group takes sustainable development very seriously, and integrates the philosophy of sustainable development into its overall business strategy, investment, construction, and operations. The Group will actively explore and provide products and services to support the development of the green and sustainable economy, which leads Group towards a low-carbon economy and contributes to China's carbon peak in 2030, carbon neutrality in 2060 and rural revitalization.

The Group has adopted strict environmental and social measures and assessments to ensure compliance with national laws and regulations on sustainable development. As one of the most important state-owned enterprises in Chongqing city, the Group undertakes the responsibility for actively guiding the direction of government investment in accordance with the requirements of national regulations of sustainable development and industrial layout.



## About the Framework of CTCE

CTCE has prepared the Green Finance Framework for Chongqing Tongnan Construction Engineering (Group) Co., Ltd. (hereinafter referred to as the "Framework"), which is intended to provide overarching principles and guidelines for all green development financing opportunities for CTCE.

The green bonds or loans issued under the Framework will comply with the International Capital Markets Association's (ICMA's) *Green Bond Principles (GBP) (June 2021 Edition)*, and the *Green Loan Principles (GLP) (February 2023 Edition)* published by the Loan Market Association (LMA), the Loan Syndications and Trading Association (LSTA) and the Asia-Pacific Loan Markets Association (APLMA).

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

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

### A. Use of Proceeds

#### Company Materials

The proceeds of each green transaction issued by CTCE will be used to finance and/or refinance the assets or projects set out in the Framework. The proceeds of the Green Bonds or Loans will be used for Qualified Green Projects as defined in Table 1.

Table 1: Qualified Green Projects

Eligible Green Project Categories	Qualified Green Projects
<b>Environmentally sustainable management of living natural resources and land use</b>	Investment, acquisition and expenditures related to comprehensive treatment projects to improve the production and living environment in rural areas. (i.e. construction of farmland water conservancy facilities, and construction and operation of rural drinking water safety projects, etc.
<b>Terrestrial and Aquatic Biodiversity</b>	Investment, acquisition and expenditures related to river, lake, water system and environment management projects (i.e. restoration of native species and vegetation, river and lake system inter-connection ecological dispatching project, construction of facilities for flood control and coastal erosion).
<b>Sustainable Water and Wastewater Management</b>	Investment, acquisition and expenditures related to construction, development, upgrade, installation, operation and maintenance the facilities of water supply infrastructure, wastewater treatment infrastructure, urban drainage systems, flood control and defenses, pumping stations, distribution network, climate resilient infrastructure and recycling systems (i.e. drinking water, recycling or reuse water, rainwater collection, treatment, urban water networks) to saving water, improve the water leakage performance and the efficiency.



**Climate Change  
Adaptation**

Investment, acquisition and expenditures related to construction and operation of infrastructure for flood protection and mitigation, such as rivers works, dams and dykes<sup>1</sup>, “sponge cities”, drainage system and others for flood control, waterlogging prevention in order to mitigate the physical climate change risk and improve the environmental resilience.

Meanwhile, CTCE declares that the proceeds will not be used for the following purposes:

- 1) Production or trade in any product or activity deemed illegal under host country laws or regulations or international conventions and agreements, or subject to international bans, such as pharmaceuticals, pesticides/herbicides, ozone-depleting substances, polychlorinated biphenyls (PCBs), wildlife or products regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- 2) Production or trade in weapons and munitions.
- 3) Production or trade in alcoholic beverages (excluding beer and wine).
- 4) Production or trade in tobacco.
- 5) Gambling, casinos, and equivalent enterprises.
- 6) Production or trade in radioactive materials. This does not apply to the purchase of medical equipment, quality control (measurement) equipment and any equipment where any international financial company considers the radioactive source to be trivial and/or adequately shielded.
- 7) Production or trade in unbonded asbestos fibers. This does not apply to the purchase and use of bonded asbestos cement sheeting where the asbestos content is less than 20 per cent.
- 8) Drift net fishing in the marine environment using nets over 2.5 kilometers in length.
- 9) Production or activities involving of forced labor and child labor.
- 10) Commercial logging operations for use in primary tropical forest.
- 11) Production or trade in wood or other forestry products other than from sustainably managed forests.
- 12) Palm oil related activities.
- 13) Projects related to nuclear energy production.
- 14) Projects related to fossil fuel production.
- 15) Projects related to coal mining.

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<sup>1</sup> For the avoidance of doubt, the dams and dykes will not serve the purpose of generating hydropower.



16) Projects related to hydropower which installed capacity >25MW.

### Opinion of Lianhe Green

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

Lianhe Green compared the green project categories listed in this framework with *the Green Bond Endorsed Projects Catalogue (2021 Edition)*, *Green Loan Principles (GLP) (February 2023 Edition)*, *Green Bond Principles (GBP) (June 2021 Edition)*, and the *United Nations Sustainable Development Goals (SDGs)* respectively.

### 1) Eligible Green Projects: Environmentally sustainable management of living natural resources and land use

#### Eligible Green Projects

Investment, acquisition and expenditures related to comprehensive treatment projects to improve the production and living environment in rural areas. (i.e. construction of farmland water conservancy facilities, and construction and operation of rural drinking water safety projects, etc.

#### Green Standards

- » GBP: Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes);
- » GLP: Environmentally sustainable management of living natural resources and land use (including environmentally sustainable agriculture; environmentally sustainable animal husbandry; climate smart farm inputs such as biological crop protection or drip-irrigation; environmentally sustainable fishery and aquaculture; environmentally sustainable forestry, including afforestation or reforestation, and preservation or restoration of natural landscapes);
- » SDGs: Goal 11 - Sustainable Cities and Communities, Goal 15 - Life on Land

#### Lianhe Green Findings / Suggestions

In January 2024, the Chongqing's Water Resources Bureau [reported](#) it has completed various types of water conservancy investment, with investments exceeding RMB 40 billion for the first time with an increase of 55.7%, the highest since the jurisdiction was founded. In February 2024, the Chongqing municipal government [mentioned](#) in its 2024 Economic and Social Development Plan that it aims to increase investment in water conservancy, accelerate the Yuxi Water Resources Allocation Project, Jumping Stirrup Reservoir, Zaodu Reservoir, Xiangyang Reservoir and other major water conservancy projects, and start a number of new water conservancy projects such as Yinheqiao Reservoir. In addition, the Chongqing Tongnan district government is [expected](#) to finish construction of the Tongnan Tongcheba reservoir in June 2024. It is a medium-sized backbone water conservancy project which mainly uses farm and town water supply and agricultural irrigation, and takes into account the comprehensive utilization functions of rural people and livestock drinking water. After the completion of the



project, it can effectively solve the problem of water shortage in drought-prone areas in the south of Tongnan District, ensure the production and domestic water for 32,000 residents in Wofo Town and Xiaodu Town, drinking water for 15,200 rural residents and more than 30,000 livestock in Wofo Town, Xiaodu Town and Tangba Town, and irrigation water for 21,400 mu of farmland.

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

1. Category 1: Energy Saving and Environmental Protection Industry - 1.3 Pollution Prevention - 1.3.5 Comprehensive Improvement of Agricultural and Rural Environment - 1.3.5.2 Improvement of Rural Living Environment

2. Category 4: Ecology and Environment-related sector 4.1 Ecological Agriculture - 4.1.1 Conservation of Agricultural Resources - 4.1.1.2 The Management of Crop Protection Areas and Protection Zones

Lianhe Green views projects such as the construction of farmland water conservancy facilities, and construction and operation of rural drinking water safety are generally making a positive contribution to climate change adaptation and water. However, more detailed information on the substantial contribution criteria (or technical screening criteria) is required to determine eligibility for the EU taxonomy.

## 2) Eligible Green Projects: Terrestrial and Aquatic Biodiversity

### Eligible Green Projects

Investment, acquisition and expenditures related to river, lake, water system and environment management projects (i.e. restoration of native species and vegetation, river and lake system inter-connection ecological dispatching project, construction of facilities for flood control and coastal erosion)

### Green Standards

- » GBP: Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments);
- » GLP: Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments);
- » SDGs: Goal 14 - Life below Water

### Lianhe Green Findings / Suggestions

In February 2024, the Chongqing municipal government [released](#) its 2024 Economic and Social Development Plan. It includes plans to further promote ecosystem protection and restoration. In the Three Gorges Reservoir area, the government successfully fought the battle to control the disaster of dangerous rock sites, completed the treatment of 120 projects and the relocation of 24 sites to avoid risks, and the removal rate of dangerous rock stocks reached 90%. The government will promote major projects for the protection and restoration of important ecosystems, strive to build 350,000 mu of "green mountains on both sides and a thousand li forest belt", afforestation of 500,000 mu of national reserve forest, and implement integrated protection and restoration projects for mountains, rivers, forests, fields, lakes, grass and sand in the heart of the Three Gorges Reservoir area, so as to improve the ecological environment of Jinyun Mountain comprehensively. China has implemented the endangered



wildlife protection project, continuously carried out monitoring, investigation and assessment of biodiversity, and strengthened the protection and restoration of rare and endangered wild animals and plants and their habitats. The government aims to strictly implement the "10-year fishing ban" policy in the Yangtze River, and gradually improve aquatic biodiversity. The government also wants to establish a technical support system for risk assessment and supervision of alien species, and strengthen the prevention and control of alien invasive species. Lastly, the government will continuously promote the manganese pollution remediation project in Xiushan, Youyang and Chengkou.

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

1. Category 1. Energy Saving and Environmental Protection Industry - 1.3 Pollution Prevention - 1.3.2 Treatment of Sewage Water - 1.3.2.3 Remediation and Treatment of Urban Black and Malodorous Water

2. Category 4. Ecology and Environment-related sector - 4.2 Ecological Protection and Construction - 4.2.1 Conservation and Restoration of Natural Ecosystems - 4.2.1.6 Protection and Restoration of Rivers, Lakes and Wetlands

3. Category 5. Sustainable Upgrade of Infrastructure - 5.4 Water Saving and Non-conventional Water Resources - 5.4.2 "Sponge" City for Flood Prevention - 5.4.2.5 Restoration of the Natural Ecology of Urban Water Bodies

Lianhe Green generally considers these types of projects to positively contribute to the environment, as rehabilitation and restoration of forests, and conservation, including restoration, of habitats, ecosystems and species activities are included in the EU taxonomy. However, more information on substantial contribution criteria (or technical screening criteria) is required for eligibility.

### 3) Eligible Green Projects: Sustainable Water and Wastewater Management

#### Eligible Green Projects

Investment, acquisition and expenditures related to construction, development, upgrade, installation, operation and maintenance the facilities of water supply infrastructure, wastewater treatment infrastructure, urban drainage systems, flood control and defenses, pumping stations, distribution network, climate resilient infrastructure and recycling systems (i.e. drinking water, recycling or reuse water, rainwater collection, treatment, urban water networks) to saving water, improve the water leakage performance and the efficiency.

#### 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

In February 2024, the Chongqing municipal government [released](#) its 2024 Economic and Social Development Plan. It plans to build or upgraded 1,304 kilometers of urban drainage networks, renovate and expand 11 urban sewage treatment plants, and improve 160 waterlogging points in the main urban areas. The government also plans to steadily advance the "three revolutions" of toilets, garbage and sewage, and comprehensively promote the penetration rate of sanitary toilets in rural areas, the classification coverage rate of household garbage, and the treatment of black and odorous water bodies.

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

1. 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
2. Category 4: Ecology and Environment-related sector - 4.2 Ecological Protection and Construction - 4.2.1 Conservation and Restoration of Natural Ecosystems - 4.2.1.6 Protection and Restoration of Rivers, Lakes and Wetlands
3. Category 4: Ecology and Environment-related sector - 4.2 Ecological Protection and Construction - 4.2.1 Conservation and Restoration of Natural Ecosystems - 4.2.1.11 Drought and Flood Management for Water-Related Ecosystem
4. Category 5: Sustainable Upgrade of Infrastructure - 5.3 Pollution Prevention - 5.3.1 Urban Environmental Infrastructure - 5.3.1.1 Construction and Operation of Facilities for Sewage Treatment, Recycling, and Sludge Treatment and Disposal
5. 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. However, more information on the substantial contribution criteria (or technical screening criteria) is required for eligibility.

## 4) Eligible Green Projects: Climate Change Adaptation

### Eligible Green Projects

Investment, acquisition and expenditures related to construction and operation of infrastructure for flood protection and mitigation, such as rivers works, dams and dykes, "sponge cities", drainage system and others for flood control, waterlogging prevention in order to mitigate the physical climate change risk and improve the environmental resilience.

### Green Standards

- » GBP: Climate change adaptation (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems);





- » GLP: Climate change adaptation (including efforts to make infrastructure more resilient to impacts of climate change, as well as information support systems, such as climate observation and early warning systems);
- » SDGs: Goal 13 - Climate Action

### Lianhe Green Findings / Suggestions

In 2022, Chongqing municipal government [released](#) the "Chongqing Sponge City Construction "14th Five-Year Plan" (2021-2025)". The plan targets more than 45% of the urban built-up area to meet the requirements of sponge city construction by 2025. In February 2024, the Chongqing municipal government [released](#) its 2024 Economic and Social Development Plan, which mentioned the need to respond to extreme weather disasters, prevent and control forest fires, mountain torches, and urban waterlogging.

Lianhe Green is in view that this type of project meets the "Category 4. Ecology and Environment-related sector - 4.2 Ecological Protection and Construction - 4.2.1 Conservation and Restoration of Natural Ecosystems - 4.2.1.11 Drought and Flood Management for Water-Related Ecosystem" under the Green Bond Endorsed Projects Catalogue (2021 Edition).

Lianhe Green views river works, dams, dykes, 'sponge cities' projects, and other flood control and waterlogging prevention projects as generally making a positive contribution to climate change adaptation. However, more detailed information on the substantial contribution criteria (or technical screening criteria) is required to determine eligibility for the EU taxonomy.

## B. Project Evaluation and Selection Process

### Company Materials

The Group imposes strict environmental and social risk management during the daily operations and project management. In terms of the process for project evaluation and selection, the Group has set up a Green Financing Working Group (the "GFWG"), which is responsible for ensuring that proceeds from green finance transaction ("GFTs") or an equivalent amount will be allocated to the eligible projects under the framework. The GFWG will also be responsible for managing any future updates of the framework, including any expansion of requirements of the use of proceeds. For the potential eligible green projects, the project related department will pre-select and evaluate green projects according to its feasibility study report, environment impact assessment report, project preliminary design etc. and will submit the potential eligible green projects to the GFWG to further assess and evaluate whether the project fulfils the eligibility and exclusion criteria of this framework and also to ensure that the mitigation measures against environmental and social risks are in place. The endorsed projects will be shortlisted and presented to the Board of Directors of the Company for final approval. After receiving the assessment and approval from the Board of Directors, the selected projects will be included in the eligible green projects list.

The GFWG is responsible for the management and compliance of all the financings issued under this framework. The GFWG consists of senior management members from various departments of the Group, including the Investment and Financing Department and Financial Department. The GFWG will meet at least every 12 months or whenever necessary to discuss, assess and select eligible green projects according to the eligibility and exclusion criteria under this framework.





The GFWG will undertake regular monitoring of the asset pool to ensure the eligibility of green projects, whilst replacing any ineligible green projects with eligible new green projects and facilitate regular reporting on any GFTs issuance in alignment with the reporting commitments.

### Opinion of Lianhe Green

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

The company has established a solid assessment process for the selection and identification of green projects, and at the same time, a solid communication system for project assessment and screening has been established, whereby each participating department submits a list of potential projects and elaborates on whether or not the nominated projects are in line with the categories of green projects under the Framework. GFWG will be responsible for the review and approval of potential green projects.

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

## C. Management of Proceeds

### Company Materials

The Group intends to allocate an amount equal to the net proceeds of the GFT(s) over time to finance or refinance the eligible green projects, which are selected according to the eligibility criteria using the evaluation and selection process outlined above.

The net proceeds of each GFT 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. A green finance allocation register will be established to record the allocation of proceeds.

The register will contain information including the following:

1. Type of funding transaction: ISIN (if applicable), pricing date, maturity date etc.; and
2. Eligible green projects allocation list, information including:
  - the eligible projects list, including for each eligible green project category, project description, project location, ownership percentage, total investment amount, amount allocated, settled currency, etc.;
  - the balance of unallocated proceeds; and
  - the information of temporary investment for unallocated proceeds.

Any balance of issuance proceeds which are not yet allocated to eligible green projects will be temporarily held in accordance with the Group's liquidity guidelines on cash, cash equivalents or short-term deposits, and the Group commits not to invest such unallocated net proceeds to the projects which are subject to exclusions criteria under this framework. For each issuance under this framework, the Group will review the register on an annual basis.

During the life of the GFT(s) issued, if the designated projects cease to fulfil the eligibility criteria,



the net proceeds will be re-allocated to replacement projects that comply with the eligibility criteria as soon as reasonably practicable.

### Opinion of Lianhe Green

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

The net proceeds of each GFT 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. A green finance allocation register will be established to record the allocation of proceeds.

In addition, during the life of the GFT(s) issued, if the designated projects cease to fulfil the eligibility criteria, the net proceeds will be re-allocated to replacement projects that comply with the eligibility criteria as soon as reasonably practicable.

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

## D. Reporting

### Company Materials

For the GFT(s) issued under the framework, the Group will make and keep readily available category level disclosure reports via the issuer's website, or include in the Group's annual report the allocation of the net proceeds raised under the framework or an amount equal to these net proceeds, on an annual basis starting from one year from the first GFT issuance until the full allocation of the net proceeds to the eligible green projects, and thereafter in the event of any material changes. The disclosed information will include but not limited to the following:

- » The net proceeds of each GFT outstanding;
- » List of eligible green projects with descriptions and the amount that has been allocated and earmarked;
- » The proportion of the proceeds allocated to refinancing of existing eligible green projects, with clarification on which investment or project portfolios will be refinanced;
- » The balance of unallocated proceeds held in cash, cash equivalents or short-term deposits and its temporary treatment (if any); and
- » The types of temporary unallocated funds placements and uses.

Impact Reporting:

The Group will report on both expected and achieved impacts arising from the eligible green projects and provide the methodology and assumptions used for calculation of the impact indicators. The Group will commit to aligning the reporting with the project approach described in ICMA's "Handbook – Harmonised Framework for Impact Reporting (2023)" subject to the availability of suitable information and data.

CTCE will disclose the impacts of qualified green projects. Depending on the availability of data, the disclosure will include, but not limited to, the information below:



Table 2: Impact Indicators for Eligible Green Projects

Eligible Project Categories	Impact Indicators
<b>Environmentally sustainable management of living natural resources and land use</b>	» The increased acreage of irrigated farmland in m <sup>2</sup>
<b>Terrestrial and aquatic biodiversity</b>	» Maintenance/safeguarding/increase of natural landscape area in m <sup>2</sup> and in % for increase
<b>Sustainable Water and Wastewater Management</b>	» Annual absolute (gross) amount of wastewater treated, reused or avoided before and after the project (m <sup>3</sup> /a) » Amount of rain water collected and reused (m <sup>3</sup> /a) » Annual absolute amount of water supplied (m <sup>3</sup> /a)
<b>Climate Change Adaptation</b>	» Additional water availability and/or increased water catchment (m <sup>3</sup> /a) » Reduction in number of operating days lost due to floods

### Opinion of Lianhe Green

Lianhe Green has reviewed a series of documents, including the Green Finance Framework and the company's policy.

The company will regularly disclose the annual report of green bonds/loans until the full allocation of the net proceeds to eligible green projects. The disclosure indicators for environmental benefits comply with the requirements of ICMA's "Handbook – Harmonised Framework for Impact Reporting (2023)" subject to the availability of suitable information and data.

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

## E. External Review

### Company Materials

Pre-issuance:

The Group has engaged Lianhe Green Development to provide a Second- Party Opinion on this Framework to review and confirm its alignment with the GBP and GLP. The Second-Party Opinion together with the Framework will be published on the Group's website.

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



CTCE 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, CTCE has established a complete management system for external evaluation and meets the requirements of the assessment standards.

## Analysis of Environmental Benefits

### Eligible Green Project: Environmentally sustainable management of living natural resources and land use

#### Environmental Benefits

Farmland water conservancy facilities, such as reservoirs, irrigation channels, and check dams, contribute to maintaining local ecosystems. These structures help regulate water flow, prevent soil erosion, and create habitats for aquatic organisms. By preserving natural water sources and preventing excessive extraction, these projects safeguard wetlands, marshes, and riparian zones. This ecological balance supports biodiversity and sustains plant and animal life. Proper water management enhances soil health. Irrigation systems ensure consistent moisture levels, promoting crop growth and reducing soil degradation. Farmland water conservancy facilities prevent soil erosion by controlling runoff. This, in turn, maintains soil fertility and prevents sedimentation in rivers and streams.

Rural drinking water safety projects focus on providing clean water to communities. By ensuring safe water sources, these projects reduce the risk of waterborne diseases. Properly managed water conservancy facilities prevent contamination from agricultural runoff, pesticides, and pollutants. This positively impacts downstream water quality. Sustainable water use practices reduce over-extraction, ensuring long-term agricultural productivity without depleting water resources.

Farmland water conservancy facilities play a role in climate adaptation. They mitigate the impact of droughts and floods by regulating water availability. By maintaining stable water levels, these projects enhance resilience against extreme weather events, benefiting both agriculture and local ecosystems.

### Eligible Green Project: Terrestrial and Aquatic Biodiversity

#### Environmental Benefits

The implementation of such projects is a necessary means to protect and restore river and lake ecosystems and maintain ecological balance. By carrying out water environment management, dredging waterways, clearing river courses, and treating black and odorous waters, the projects can effectively regulate local river runoff and achieve sustained regulation of local water storage. At the same time, by conducting environmental management of the ecological environment along the river course, such projects are conducive to replenishing water sources around the riverbank and conserving soil and water. In addition, after project construction, the ecological environment will be improved, allowing aquatic vegetation and benthic organisms to recuperate and reproduce, thus greatly improving water environmental quality. After project completion, there will be no major impact on important habitats such as fish migration channels, and it will be beneficial to downstream aquatic organisms and ecological environment on both banks. It can



increase the amount of species resources, enhance biodiversity of communities and the stability of ecosystems.

### **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: Climate Change Adaptation**

#### **Environmental Benefits**

Such projects can effectively cope with floods and waterlogging disasters in aquatic ecosystems by building flood control and disaster mitigation infrastructure, playing a role in flood control and disaster mitigation, avoiding damage to the living environment and people's lives and property in the region caused by flooding, and greatly reducing major losses in manpower, materials and financial resources. This ensures that residents can live and work in peace and stability. In addition, the construction of flood control and disaster mitigation infrastructure is beneficial to optimizing water quality and reducing pollution in aquatic ecosystems. Through long-distance water transfer or medium-, long- and short-term water storage, the water bodies can be fully reoxygenated, thus enriching the potential environmental capacity resources and enhancing biodiversity of aquatic organisms, restoring ecosystem functions. At the same time, by carrying out ecological system protection and restoration of water areas during project implementation, such projects can effectively prevent deterioration of aquatic ecosystems, resolving aquatic ecosystem pollution issues, and further improving local water quality.



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

### Responsibilities

#### The Company

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

### Analytical Process

The main aspects of this assessment include the following:

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



### **Solicitation Status**

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

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