



光大環境

EVERBRIGHT ENVIRONMENT

(Stock Code 股份代號: 257)

DEVOTED TO

Ecology and Environment

for a
Beautiful China

情繫生態環境
築夢美麗中國

2024

SUSTAINABILITY REPORT
可持續發展報告

CHINA EVERBRIGHT
ENVIRONMENT GROUP LIMITED
中國光大環境(集團)有限公司

DEVOTED TO
ECOLOGY AND ENVIRONMENT
FOR A BEAUTIFUL CHINA
情繫生態環境 築夢美麗中國



Contents 目錄

2

About
This Report
關於本報告

8

Message from the Chairman
of the Board
董事會主席致辭

14

2024
Sustainability Highlights
二零二四年可持續發展摘要

18

About
Everbright Environment
關於光大環境

34

Sustainable Operations
Management
可持續的運營管理

56

Stakeholder
Engagement
持份者參與

68

Responding to
Climate Change
應對氣候變化

108

Environmental
Protection
環境保護

154

Talent Development
人才發展

175

Safety Culture
安全文化

188

Community Care
社區關懷

205

Together for the Sustainable
Development Goals
攜手邁向可持續發展目標

217

Key Statistics
主要數據

229

Verification Statement
審核聲明

242

Appendix I –
Reporting Boundary
附錄I – 報告邊界

250

Appendix II –
Main Corporate Memberships
附錄II – 主要企業會籍

253

Appendix III –
GRI Content Index
附錄III – GRI內容索引

268

Appendix IV –
Stock Exchange ESG Reporting
Guide Content Index
附錄IV – 聯交所《環境、社會及
管治報告指引》內容索引

273

Appendix V –
Compliance with Relevant Laws and
Regulations that have a Significant Impact
on Everbright Environment
附錄V – 對光大環境有重大影響的
相關法律及規例的遵守情況

About This Report 關於本報告

Group Profile

China Everbright Environment Group Limited (“Everbright Environment” or the “Company”, together with its subsidiaries, the “Group”) is a flagship enterprise of its controlling shareholder, China Everbright Group Limited (“Everbright Group”), in the industrial sector. Everbright Environment is listed on the Main Board of The Stock Exchange of Hong Kong Limited (the “Stock Exchange”) (257.HK), which has two listed subsidiaries: China Everbright Water Limited (“Everbright Water”), which is listed on both the Mainboard of the Singapore Exchange Securities Trading Limited (“SGX”) and the Stock Exchange (U9E.SG & 1857.HK); and China Everbright Greentech Limited (“Everbright Greentech”), which is listed on the Main Board of the Stock Exchange (1257.HK)⁽¹⁾. Since shifting its business focus to the environmental sector in 2003, the Company has grown into the largest environmental enterprise in the People’s Republic of China (“PRC”), a leading player in Asia’s environmental protection industry, the world’s largest waste-to-energy investor and operator, and a world-renowned environmental group.

Reporting Scope and Principles

The Sustainability Report 2024 (the “Report”) is the Group’s thirteenth standalone sustainability report, which covers the Group’s main sustainability initiatives and performance during 1 January 2024 to 31 December 2024 (the “Reporting Period”).

The data and information disclosed in the Report are consolidated from the materiality assessment, stakeholder engagement and relevant sustainability reporting guidelines, covering the sustainability performance of the Group’s headquarters in Hong Kong and Shenzhen, a management centre and a representative office⁽²⁾, Singapore office, and projects under the Group’s operational control from construction⁽³⁾ through operation phases, and other business activities of the Group during the Reporting Period⁽⁴⁾⁽⁵⁾. The delineation of reporting boundary is provided in Appendix I, while the relevant entities of the Group can be found in the Company’s Annual Report 2024 (the “Annual Report 2024”): Notes to Financial Statements.

集團概覽

中國光大環境（集團）有限公司（「光大環境」或「本公司」，連同其附屬公司，統稱「本集團」）為其控股股東中國光大集團股份公司（「光大集團」）在實業領域的旗艦企業。光大環境於香港聯合交易所有限公司（「聯交所」）主板上市（257.HK），轄下兩家上市公司：新加坡證券交易所有限公司（「新交所」）及聯交所主板上市之中國光大水務有限公司（「光大水務」，U9E.SG及1857.HK）以及聯交所主板上市之中國光大綠色環保有限公司（「光大綠色環保」，1257.HK）⁽¹⁾。自二零零三年轉型環境領域以來，本公司已逐步成長為中國最大的環境企業、亞洲領先的環保企業、全球最大的垃圾發電投資運營商以及世界知名的環境集團。

報告範圍及原則

二零二四年可持續發展報告（「本報告」）為本集團第十三份獨立的可持續發展報告，涵蓋了本集團於二零二四年一月一日至二零二四年十二月三十一日（「報告期」）期間本集團的主要可持續發展策略和表現。

本報告所披露的數據及信息是基於實質性評估、持份者參與及相關的可持續發展報告指引釐訂，涵蓋了本集團在報告期內於香港及深圳總部、管理中心及代表處⁽²⁾、新加坡辦事處以及本集團從建設⁽³⁾到運營階段擁有運營控制權的項目，以及本集團其他業務活動的可持續發展表現⁽⁴⁾⁽⁵⁾。有關報告邊界的描述，請參閱附錄I。本集團的相關實體資料可參閱本公司二零二四年年報（「二零二四年年報」）中的財務報表附註。

We believe that high-quality information disclosure in the Report is a key step for the Group to achieve efficient and sustainable management. As such, the Group adheres to the following 11 principles in disclosing its environmental, social and governance (“ESG”) performance:

我們認為，在報告中進行高質量的信息披露是本集團實現高效和可持續管理的關鍵步驟。因此，本集團在披露環境、社會及管治（「ESG」）表現時恪守以下十一項原則：

1 Materiality 重要性	2 Quantitativeness 量化	3 Consistency and Comparability 一致性及可比性
We conduct annual materiality assessments to ensure that the ESG issues identified and prioritised, accurately and reliably reflect the issues that matter most to us and our stakeholders. 我們每年進行重要性評估，確保已識別並優先考慮的ESG議題能準確地反映我們和持份者最關注的事項。	We strive to quantify data with the most accurate and precise standards, methodologies, and assumptions possible for ease of comparing and verifying ESG performance. 我們致力於採用準確且精確的標準、計算方法和假設來量化數據，以便比較和驗證ESG表現。	We use a consistent format to compile our latest annual sustainability report so that stakeholders can make meaningful assessments and comparisons of our ESG performance to make informed decisions. 我們採用一貫的格式編製最新年度的可持續發展報告，以便持份者能夠對我們的ESG表現作出有意義的評估及比較，從而作出明智的決策。
4 Accuracy 準確性	5 Balance 平衡性	6 Clarity 清晰性
We ensure that the reported information, be it qualitative or quantitative, is supported by sufficient and accurate evidence. 我們確保報告的資訊，不論定性或定量，均有足夠且正確的證據支持。	We disclose relevant information fairly and impartially, whether it has positive or negative impacts on the Group, upholding a rational approach, and treating negative information as opportunities for improvement. 我們公平公正地披露相關資訊，無論對本集團的影響是正面還是負面，均秉持實事求是的原則，並將負面資訊作為改進的參考。	We clearly present all information in the Report with precise language and rich visuals, and where necessary, annotations to provide supplementary information. 我們以簡明的語言和圖文並茂的方式清晰呈現各類資訊，必要時以註解提供輔助資訊。
7 Completeness 完整性	8 Sustainability Context 可持續發展背景	9 Timeliness 時效性
We aim to provide a complete picture of our ESG performance by covering all our material issues. 我們致力於透過涵蓋所有重要議題，全面展現我們的ESG表現。	We aim to identify the sustainable impacts both within and beyond the Group, while promoting ecologically, socially, and economically sustainable development at a macro level. 我們致力於識別可持續發展對本集團的內外影響，並確保在宏觀層面上推動生態、社會和經濟的可持續發展。	We prepare our sustainability reports with an annual reporting period covering 1 January to 31 December of the same year and publish them at the same time as our annual reports, which is in April of each year. 我們的報告期為每年的一月一日至十二月三十一日，並與我們的年報同期發佈，即每年的四月份。
10 Verifiability 可驗證性	11 Stakeholder Inclusiveness 持份者包容性	
We report in accordance with multiple international and local guidelines, standards, and frameworks, and appoint an independent certification body to audit and verify the Report's content and data. 我們遵循多項國際及本地指引、準則和框架進行披露，並委託獨立認證機構對報告內容和數據進行審計和核實。	We engage in continuous and in-depth communication with various stakeholders to identify and discuss the most material issues. These stakeholders include investors, shareholders, governments, villagers, local communities, business partners, suppliers, customers, employees, media and non-governmental organisations (“NGOs”). 我們與各方持份者進行持續並深入的溝通，識別及探討最重要的議題。這些持份者包括投資者、股東、政府、村民、當地社區、業務夥伴、供應商、客戶、員工、媒體和非政府組織。	

Reporting, Calculation and Assurance Standards

Based on the 11 disclosure principles, the Group has implemented the corresponding standards in three aspects: report preparation, data quantification and audit verification. The board (the “Board”) of directors (the “Directors”) of Everbright Environment reviewed and approved the content and scope of the Report to demonstrate that the Board had considered sustainability issues as part of its strategic formulation, determined the material ESG issues and overseen the management and monitoring of those issues.

報告、計算及審核準則

本集團在十一個披露原則的基礎上，將相應的準則應用於報告編寫、數據量化及審計驗證三個範疇中。本報告的內容及範圍亦經過光大環境董事（「董事」）會（「董事會」）審閱及批准，以展示董事會已將可持續發展議題視為戰略制定的其中一部份，確定了主要的ESG議題，並對該等議題的管理和監察進行了監管。

Categories of Standards 準則類別	Practices 實踐
Reporting Standards (or Frameworks) 報告準則 (或框架)	
Rule 13.91 and Appendix C2 <i>Environmental, Social and Governance Reporting Guide</i> (“ESG Reporting Guide”) of the <i>Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (The “Listing Rules”)</i>	Fulfilling the Group’s basic responsibilities as a Hong Kong-listed company in accordance with local listing rules and relevant guidelines. To meet the compliance requirements of our Sustainability Report 2025 under the updated <i>Environmental, Social and Governance Reporting Code</i> (the “ESG Code”), certain disclosures in this Report have been prepared with reference to the ESG Code.
《香港聯合交易所有限公司證券上市規則》（「上市規則」）第13.91條及附錄C2《環境、社會及管治報告指引》	按照本地上市規則及相關指引履行本集團作為一家香港上市公司的基本責任。為符合更新版《環境、社會及管治報告守則》（「ESG守則」）對本集團二零二五年可持續發展報告的合規要求，本報告中若干披露事項已參照ESG守則編製。
Global Reporting Initiative Sustainability Reporting Standards (“GRI Standards”)	Systematically disclosing material issues related to the Group in an easily understood and internationally recognised language.
全球報告倡議組織準則（「GRI準則」）	透過容易理解的國際通用語言有系統地披露與本集團相關的實質性議題。
United Nations Sustainable Development Goals (“SDGs”)	Integrating all 17 goals into the Group’s environmental and social management strategy, and identifying sustainable development directions to demonstrate our determination to address the world’s most pressing issues.
聯合國可持續發展目標（「SDGs」）	將17項目標全面融入本集團的環境及社會管理戰略中，並識別可持續發展方向，以展示應對全球最迫切議題的決心。

Categories of Standards 準則類別	Practices 實踐
Reporting Standards (or Frameworks) 報告準則 (或框架)	
<i>Recommendations of the Task Force on Climate-related Financial Disclosures</i> ("TCFD Recommendations") 《氣候相關財務信息披露工作組建議》(「TCFD建議」)	Effectively identifying risks and opportunities related to climate change in accordance with international frameworks in order to develop relevant response strategies and processes. 按照國際框架有效地識別氣候變化相關的風險與機遇，以便制定相關應對策略和流程。
Calculation Standards 計算準則	
Clean Development Mechanism ("CDM") 清潔發展機制 (「CDM」) <i>2019 Refinement to the 2006 IPCC⁽⁶⁾ Guidelines for National Greenhouse Gas Inventories</i> 《二零零六年IPCC⁽⁶⁾國家溫室氣體清單指南二零一九年修訂版》 <i>ISO 14064-1:2018 - Greenhouse Gases – Part 1: Specification with Guidance at the Organizational Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals</i> ("ISO 14064-1:2018") ISO 14064-1:2018《溫室氣體—第一部分：組織層級溫室氣體排放和清除的量化和報告指南》(「ISO 14064-1:2018」)	Conducting data collection and analysis in accordance with relevant international or local guidelines and standards, and quantify the project's greenhouse gas ("GHG") emissions and displacement. Except for the data published in the Annual Report 2024, all data contained in the Report are subject to rounding adjustments⁽⁷⁾. 根據相關國際或本地指引及準則進行資料收集及分析，並量化項目的溫室氣體排放及替代。除了二零二四年年報已公佈的數據外，本報告所載的所有數據均已作捨入調整⁽⁷⁾。
Assurance Standards 審核準則	
<i>International Standard on Assurance Engagements 3000 (Revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information</i> ("ISAE 3000") 《國際鑒證業務準則3000 (修訂版) —歷史財務資料審計或審閱以外的鑒證》(「ISAE 3000」) <i>ISO 14064-3:2019 - Greenhouse gases – Part 3: Specification with Guidance for the Verification and Validation of Greenhouse Gas Statements</i> ("ISO 14064-3:2019") ISO 14064-3:2019《溫室氣體—第三部分：有關溫室氣體聲明審定和核證指南》(「ISO 14064-3:2019」)	Commissioning the Hong Kong Quality Assurance Agency as the independent certification body to audit and verify the content and data of the Report, with the relevant verification statement attached to the Report. 已委託香港品質保證局作為獨立認證機構，為本報告的內容及數據進行審計和核實，並將其相關審核聲明附載於本報告中。

The Statement of the Board

According to the relevant provisions set out in Appendix C2 to the *Listing Rules*, the Board has issued a statement on the following matters. A disclosure of the Board's oversight of ESG issues is provided in the "Board Oversight of ESG and Climate Matters" section of this Chapter; the Board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the Group's businesses), as well as the details regarding how the Board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the Group's businesses are provided in the "Sustainable Operations Management" chapter on pages 34-55 of the Report.

Board Oversight of ESG and Climate Matters

The Board has overall responsibility for the Group's sustainability policies, strategies and performance, and oversees the related work, including reviewing and approving the Report.

Under the leadership of the Chairman of the Board, the Safety and Environmental Management Committee is responsible for formulating, monitoring and reviewing the Group's objectives, strategies and policies on sustainable development; as well as supervising the Group's performance and effectiveness in implementing the Environmental, Safety, Health and Social Responsibility ("ESHS") Management System and related measures; identifying, evaluating and prioritising the most material ESG, climate change and biodiversity-related topics that are relevant to our operations and concerned by our stakeholders; and regularly reporting to the Board on relevant matters and making recommendations for continuous improvement.

During the Reporting Period, the Board has been briefed in detail on economic, environmental and social issues, covering the relevant risks and opportunities, to ensure the effective implementation of the Group's sustainability strategy.

The Board will continue to manage and monitor ESG matters, as well as take them into account in the formulation of the Group's future business direction and strategy.

董事會聲明

根據《上市規則》附錄C2所載的有關條文，董事會就以下事宜發出聲明。有關董事會對ESG事宜的監管披露之討論載於本章之「董事會對ESG及氣候變化事宜的監管」一節；有關董事會的ESG管理方針及策略，包括評估、優次排列及管理重要的ESG相關事宜（包括對本集團業務的風險）的過程之討論，以及董事會如何按ESG相關目標檢討進度，並解釋它們如何與本集團業務有關連之討論，均載於本報告第34至55頁之「可持續的運營管理」章節。

董事會對ESG及氣候變化事宜的監管

董事會全面負責本集團的可持續發展政策、策略及績效，並監督相關工作，包括審閱和批准本報告。

在董事會主席的領導下，安全與環境管理委員會負責制訂、監察及檢討本集團有關可持續發展的目標、策略及政策；監督本集團在實施環境、安全、健康及社會責任（「ESHS」）管理體系及相關措施方面的表現和成效；識別、評估和優先應對與我們的運營及持份者最深切關注的ESG、氣候變化和生物多樣性相關議題；並且就相關事宜定期向董事會報告並提出持續改善的建議。

於報告期內，董事會已聽取有關經濟、環境和社會議題的詳細匯報，內容涵蓋相關的風險與機遇，以確保本集團的可持續發展策略得以有效實施。

董事會將繼續管理和監察ESG事宜，並將其納入本集團未來業務方向和策略制定的考量中。

Accessibility and Feedback

The Report is available in both Chinese and English versions and has been uploaded onto the websites of Everbright Environment (www.cebenvironment.com) and Hong Kong Exchanges and Clearing Limited (www.hkexnews.hk). If there is any inconsistency or discrepancy between the Chinese version and the English version, the English version shall prevail; in the event of any inconsistency or discrepancy between the Report and the Annual Report 2024, the Annual Report 2024 shall prevail unless otherwise stated.

The Group welcomes all stakeholders and the public to provide valuable comments and suggestions to info1@cebenvironment.com on the content of the Report, the reporting approach as well as the Group's sustainability performance.

Notes:

- ⁽¹⁾ For detailed sustainability performance of the two listed subsidiary companies of the Group (namely Everbright Water and Everbright Greentech), please refer to their standalone 2024 sustainability reports.
- ⁽²⁾ Include a management centre in Beijing and a representative office in Vietnam.
- ⁽³⁾ For environmental data of projects under construction, only electricity and water consumption and the associated GHG emissions are disclosed in the Report. Other data such as fuel and materials consumption are possessed by contractors and/or subcontractors and the Group does not have access to them.
- ⁽⁴⁾ Unless otherwise specified, data of contractors and/or subcontractors is not disclosed in the Report.
- ⁽⁵⁾ Since the assets related to the projects undertaken by Everbright Environment under engineering, procurement and construction ("EPC") approach are owned by its clients, Everbright Environment has no access to the environmental data of such projects, including electricity consumption and water consumption, etc. As such, the environmental performance of these projects is not disclosed in the Report.
- ⁽⁶⁾ IPCC refers to Intergovernmental Panel on Climate Change.
- ⁽⁷⁾ Due to rounding, the sum of individual numbers in certain charts and tables in the Report may not equal to the stated totals or 100%.

報告獲取及反饋

本報告備有中英文版本，並已上載至光大環境網站(www.cebenvironment.com)及香港交易及結算所有限公司網站(www.hkexnews.hk)供下載及閱覽。如中、英文版本有任何抵觸或不相符之處，應以英文版本為準；除非另有說明，若本報告和二零二四年年報有任何抵觸或不相符之處，應以二零二四年年報為準。

本集團歡迎各持份者及公眾就本報告內容、報告方式和本集團在可持續發展方面的表現提供寶貴意見及建議，並電郵至 info1@cebenvironment.com。

附註：

- ⁽¹⁾ 關於本集團旗下兩間附屬上市公司（分別為光大水務及光大綠色環保）的詳細可持續發展表現，請參閱其獨立的二零二四年年報。
- ⁽²⁾ 包括分別位於北京的管理中心以及越南的代表處。
- ⁽³⁾ 有關在建項目的環境數據，僅被披露其電力及水消耗量以及相關的溫室氣體排放。其他數據如燃料消耗量和物料使用量由承包商和／或分包商處理，本集團無權存取有關數據。
- ⁽⁴⁾ 除非另有註明，承包商及分包商的數據不會於本報告中反映。
- ⁽⁵⁾ 由於光大環境以工程總包（「EPC」）的模式承接的資產由其客戶擁有，光大環境無權存取其環境數據，包括電力消耗量及水消耗量等。因此，這些項目的環境數據不會於本報告中披露。
- ⁽⁶⁾ IPCC是指政府間氣候變化專門委員會。
- ⁽⁷⁾ 由於捨入關係，本報告中個別圖表所列的數字加總後，可能與所示總數或100%不符。

Message from the Chairman of the Board 董事會主席致辭



WANG SILIAN

王思聯

Chairman of the Board
董事會主席

Over the years, Everbright Environment has adhered to its corporate mission of being “Devoted to Ecology and Environment for a Beautiful China”. Centred around the three core areas of solid waste, water-related business, and clean energy, the Group solidified the foundation for stability and fostered an environment for progress. By providing high-quality, green, and low-carbon services, Everbright Environment is dedicated to contributing to the development of a Beautiful China.

In 2024, Everbright Environment adhered to the principle of making steady progress and promoting stability through practical measures, recording a total revenue of HKD30,258,009,000 during the Reporting Period. Our outstanding performance has garnered widespread attention and recognition. Many international dignitaries and domestic provincial and ministerial leaders visited Everbright Environment’s high-quality environmental protection projects across various regions. Notably, the Prime Minister of Vietnam attended the completion ceremony of the Group’s Hue Waste-to-energy Project (“Hue Project”) in Vietnam, while the Hong Kong delegation of G19 lawmakers conducted a site visit to the Company’s Boluo Waste-to-energy Project (“Boluo Project”). Everbright Environment’s outstanding projects in Xiong’an, Hangzhou, and Boluo were featured in prominent media coverage, including CCTV-4’s *New Landmarks of China*, China Education Television’s award-winning documentary *Revelations on Ecological Civilisation*, and Hong Kong TVB’s special feature report *News Magazine*. In addition, the Asian Development Bank, together with key Chinese and Vietnamese media outlets, visited the Group’s Can Tho Waste-to-energy Project (“Can Tho Project”) in Vietnam, actively promoting

光大環境多年來一直秉持「情繫生態環境，築夢美麗中國」的企業使命，圍繞「固廢、泛水、清潔能源」三大核心領域，夯實「穩」的根基，厚植「進」的態勢，提供綠色低碳的優質服務，致力於為美麗中國建設添磚加瓦。

二零二四年，光大環境堅持穩中求進、以實促穩，於報告期內錄得綜合收益為港幣30,258,009,000元。我們的良好表現得到各界的關心與認可，多位外國政要和國家省部級領導到訪光大環境各地優質環保項目，越南順化垃圾發電項目（「順化項目」）竣工儀式獲越南總理出席見證，香港G19議員代表團考察光大環境博羅垃圾發電項目（「博羅項目」）。央視中文國際頻道《中國新地標》、中國教育電視台金牌紀錄片《生態文明啟示錄》、香港TVB《新聞透視》專題報導光大環境雄安、杭州、博羅項目的優秀案例。亞洲開發銀行攜手中越核心媒體考察團參觀光大環境越南芹苴垃圾發電項目（「芹苴項目」），積極傳播「一帶一路」中的綠色故事。在可持續發展表現方面，連續六年穩居「中國環境企業營收前50」榜首，連續十四年穩居「固廢十大影響力企業」榜首、連續九年獲納入「道瓊斯可持續發展指數系列」、連續十四年獲納入「恒生可持續發展企業基準指數」及七次入選標普全球《可持續發展年鑑》，在「標準普爾全球ESG評分」獲得57分、遠超行業平均分。

green development stories under the “Belt and Road Initiative”. In terms of sustainable development, Everbright Environment has consistently achieved top industry rankings: it ranked first place in the “Top 50 Chinese Environmental Enterprises by Revenue” for six consecutive years, topped the “Top 10 Influential Solid Waste Treatment Enterprises in China” for 14 consecutive years, included in the “Dow Jones Sustainability Indices” for nine consecutive years, selected for the “Hang Seng Corporate Sustainability Benchmark Index” for 14 consecutive years, and included seven times in the S&P Global *Sustainability Yearbook*. The Group received an S&P Global ESG Score of 57, significantly exceeding the industry average. Furthermore, the Group was invited to participate in the annual conference of the China Council for International Cooperation on Environment and Development, a dialogue between the Vietnam Prime Minister and Chinese enterprises in Vietnam, the 2024 Annual Meeting of Beautiful China Forum 100 and the Green Development Forum of Shanghai Cooperation Organisation Countries, further expanding our influence within the industry.

Implementing Green Development

We remain committed to China’s “Dual Carbons” strategy, actively implementing carbon reduction initiatives. During the Reporting Period, the Group processed approximately 56,162,000 tonnes of household waste, 499,000 tonnes of hazardous and solid waste, 7,686,000 tonnes of agricultural and forestry waste, as well as treated nearly 1,763,000,000 m³ of waste water and 14,039,000 m³ of waste-to-energy plant’s leachate. During the Reporting Period, the Group supplied around 27,678,000,000 kWh of green electricity, which could support the annual electricity needs of 23,065,000 households, displacing approximately 13,041,000 tonnes of Carbon Dioxide (“CO₂”) emissions. Several of our projects have received international sustainable development certifications, including: the Group’s Gansu Wuwei Waste-to-energy Project (“Wuwei Project”), successfully registered as an International Verified Carbon Standard (“VCS”) Project; and the Group’s Huangshi Waste Tire Recycling Project in Hubei Province was awarded dual certifications of ISCC EU and ISCC PLUS, demonstrating our commitment to the national “Dual Carbons” strategy.

此外，本集團受邀出席中國環境與發展國際合作委員會二零二四年年會、越南總理與在越中資企業座談會、美麗中國百人論壇二零二四年年會及上海合作組織國家綠色發展論壇，行業影響力持續擴大。

踐行綠色發展

我們聚焦「雙碳」戰略，積極踐行碳減排。報告期內，本集團處理生活垃圾約56,162,000噸、危廢及固廢約499,000噸、農林廢棄物約7,686,000噸；處理污水約1,763,000,000立方米；垃圾發電廠滲濾液處理量達約14,039,000立方米。報告期內，本集團提供綠色電力約27,678,000,000千瓦時，可供約23,065,000個家庭一年使用，替代二氧化碳排放13,041,000噸。公司旗下多個項目獲得國際可持續發展領域認證：甘肅武威垃圾發電項目（「武威項目」）成功註冊備案為國際核證資源減排標準（「VCS」）項目；光大綠色環保黃石輪胎項目獲得國際可持續發展與碳認證（「ISCC」）雙重認證，是落實國家「雙碳」戰略的積極實踐。

We are dedicated to innovation-led growth, accelerating the transformation of scientific and technological achievements into practical applications. The Group's Changzhou Waste Battery Recycling and Resource Utilisation Project serves as a benchmark project for the implementation of the national major technical equipment of this kind in Jiangsu Province. Our unmanned coke-cleaning robots entered the market, enabling "remote-controlled coke cleaning" and eliminating a major industry safety challenge that has persisted for over 30 years. Our self-developed water-cooled grate furnace for incineration of solid waste of high heating value was included in the *National Catalogue of Major Technical Equipment for Promotion and Application (First Set of Equipment) (2024 Edition)*, further validating our technological innovation capabilities. During the Reporting Period, we had received more than 20 provincial and ministerial-level scientific and technological awards and were recognised as a Jiangsu Provincial "Academician and Expert Innovation Centre".

We are committed to green development and continuously exploring business transformation opportunities. The Group is actively advancing transformative initiatives such as virtual power plants, resource utilisation and high-value application of biomass, and fly ash resource utilisation. Adopting a location-specific approach, we have nurtured environmental protection new-quality productivity. Notably, we have implemented the "zero-carbon industrial park + virtual power plant" model for new energy projects in four regions, successfully establishing virtual power plants and electricity trading platform, which are now operational and have facilitated actual transactions. Additionally, the Group's Everbright Greentech Huaiyuan Project successfully completed its first electricity transaction, marking a significant milestone in our green energy initiatives.

我們聚焦創新引領，強化科技成果轉化賦能。光大常州廢舊電池回收資源化利用項目獲評江蘇省首台（套）成果落地標杆項目。無人打焦機服務進入市場，實現爐外「遙控打焦」，消除困擾行業30餘年的安全痛點。自主研發的水冷爐排爐裝備入選國家工信部《首台（套）重大技術裝備推廣應用指導目錄（2024年版）》，成為企業科技創新能力的有力證明。報告期內，取得省部級以上科技榮譽獎勵超過20項，獲評江蘇省「院士專家創新中心」。

我們聚焦綠色發展，持續探索業務轉型。積極推進虛擬電廠、生物質資源化高值化利用、飛灰資源化利用等轉型業務。因地制宜，積極培育環保新質生產力，在四地以「零碳園區+虛擬電廠」模式落地新能源項目，成功搭建虛擬電廠和電力交易平台，成功投入、實際交易。本集團旗下光大綠色環保懷遠項目順利完成全系統首筆綠色電力證書交易。

Building a “Government-Enterprises-People” Shared Value Ecosystem

We actively fulfill our responsibilities as a corporate citizen, delivering high-quality and stable integrated environmental solutions. Leveraging our industrial expertise, we contribute to rural revitalisation through our integrated biomass utilisation model, which has achieved remarkable results. Notably, the Hunan Xinhua Waste-to-energy Project (“Xinhua Project”) was honoured as a “2024 China Livelihood Project”. In response to local government initiatives, we played a key role in enhancing the effluent quality of the two largest waste water treatment plants in Shandong province, contributing significantly to the ongoing improvement of the water quality in Xiaoqing River, the “Mother River” of the Jinan people.

We adhere to “Four Performance Aspects”, namely, plant appearance (garden-like factory), noise control (no noise), odour management (no peculiar smell), and emissions standard (meeting emission standards), to protect both natural and human habitats. Through our diverse portfolio of environmental protection projects, we continue to lead the public opening efforts within the PRC’s environmental protection sector. As of 31 December 2024, over 220 environmental protection projects of the Group had been opened for public visits, receiving more than 180,000 visitors from various sectors online and offline, and enhancing local awareness and recognition of environmental protection and low-carbon living.

We actively engage in public welfare initiatives, organising a series of community-centric science popularisation activities based on global events such as “World Environment Day” and “Earth Hour”. Our “Green Wings Program”, a public welfare campaign for environmental education. Through activities such as environmental lectures, workshops, project visits, and student internships, it aims to inspire enthusiasm and a sense of responsibility for environmental protection among Hong Kong’s youth and the general public, fostering consensus on green and low-carbon development, was awarded the “Charity Case of the Year” at the China Charity Festival.

構建「政企民」利益共同體

我們積極踐行企業公民之責，提供優質、穩定的環境綜合治理服務。發揮產業優勢助力鄉村振興，獨特的生物質綜合利用一體化模式成效顯著，湖南新化垃圾發電項目（「新化項目」）榮獲「二零二四中國民生工程」稱號。我們積極回應地方政府要求，有力保障山東省規模最大的兩個污水處理廠出水水質再提升，為濟南人民的「母親河」小清河水質持續改善貢獻了力量。

我們堅持「四個經得起」，即經得起看、經得起聽、經得起聞、經得起測，守護自然和人居環境。依託旗下各類運營環保項目，持續引領中國環保行業公眾開放。截至二零二四年十二月三十一日，本集團已有220餘個環保項目參與公眾開放。我們通過線上線下模式共接待國內外各界人士參觀考察超過180,000人次，增強當地居民對環保和綠色低碳生活方式的關注與認同。

我們積極開展公益行動，圍繞「世界環境日」、「地球一小時」等環保主題節目，精心策劃推出一系列貼近社區的科普主題活動。開展「綠翼計劃」香港環保教育公益行動，我們的通過環保講座、工作坊、實地考察、學生實習等活動，激發香港青少年對環境保護的了解，助力美麗中國、綠色香港建設，榮獲中國公益節「年度公益案例獎」。

Sustainable and High-Quality Development

We are committed to strategic leadership and have conducted in-depth research to define our long-term strategic goal to become a “world-class integrated environmental service provider with Chinese characteristics”. To support this goal, we have clearly identified three major development directions, namely technology as a driving force, an internationalisation path, and an industrial ecological system, initiating the call for a “Second-stage Entrepreneurship”, aiming to drive the Group’s sustainable development through high-quality operational management.

We continuously enhance management efficiency and effectiveness while strengthening our professional value. During the Reporting Period, we focused on improving internal management by comprehensively reinforcing our systems and processes, updating over 50 internal policies. We also compiled a case study database to systematically consolidate lessons learned. In terms of enhancing our risk controls and compliance management, we conducted regular risk assessments, managed our risk appetite, and developed a risk management information module covering all project companies. In line with the principles of controllable risk, dynamic adjustment, and transparent governance, we fully integrated Special Purpose Vehicles (“SPVs”) into our comprehensive risk and internal control compliance management system. Strengthened safety and environmental management enabled us to achieve zero recorded case of serious or above-level safety incidents in 2024, for the first time in seven years.

可持續高質量發展

我們聚焦戰略引領，深入調查研究，提出「建設具有中國特色的世界一流環境綜合服務商」戰略目標，明確科技化、國際化、生態型的「兩化一型」核心發展戰略，開啟「二次創業」新征程，以高質量的運營管理推動企業可持續發展。

我們不斷提升管理質效，持續增強專業價值。報告期內，聚焦內部管理提升，全面加強制度建設，更新制度50餘項，組織編製案例庫，進一步梳理總結經驗教訓。加強風險防控和合規管理，持續開展風險評估與風險偏好管控工作，構建覆蓋項目公司的風險管理信息模塊。本著風險可控、動態調整、穿透管理的原則，將特殊目的載體（「SPVs」）納入全面風險和內控合規管理體系。加強安環管理，二零二四年實現近7年來首次全年沒有發生重傷及以上安全事故。

Our Way Forward

Looking ahead to 2025, Everbright Environment will remain firmly committed to the national “Dual Carbons” goals as the Group’s top priority, thoroughly implement the spirit of the Third Plenary Session of the 20th Central Committee of the Communist Party of China and the National Ecological and Environmental Protection Conference, adhering to the principle of seeking progress while maintaining stability, and promoting stability through solid execution. It will delve deeper into the three major development directions, namely technology as a driving force, an internationalisation path, and an industrial ecological system, striving to increase revenue and enhance efficiency. At the same time, we will proactively prevent and mitigate risks in key areas, focus on solidifying our leading position in the environmental protection industry, and further enhance our core functions in advancing the ecological civilisation and social well-being. These efforts will enhance our core competitiveness and fully launch a new chapter of our new “Second-stage Entrepreneurship”, and gradually transform the strategic blueprint of its “15th Five-Year Plan” into reality. Meanwhile, we are committed to listening to diverse opinions, and working hand-in-hand with all stakeholders to shape a brighter future for the industry and the Group.

WANG SILIAN

Chairman of the Board

25 March 2025

展望將來

展望二零二五年，光大環境將堅定不移把國家「雙碳」目標視為本集團的重要任務，深入貫徹落實黨的二十屆三中全會和全國生態環境保護工作會議的精神，堅持穩中求進、以實促穩，聚焦主責主業，深化「兩化一型」，大力增收創效，積極防範和化解重點領域風險，著力鞏固環保行業龍頭地位，在服務生態文明建設和社會民生中增強核心功能，提升核心競爭力，全面開啟「二次創業」新征程，為實現「十五五」良好開局夯基固本。同時，我們承諾傾聽各方聲音，與所有利益相關者攜手，共塑行業與企業美好未來。

王思聯

董事會主席

二零二五年三月二十五日

* This recognition was renamed from “Top 50 Chinese Environmental Enterprises” was renamed to “Top 50 Chinese Environmental Enterprises by Revenue” in 2024, the Group has been ranked the first place on the list since 2019.

* 該榜單於二零二四年由「中國環境企業50強」更名為「中國環境企業營收前50」。本集團自二零一九年持續位居榜單首位。

Economy 經濟

As of 31 December 2024
截至二零二四年十二月三十一日

604 environmental protection projects
環保項目數目達**604**個



In 2024
二零二四年

Revenue amounted to HK\$**30,258,009,000**
收益為港幣**30,258,009,000**元

Integrated biomass utilisation projects directly and/or indirectly created **43,875** jobs and increased farmers' income by approximately RMB **2.503** billion, benefiting over **4.956** million farmers
生物質綜合利用項目直接及／或間接提供工作崗位逾**43,875**個，帶動農民增收約人民幣**25.03**億元，令逾**495.6**萬名農民受益

Environment 環境

In 2024
二零二四年

Environmental protection projects supplied approximately **27,678,000,000** kWh of green electricity, displacing approximately **13,041,000** tonnes of CO₂ equivalent ("CO₂e") GHG emissions, and all projects displaced approximately **26,414,402** tonnes of CO₂e GHG emissions in total⁽¹⁾
環保項目合共提供綠色電量約**27,678,000,000**千瓦時，替代了溫室氣體排放約**13,041,000**噸二氧化碳當量，所有項目合計替代了溫室氣體排放約**26,414,402**噸二氧化碳當量⁽¹⁾

These projects treated approximately **1,763,000,000** m³ of waste water and approximately **14,039,000** m³ of leachate, reducing COD discharge by approximately **852,000** tonnes in total
該等項目處理污水約**1,763,000,000**立方米及滲濾液約**14,039,000**立方米，合共減少了約**852,000**噸COD排放

Note:

⁽¹⁾ For details, please refer to pages 103 – 104 in the "Responding to Climate Change" chapter, and pages 118 – 120 in the "Environmental Protection" chapter of the Report.

附註：

⁽¹⁾ 詳情請參閱本報告的「應對氣候變化」章節之第103至104頁及「環境保護」章節之第118至120頁。

Employee 員工

截至二零二四年十二月三十一日
As of 31 December 2024

14,867 employees in total
員工總數為**14,867**人



In 2024
二零二四年

Rate of work-related injuries: **0.14**
(employees) and **0.03** (third-party
contractors and subcontractors working on-
site)
工傷率：**0.14**(員工) 及**0.03**(第三方承包商
及分包商駐場工人)

(Rate of work-related injuries = (Total
number of work-related injuries/Total
working hours) x 200,000)
(工傷率 = (工傷個案總計 / 工作總時數) x
200,000)

Community 社區

In 2024
二零二四年

Environmental protection projects received
over **80,000** domestic and foreign visitors
from all social circles
環保項目共接待國內外各界人士參觀考察
超過**80,000**人次

Donations amounted to HK\$**1,193,000**
捐款總金額為港幣**1,193,000**元



As of 31 December 2024
截至二零二四年十二月三十一日

226 environmental protection facilities had
been opened up to the public
已向公眾開放**226**個環保設施

In 2024, the Group received many honours in recognition of its effort in many aspects, including business operation and ESG performance. The major awards and recognition are summarised as below:

二零二四年，本集團在業務經營及ESG表現方面成績卓越，滿載而歸。主要獎項及榮譽摘要如下：

Business Performance • 業務經營

Included in the “2024 Global Top 500 New Energy Enterprises” list (ranked 82th)
入選「2024全球新能源企業500強」榜單（第82位）

China Institute of Energy Economics Research
中國能源經濟研究院

First place in the “2024 Top 50 Chinese Environmental Enterprises by Revenue” (the sixth consecutive year) (formerly known as Top 50 Chinese Environmental Enterprises)
「2024中國環境企業營收前50榜單首位（連續第六年）（更名前為「中國環境企業50強」）」

China Environment Chamber of Commerce
全聯環境服務業商會



First place in the “Top 10 Influential Solid Waste Treatment Enterprises in China” (the 14th consecutive year)
「中國固廢十大影響力企業」榜單榜首（連續第十四年）

E20 Environmental Platform
E20環境平台



Awarded the “Outstanding Enterprise Contribution Award for the 75th Anniversary of the Founding of the PRC” and recognised as an “Outstanding High-Quality Development Listed Company”
「新中國成立75週年卓越企業貢獻獎」、
「卓越高質量發展上市公司」

China Securities Golden Bauhinia Awards
中國證券金紫荊獎

ESG Performance • ESG表現

Included in the Dow Jones Sustainability Indices (the ninth consecutive year)
獲納入道瓊斯可持續發展指數系列（連續第九年）

S&P Dow Jones Indices
標普道瓊斯指數

Included in the *Sustainability Yearbook (China Edition)* (the second consecutive year)
獲納入《可持續發展年鑒（中國版）》（連續第二年）

S&P Global
標普全球



Hang Seng Corporate
Sustainability Index
Series Member 2023-2024

Included in the Hang Seng Corporate Sustainability Benchmark Index (the 14th consecutive year)

獲納入恒生可持續發展企業基準指數 (連續第十四年)

Hang Seng Index
恒生指數

Shortlisted in the list of "China's Top 100 Sustainable Development Companies (2024)"

入選「2024中國企業可持續發展100佳」

China Business Council for Sustainable Development and
China Enterprise Confederation
中國可持續發展工商理事會、中國企業聯合會

Everbright Water was shortlisted in the list of "Top 10 Influential Enterprises in China's Water Industry" (the 7th consecutive year)

光大水務入選「中國水業十大影響力企業」榜單 (連續第七年)

E20 Environment Platform
E20環境平台

Everbright Water was awarded "ListCo Excellence Awards" (the 5th consecutive year)
光大水務獲頒「傑出上市公司大獎」(連續第五年)

Jointly awarded by PRC media *IFENG.COM/HK*, Hong Kong media *AM730*, and other institutions
中國內地媒體《鳳凰網港股》、香港媒體《AM730》等機構聯合頒發



Everbright Greentech was awarded the "ESG Excellence in Environmental Performance Award", "ESG Excellence in Corporate Governance Award",

and "ESG Certification of Recognition"

光大綠色環保獲頒「ESG卓越環境表現專業獎」、「ESG卓越企業管治專業獎」、「ESG嘉許認證」

Sing Tao News Group and The Hong Kong Polytechnic University
星島新聞集團、香港理工大學



Everbright Greentech received the "Global ESG Excellence Award" (the third time)

光大綠色環保獲頒「全球卓越ESG大獎」(第三次)

Yazhou Zhoukan
《亞洲週刊》雜誌

Social Responsibility Brand of the Year (the 10th consecutive year)
年度責任品牌 (連續第十年)

China Charity Festival
中國公益節

The "Green Wings Program" was awarded the Charity Case of the Year
「綠翼計劃」獲評為「年度公益案例獎」

China Charity Festival
中國公益節

About Everbright Environment 關於光大環境

Promoting clean energy & implementing
low-carbon development
推動清潔能源・落實低碳發展



As the first one-stop integrated environmental solution provider in the PRC, Everbright Environment focuses on three core areas, namely solid waste, water-related business, and clean energy. The Group's business portfolio spans an extensive range that encompasses waste-to-energy and synergistic waste treatment, integrated biomass utilisation, hazardous and solid waste treatment, new energy, environmental remediation, water environment management, equipment manufacturing, waste sorting, environmental sanitation integration, resource recycling, development of zero-waste cities, analysis and testing, research and development relating to green technologies, ecological and environmental planning and designing, as well as environmental protection industrial parks, among others.

Everbright Environment is a key partner of the International Coalition for Green Development on the Belt and Road as well as the Ecological Protection and Green Development of the Yangtze River Economic Belt. The Company upholds its corporate mission of being "Devoted to Ecology and Environment for a Beautiful China", with awards for ranking first among the "Top Ten Influential Solid Waste Treatment Enterprises in China" for 14 consecutive years, the top on the list of "Top 50 Environmental Enterprises by Revenue in China"* for six consecutive years. With the goal of "Create Investment Value and Undertake Social Responsibility", the Group has also been a constituent member of Dow Jones Sustainability Emerging Markets Index for nine consecutive years, Hang Seng Corporate Sustainability Benchmark Index for 14 consecutive years, and *S&P Global's Sustainability Yearbook* for seven consecutive years.

* The ranking of CECC was renamed from "Top 50 Chinese Environmental Enterprises" to "Top 50 Chinese Environmental Enterprises by Revenue" in 2024. The Group has been ranked the first place on the list since 2019.

光大環境作為中國首個一站式、全方位的環境綜合治理服務商，專注於固廢、泛水、清潔能源三大核心領域。集團主營業務範圍廣泛，涵蓋垃圾發電及協同處理、生物質綜合利用、危廢及固廢處置、新能源、環境修復、水環境綜合治理、裝備製造、垃圾分類、環衛一體化、資源循環利用、無廢城市建設、分析檢測、綠色技術研發、生態環境規劃設計、環保產業園等。

作為「一帶一路」綠色發展國際聯盟和長江經濟帶生態大保護的戰略合作夥伴，光大環境秉承「情繫生態環境，築夢美麗中國」的使命，連續十四年穩居「中國固廢十大影響力企業」首位、連續六年蟬聯「中國環境企業營收前50強」榜首。另外，本集團致力追求「創造投資價值，承擔社會責任」的企業目標，連續九年獲納入「道瓊斯可持續發展指數系列」、連續十四年獲納入「恒生可持續發展企業基準指數」、並且七次入選標普全球《可持續發展年鑑》。

* 該榜單於二零二四年由「中國環境企業50強」更名為「中國環境企業營收前50」。本集團自二零一九年持續位居榜單首位。

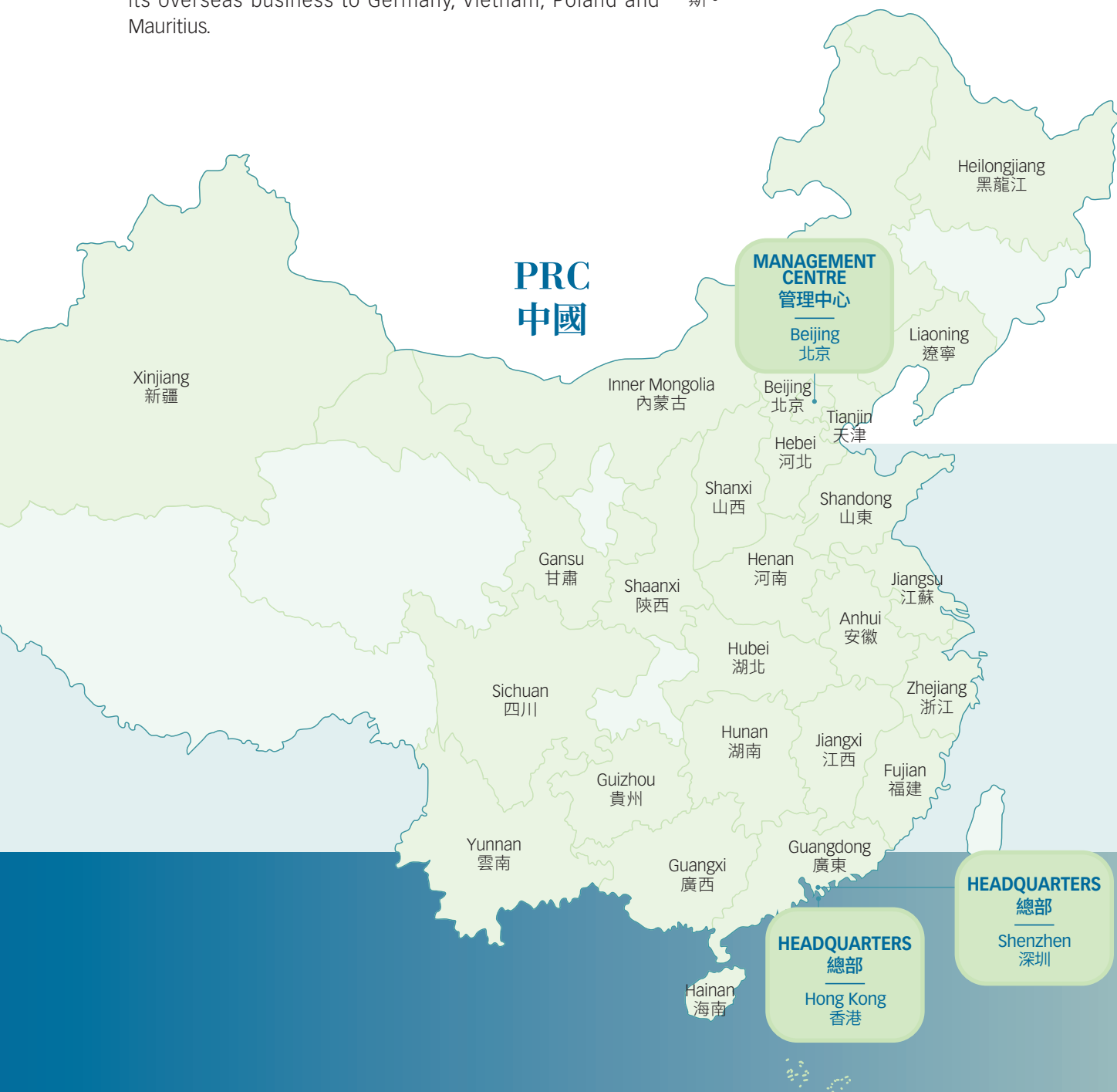
The Group's Vision 企業願景	The Group's Mission 企業使命	The Group's Value 企業價值觀	The Group's Culture 企業文化
To Become a World-class Integrated Environmental Service Provider with Chinese Characteristics 具有中國特色的世界一流環境綜合服務商	Devoted to Ecology and Environment for a Beautiful China 情繫生態環境 築夢美麗中國	To Create Investment Value and Undertake Social Responsibility 創造投資價值 承擔社會責任	Honouring Integrity and Trustworthiness, Making Profit via Righteous Means, Pursuing Stability and Prudence, Upholding Fundamental Principles and Breaking New Ground, and Complying with Laws and Regulations 誠實守信 以義取利 穩健審慎 守正創新 依法合規

Business Footprint

As of 31 December 2024, the Group's 604 projects were distributed in 229 cities, counties, and districts across 25 provinces, municipalities, autonomous regions and one special administrative region in China, and simultaneously extending its overseas business to Germany, Vietnam, Poland and Mauritius.

業務分佈

截至二零二四年十二月三十一日，本集團的604個項目分佈全國26個省(市)、自治區及特別行政區，足跡遍及229個市縣區，與此同時海外業務已涉足德國、越南、波蘭及毛里求斯。



Proportion of Investment by Sector 按板塊劃分的投資額百分比

Environmental energy
環保能源



60.89%

Environmental water
環保水務



19.50%

Greentech
綠色環保



19.23%

Others
其他



0.38%

Total Investment of Approximately 總投資約

RMB 人民幣 **162.425** billion 十億元





Environmental Energy 環保能源

The world's largest waste-to-energy investor and operator

Environmental energy is the largest core business sector of the Group, contributing the most to its overall business. This sector encompasses waste-to-energy, food and kitchen waste treatment, leachate treatment, fly ash treatment, methane-to-energy, sludge treatment and disposal, construction and decoration waste treatment, development of environmental protection industrial parks, integrated urban services, waste sorting, resource utilisation and recycling, as well as technical consultancy and engineering design relating to environmental protection. During the Reporting Period, environmental energy continued to focus on the solid waste business area, improving the layout of the waste-to-energy business chain, and solidifying its industry-leading position.

全球最大垃圾發電投資運營商

環保能源為本集團旗下最具規模、業務佔比最高的核心業務板塊，業務涵蓋垃圾發電、餐廚及廚餘垃圾處理、滲濾液處理、飛灰處理、沼氣發電、污泥處理處置、建築裝潢垃圾處理、環保產業園開發；城市綜合服務、垃圾分類、資源化處置和再生資源，以及環保領域技術諮詢、工程設計等。回顧年度內，環保能源持續聚焦固廢業務領域、完善垃圾發電產業鏈佈局，鞏固行業龍頭地位。

As at 31 December 2024
截至二零二四年十二月三十一日

167	Waste-to-energy projects 垃圾發電項目
55	Food and kitchen waste treatment projects 餐廚垃圾處理項目
11	Sludge treatment and disposal projects 污泥處理處置項目
2	Leachate treatment projects 滲濾液處理項目
2	Methane-to-energy-projects 沼氣發電項目
13	Fecal treatment, fly ash treatment, animal carcass treatment and incineration residue treatment projects 糞便處理、飛灰填埋、病死動物處理及 爐渣處理項目
5	Medical waste treatment projects 醫療廢物處理項目
15	Waste sorting and integration projects 垃圾分類及一體化項目
1	Construction and decoration waste treatment project 建築及裝潢垃圾項目
1	Solid waste treatment project 固廢處理項目
11	Heat supply projects 供熱項目

Total Designed Capacities 設計總規模

approximately 約
54,147,750 tonnes
噸
Annual household waste processing capacity
年處理生活垃圾量

approximately 約
18,453,224,900 kWh
千瓦時
Annual on-grid electricity
年上網電量

approximately 約
3,169,295 tonnes
噸
Annual food and kitchen waste processing
capacity 年處理餐廚垃圾量

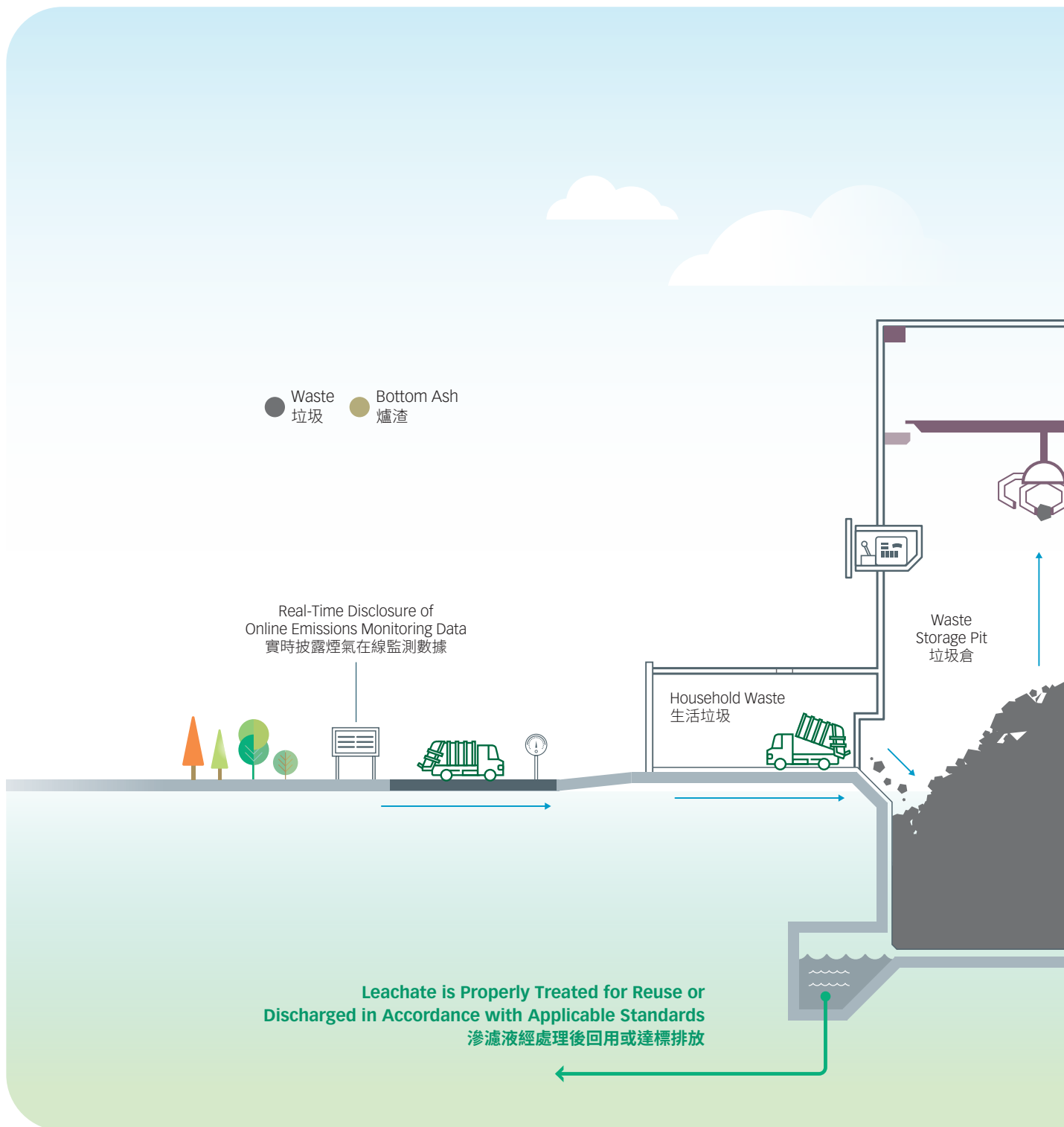
approximately 約
503,700 tonnes
噸
Annual sludge treatment capacity
年處理污泥量

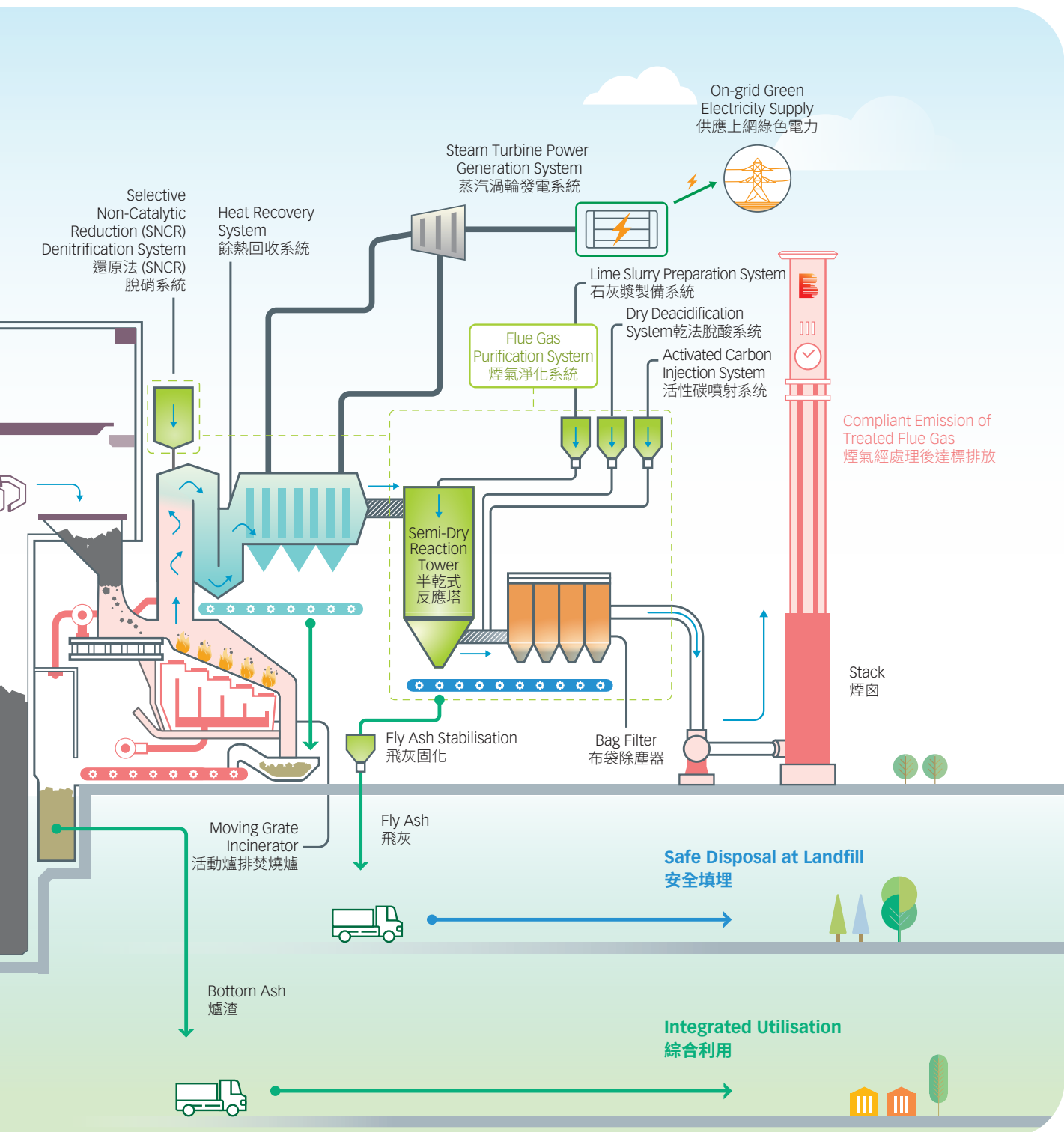
approximately 約
20,258 tonnes
噸
Annual medical waste processing capacity
年處理醫療廢物量

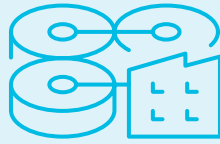
283 Total Contracted Projects 總投資項目

(In addition to undertaking 2 operation and management ("O&M") projects and 2 engineering design, procurement, construction and operation ("EPCO") projects)
(另承接2個委託運營項目及2個「工程設計—採購—施工—運營」(「EPCO」)項目)

Waste-to-energy Project – Typical Process Flow Diagram 垃圾發電項目—工藝流程圖







Environmental Water 環保水務

Water environment management integrated service provider

As the Group's environmental water sector, Everbright Water is listed on the Mainboard of the Singapore Exchange Securities Trading Limited and the Main Board of the Stock Exchange. As a first-class water environment management service provider in China, Everbright Water focuses on the "water-related" business areas. It has developed a fully-fledged business coverage, which includes raw water protection, water supply, municipal waste water treatment, industrial waste water treatment, reusable water, river-basin ecological restoration, sludge treatment, disposal, etc. It has also formed a full business chain in the water business, including project investment, planning and design, technology research and development ("R&D") and related services, engineering and construction, operations management, and integrated diagnosis, among others. Everbright Water is proactively creating value for industries through various water businesses. As of 31 December 2024, the Group held a 72.87% stake in Everbright Water.

水環境治理綜合服務供應商

作為本集團環保水務板塊，光大水務是新加坡證券交易所有限公司及聯交所主板上市公司。作為中國一流的水環境綜合治理服務供應商，光大水務聚焦「泛水」領域，已實現原水保護、供水、市政污水處理、工業廢水處理、中水回用、流域治理、污泥處理處置等全業務覆蓋，精專於項目投資、規劃設計、科技研發及服務、工程建設、運營管理、綜合診斷等業務領域，致力於推動以水為源的產業價值創造。截至二零二四年十二月三十一日，本集團持有光大水務72.87%的權益。

As at 31 December 2024
截至二零二四年十二月三十一日

- 133 Municipal waste water treatment projects
市政污水處理項目
- 17 Industrial waste water treatment projects
工業廢水處理項目
- 8 Reusable water projects
中水回用項目
- 6 River-basin ecological restoration projects
流域治理項目
- 3 Water supply projects
供水項目
- 1 Raw water protection project
原水保護項目
- 1 Livestock and poultry manure resource
utilisation project
畜禽糞污資源化利用項目
- 2 Sludge treatment and disposal projects
污泥處理處置項目

Total Designed Capacities 設計總規模

approximately 約
2,366,660,000 m³
立方米

Annual waste water treatment capacity
年污水處理量

approximately 約
118,479,000 m³
立方米

Annual reusable water supply capacity
年供中水量

approximately 約
310,250,000 m³
立方米

Annual water supply capacity
年供水量

171 Total Contracted Projects 總投資項目

(In addition to undertaking 12 O&M projects)
(另承接12個委託運營項目)



Greentech 綠色環保

One of China's top investors and operators with expertise in integrated biomass utilisation, harmless treatment of hazardous and solid waste

As the Group's greentech sector, Everbright Greentech is listed on the Main Board of the Stock Exchange, which focuses on integrated biomass utilisation, hazardous and solid waste treatment, environmental remediation, and new energy such as solar power and wind power. As of 31 December 2024, the Group held a 69.70% stake in Everbright Greentech.

全國領先生物質綜合利用、危廢及固廢無害化處置投資運營商之一

作為本集團綠色環保板塊，光大綠色環保為聯交所主板上市公司，專注於生物質綜合利用、危廢及固廢處置、環境修復、光伏發電及風電業務等新能源領域。截至二零二四年十二月三十一日，本集團持有光大綠色環保69.70%的權益。

As at 31 December 2024
截至二零二四年十二月三十一日

- 56 Integrated biomass utilisation projects
生物質綜合利用項目
- 51 Hazardous and solid waste treatment projects
危廢及固廢處置項目
- 67 Environmental remediation projects and services
環境修復項目及服務
- 37 Solar energy and wind power projects
光伏發電及風電項目

Total Designed Capacities 設計總規模

approximately 約
8,209,800 tonnes
噸

Annual processing capacity of biomass raw materials
年處理生物質原材料量

approximately 約
4,215,750 tonnes
噸

Annual household waste processing capacity
年處理生活垃圾量

approximately 約
2,466,376 tonnes
噸

Annual hazardous and solid waste processing capacity
年處置危廢及固廢量

approximately 約
7,144,334,985 kWh
千瓦時

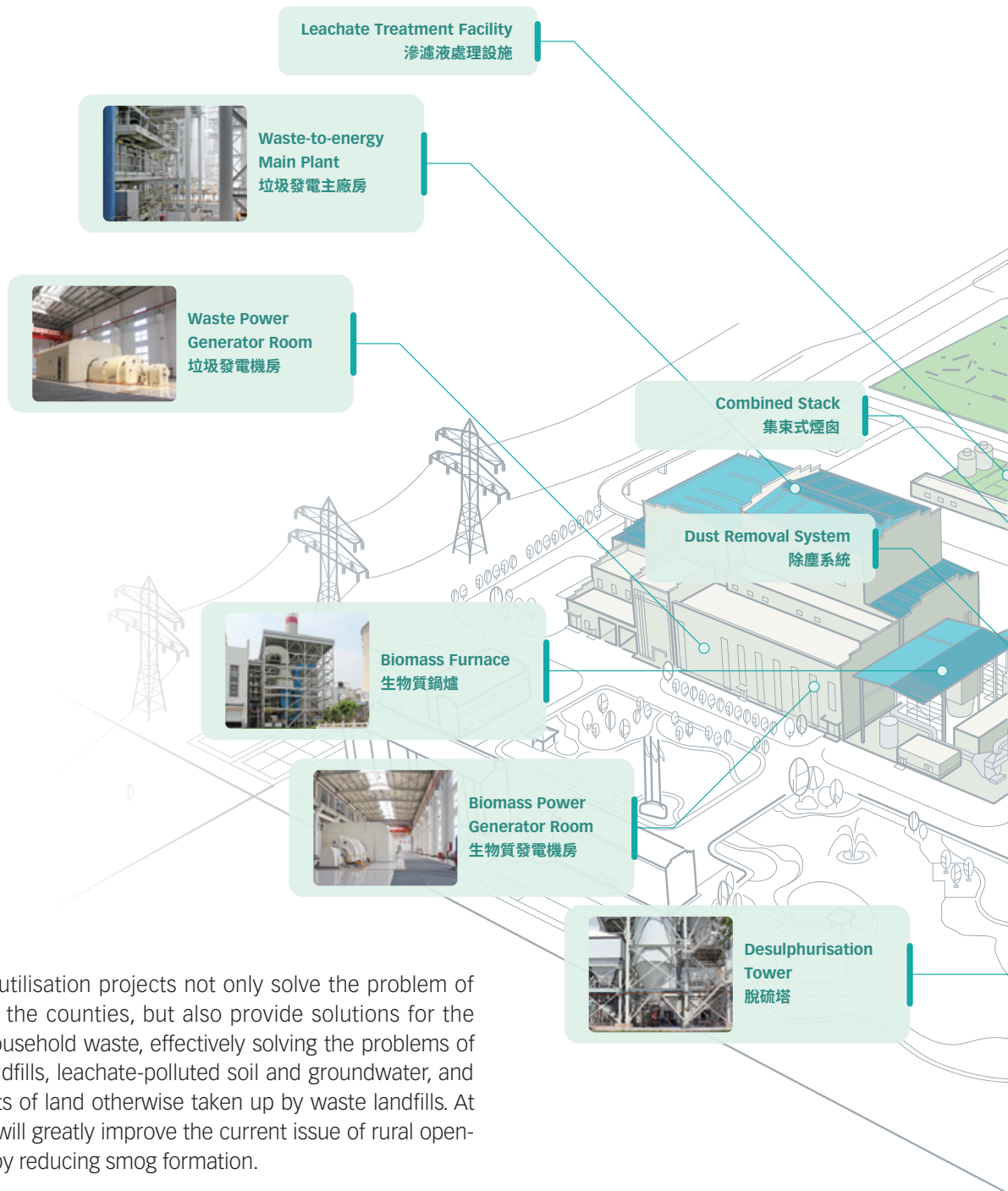
Annual on-grid electricity
年上網電量

approximately 約
6,306,663 tonnes
噸

Annual steam supply capacity
年供蒸汽量

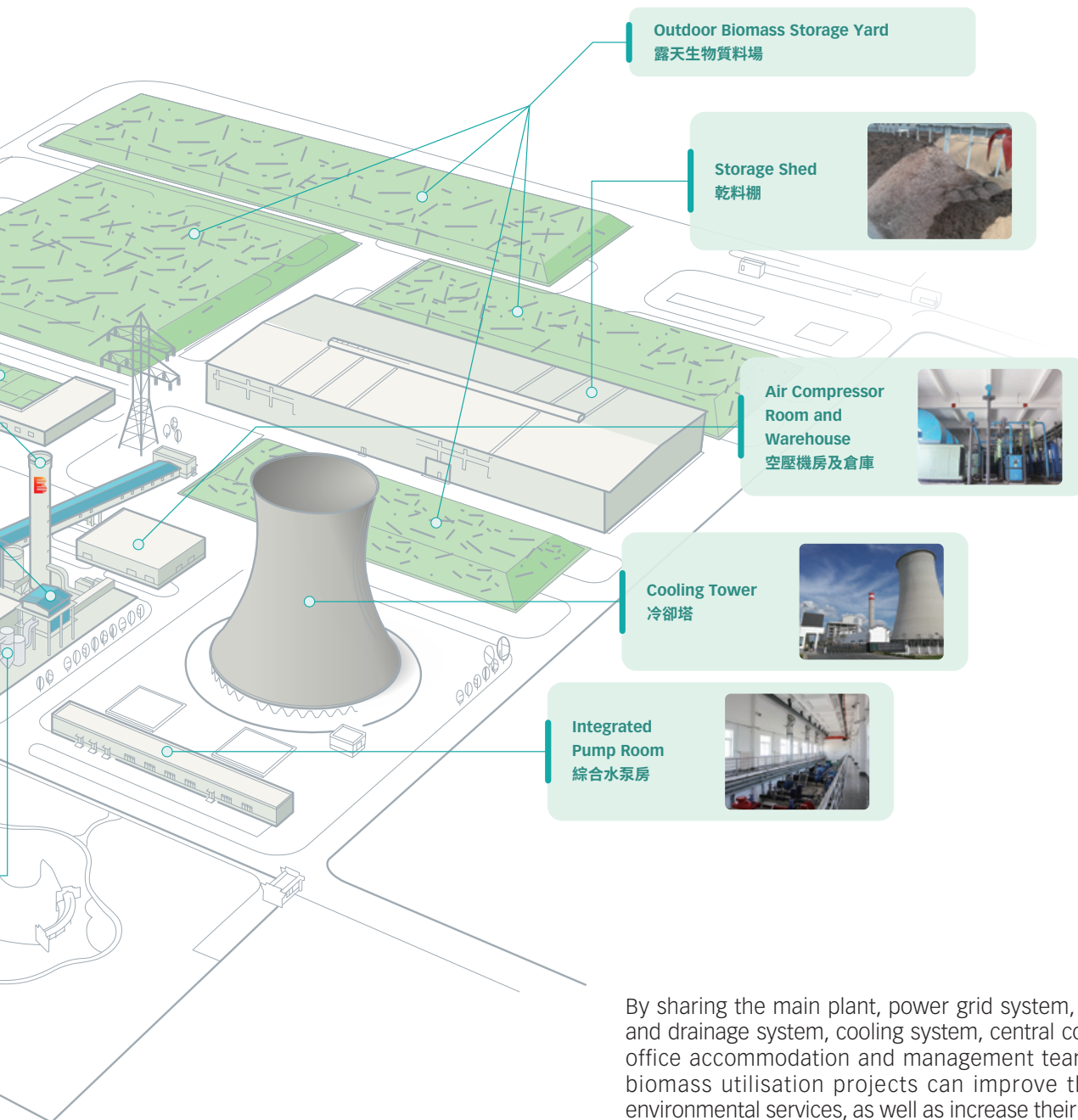
211 Total Contracted Projects and Services
總投資項目及服務

Integrated Biomass Utilisation Project – Overview 生物質綜合利用項目—概覽



Integrated biomass utilisation projects not only solve the problem of household waste in the counties, but also provide solutions for the treatment of rural household waste, effectively solving the problems of household waste landfills, leachate-polluted soil and groundwater, and conserving large plots of land otherwise taken up by waste landfills. At the same time, they will greatly improve the current issue of rural open-air burning of straw by reducing smog formation.

生物質綜合利用項目不僅可以解決縣城內的生活垃圾問題，還可以為農村生活垃圾處理提供解決方案，有效解決生活垃圾填埋及滲濾液污染土壤及地下水問題，可節約因垃圾填埋所佔用的大量土地，同時極大程度上改變農村露天焚燒秸稈的現狀，減少霧霾的形成。



By sharing the main plant, power grid system, water supply and drainage system, cooling system, central control system, office accommodation and management team, integrated biomass utilisation projects can improve the output of environmental services, as well as increase their overall return on investment, enhancing the Group's competitiveness.

生物質綜合利用項目通過共用主廠房、電網系統、給排水系統、冷卻系統、中控系統、辦公住宿場所及管理團隊等，既能提高環境服務產出，也能增加項目整體投資回報並提升本集團的競爭力。

Equipment Manufacturing

With Changzhou Equipment Company being the platform, the Group's equipment manufacturing sector strategically positions itself as the major entity to implement the Group's development strategies empowered by intelligent manufacturing. It also persistently develops and upgrades the zero-carbon factories to foster a new development paradigm featured with "Intelligently Made by Everbright". As a result, equipment manufacturing continues to solidify its industry-leading position. During the year under review, equipment manufacturing insisted on integrating its professional advantages with market demand, actively deployed market opportunities at home and abroad, and followed up on multiple projects with good progress.

裝備製造

本集團裝備製造板塊依託常州裝備公司為平台，圍繞「智造賦能戰略實施主體」戰略定位，堅持升級打造「零碳工廠」，積極構建「光大智造」發展新格局，持續鞏固行業領先地位。回顧年度內，裝備製造堅持將自身專業優勢與市場需求相結合，積極謀劃境內外市場佈局，跟進多個項目且進展良好。

In 2024 二零二四年

「多源多相態危廢大容量順流式焚燒成套裝備及工程應用」經權威機構成果鑒定為國際先進水平。

The "set of equipment and engineering application for multi-source, multi-phase hazardous waste large-capacity continuous flow incineration" was certified as internationally leading by an authoritative organisation.

「廢舊動力電池高效梯級熱解關鍵技術及有價組分回收成套裝備」獲成果鑒定達國際領先水平。

The "key technologies for efficient tiered pyrolysis of waste power batteries and complete equipment for recovering valuable components from waste batteries" were certified as internationally leading in terms of performance.

Envirotech

Being the Group's engine for technology R&D and innovation, envirotech focused on key research areas such as solid waste treatment and resource utilisation, agricultural and forestry biomass utilisation, water environment management, big data, intelligent control, etc. Serving as the Group's platform for core technological innovation and commercialisation of technological achievements, envirotech aims to empower the development of all business sectors of the Group through technology-driven solutions. Since 2024, envirotech strengthened technical exchanges and communication with various business sectors within the Group. It delved into demands, identified pain points, effectively addressed practical issues in project operations, and promoted the transformation of outcomes.

環境研究院

作為本集團科技研發創新的引擎，環境研究院聚焦固廢處理及資源化利用、農林生物質利用、水環境治理、大數據及智能控制等重點領域，專注於以科技賦能本集團各板塊業務發展，是本集團核心技術創新及成果轉化平台。二零二四年以來，環境研究院加強與本集團業務板塊進行技術對接與交流，深挖需求、收集痛點，有效解決項目運營中的實際問題，推動成果落地轉化。



As of 31 December 2024 截至二零二四年十二月三十一日

The Group had been granted a total of 2,149 patents, comprising 282 invention patents, 1,480 utility model patents, 332 software patents and 55 appearance patents.

本集團獲授權專利合共2,149項，其中發明專利282項、實用型專利1,480項、軟件著作專利332項及外觀專利55項。

Sustainable Operations Management

可持續的運營管理



Upholding corporate integrity &
fulfilling social responsibility
秉持企業誠信・善盡社會責任

The Group regards high-quality, comprehensive, and exceptional corporate governance as the cornerstone of sustainable development, adhering to the management principle of “People-Oriented, Pragmatism, Creativity, and Systematic Management”. To embody this principle, we have established a robust organisational and management structure, clearly defining the responsibilities and obligations of employees at all levels. Through the Management Decision Committee, the Group comprehensively oversees and reviews business operations and management to safeguard stakeholders’ interests and create long-term value for the Group.

The Group actively fulfills its corporate social responsibilities by fully complying with all relevant national and regional laws, regulations, and standards, and strives to minimise the negative impacts of its operations on the environment and society.

Business Principles

The Group adheres to the management principles of integrity and pragmatism, upholds high ethical standards, and remains steadfast in implementing these principles and values across all business operations. Committed to fostering a culture of integrity, the Group has established and continually refined relevant management policies and guidelines. As part of this effort, the Group has developed and enhanced policies such as the *Employee Code of Conduct*, the *Anti-Corruption, Anti-Bribery and Anti-Money Laundering Policy*, the *Managers and Employees Recusal Policy*, the *Internal Whistleblowing and Investigation Policy*, and the *External Whistleblowing and Investigation Policy*. These policies provide clear principles and guidance on matters such as equal opportunity, anti-discrimination, anti-corruption, prevention of bribery and extortion, anti-fraud, anti-money laundering, avoidance of anti-competitive practices, conflict of interest management, proper use of confidential and proprietary information, environmental, health, and safety standards, whistleblowing, and the safeguarding of employees’ remuneration, welfare, and benefits. The Group ensures that its values, culture, and policies are effectively communicated to both existing and new employees to enhance their understanding of internal regulations and ethical standards, thereby fostering a healthy, structured, and orderly corporate environment.

本集團將優質、全面及高水平的企業管治視為可持續發展的基石，始終秉持著「以人為本、求真務實、開拓創新、規範管理」的管理理念。為實踐這一理念，我們建立了一套完善的組織和管理架構，明確各職級的責任與義務，並通過管理決策委員會全面監督及檢討業務運營及管理情況，以維護各持份者的利益，為本集團建立長遠的價值。

本集團積極承擔企業社會責任，全面遵從國家或地方的相關標準與法規，致力於減輕業務對環境和社會帶來的負面影響。

營商原則

本集團秉持誠信和務實的管理理念以及高尚的道德操守，堅守原則並在各項業務運作中實踐企業價值觀。我們致力於建立以誠信為本的企業文化，為此已建立相關的管理政策和指導方針。在此過程中，本集團制定並完善《員工守則》、《反貪污、反賄賂及反洗錢政策》、《幹部員工迴避規定》、《內部舉報及調查辦法》及《外部舉報及調查辦法》等政策，在平等機會、反歧視、反貪腐、防止賄賂、防止勒索、反欺詐、反洗黑錢、防止反競爭行為、避免利益衝突、機密和專有資料的使用、環境、健康及安全、舉報以及員工待遇和福利保障等方面都提供了明確的原則和指引。我們向現有及新入職的員工傳達本集團的價值觀、文化和政策，以提升員工對內部規範和道德操守的認知，從而營造一個健康有序的企業環境。

The bonus structure for Executive Directors (including the Chairman of the Board and the Chief Executive Officer (“CEO”)) and the senior management of the Company is determined based on key performance indicators such as operating profit, investments in new projects, and safety and environmental performance. This ensures alignment between the long-term interests of the Executive Directors, senior management, the Company, and its shareholders. For details regarding Directors’ remuneration, please refer to the Company’s Annual Report 2024.

Prevention of Corruption and Anti-Competitive Behaviour

To eradicate corrupt practices and raise awareness of conflict of interest and integrity among employees, the Group consistently provides comprehensive anti-corruption training for Directors and employees. This includes sessions such as “Training on Upholding and Implementing Probity” and “Lecture on Probity”. Additionally, the Group conducts training programmes focused on the *Employee Code of Conduct*, corporate culture, policies, and management systems to further strengthen an atmosphere of integrity and discipline, fostering the development of a culture of integrity within the Group. In December 2024, the Group held a themed anti-corruption education and warning session. This training was conducted both online and offline and mandated participation by all employees. Through the viewing of educational films and the analysis of real-life corruption cases, the Group aims to help employees draw profound lessons, eradicate any inclination toward corruption at its root, and build a solid moral foundation to resist misconduct at its core.

In addition, the Group organises various educational activities and training programmes for the management to reinforce principles of integrity and self-discipline across all levels of management and to promote the values of sincerity and uprightness. At the same time, the Group actively strengthens system reforms and power constraints, implements the *Anti-Corruption, Anti-Bribery and Anti-Money Laundering Policy*, enhances disciplinary supervision, and strictly enforces accountability. These efforts are aimed at fully implementing anti-corruption practices and preventing anti-competitive behaviour across all business levels.

During the Reporting Period, all Directors, management personnel, and other employees of the Group received anti-corruption training, achieving a 100% training coverage rate.

執行董事（包括董事會主席及總裁）及本公司高級管理人員的獎酬制度均根據公司經營業績、新項目投資及安全環境表現等指標釐定，確保執行董事和高級管理人員與本公司及其股東的長遠利益一致。有關各董事的薪酬資料，可參閱本公司的二零二四年年報。

防止貪腐及反競爭行為

為杜絕貪污行為並提高員工對利益衝突和保守誠信的意識，本集團持續向董事和員工提供多次反貪腐培訓。我們已組織「廉政建設及執行力培訓」和「廉潔工作講座」、並提供與《員工守則》、企業文化、政策及管理體系相關的培訓，以進一步營造誠信守紀的公司氛圍，推動本集團誠信文化的建立。二零二四年十二月，本集團舉辦了以反貪腐為主題的警示教育培訓。此次培訓以線上及線下結合的方式進行，並要求全體員工參與。通過觀看警示教育片及剖析身邊的貪腐案例，本集團希望全體員工深刻吸取案例教訓，從思想源頭消除貪腐之念、從靈魂深處築牢拒腐防變的堤壩。

本集團還通過多種形式開展面向管理層的教育活動，促使各級管理層嚴格遵循廉潔自律的原則，弘揚清風正氣的價值觀。同時，本集團加強制度改革和權力制約，落實《反貪污、反賄賂及反洗錢政策》增強紀律監督，嚴格執行紀律，致力於在各業務層面全面實踐防貪腐和避免反競爭行為。

報告期內，本集團全體董事、管理人員及其他員工均接受了反貪腐培訓，培訓覆蓋比例達100%。

Protection of Third-Party Privacy and Intellectual Property

To ensure compliance with legal requirements in protecting third-party personal data and privacy, the Group has clearly defined the scope of third-party privacy in the *Privacy Policy* and established a set of standard procedures and guidelines for employees and suppliers to follow. We require our employees to strictly follow the *Data Management Policy*, *Confidentiality Management Regulations*, and the *Employee Network and Information Security Handbook*, as well as to collect, store, process, disclose, and use third-party personal data in accordance with the law. Additionally, our *Privacy Policy* and *Intellectual Property Management Measures* include provisions to prevent copyright infringement, safeguarding intellectual property and ensuring respect for knowledge and talent.

To further mitigate the risk of privacy and sensitive information leaks, the Executive Director, who also serves as the Head of the Cyber and Information Security Leadership Team, is responsible for overseeing information security and implementing the Group's cybersecurity measures as outlined in the *Everbright Environment Information Security Management Policy*. We regularly provide training to employees to reinforce the importance of privacy and intellectual property protection, as well as to ensure they are equipped with the correct management practices.

Policy for Whistleblowing

The Group has consistently upheld transparent and ethical operations across all its businesses, actively and continuously improving the accountability and supervision framework, and striving to maintain high standards of corporate governance. To this end, the Group has established the *Internal Whistleblowing and Investigation Policy* and the *External Whistleblowing and Investigation Policy*, providing safe, confidential, and legal channels for whistleblowing. Employees and relevant stakeholders (including but not limited to investors, lenders, suppliers, customers, service providers, governments, etc.) can report, without fear of retaliation, any actual or suspected misconduct or illegal activities related to the Group's financial reporting, internal controls, or other areas. All reports or complaints are ensured to be handled fairly, justly, and effectively. These policies are available on the Company's website.

保護第三方隱私及知識產權

為確保在遵守法律規定的基礎上保護第三方的個人資料和隱私，本集團在《隱私政策》中清楚列明相關第三方的隱私範圍，並規定了員工與供應商必須遵循的一系列標準程序和處理方法指南。我們要求員工嚴格遵循《數據管理政策》、《保密工作管理規定》及《員工網絡及信息安全手冊》，依法收集、保管、處理、披露和使用第三方的個人資料和數據。為保護知識產權和確保各方尊重知識及人才，我們的《隱私政策》及《知識產權管理辦法》亦包含了防止侵犯版權的條款。

為進一步降低隱私和敏感資訊外洩的風險，信息安全工作由本公司網絡與信息安全領導小組負責，並根據《光大環境資訊安全管理政策》執行本集團的網路安全措施。我們定期提供培訓，使員工重新認識隱私及知識產權保護的重要性，並掌握正確的管理方法。

舉報政策

本集團一貫堅持各項業務的透明廉潔運作，積極而持續地完善問責監督體系，致力於保持高標準的企業管治水平。為此，本集團制定了《內部舉報及調查辦法》和《外部舉報及調查辦法》，提供安全、保密且合法的舉報渠道，令員工及往來人士（包括但不限於投資者、貸款人、供應商、客戶、服務商、政府等）能夠無畏地舉報任何涉及本集團財務匯報、內部監控或其他方面的實際或涉嫌的不正當或不合法行為。我們確保所有的舉報或投訴均能夠得到公平、公正和有效的處理。此類辦法已列載於本公司網站。

The Group has set up dedicated email addresses (published on the Company's website) that operate 24/7 as formal reporting channels. Employees and correspondents may report directly to the chairman of the Audit Committee and the CEO. We will not disclose the identity of the whistleblower without the whistleblower's consent, or unless required by law, to ensure that the whistleblower can defend the Company's ethical standards without fear. All concerns or violations raised will be treated as confidential information. The Group guarantees that a fair and independent investigation will be conducted and follow-up actions will be taken accordingly.

During the Reporting Period, the Company received nine reports through the above whistleblowing channels, covering cases concerning tender procedures and abuse of authority. Five cases have been investigated, and the findings were reported to the Audit Committee.

本集團設立了24/7運作的專用電子郵箱（已在本公司網站上公佈），作為正式的舉報渠道。員工及往來人士可以直接聯繫審核委員會主席及總裁作出舉報。在未經舉報者同意或無法律要求的情況下，我們不會透露舉報者的身份，以確保舉報者能夠無後顧之憂地捍衛本集團的道德標準。所有提出的關注事項或違規行為都將被視為保密訊息。本集團保證會妥善安排公平獨立的調查並適時跟進。

在報告期內，本公司通過上述舉報渠道收到9宗個案報告，涉及招標程序及濫用職權的舉報。5宗案件已完成調查，調查結果已向審核委員會報告。



Sustainability Approach

The Group actively integrates the principles of sustainable development into its governance framework and daily operations, striving to create long-term value and benefits for its stakeholders.

可持續發展方針

本集團積極將可持續發展原則融入管治框架及日常運營中，致力為持份者創造長遠價值及利益。

Sustainable Development Policies and Systems

After years of development, the Group has established a comprehensive ESG system, covering the entire project lifecycle from the early planning stages to final operational management. The system includes requirements for aspects such as environmental and social impact screening and categorisation, resettlement, indigenous peoples, environmental impact assessments, information disclosure, public consultation and engagement, gender equality, grievance mechanisms, due diligence, and review, monitoring, and reporting, among others. These requirements ensure that the Group's operations comply with international principles and standards for safeguarding the environment and society. Furthermore, the Group's *Code of Practice* provides clear guidance on operations involving air and GHG emissions, effluent discharge into water and soil, generation and management of hazardous and non-hazardous waste, and the use of energy, water resources, and other raw materials, strengthening and standardising the Group's environmental and social governance. The Group's *Environmental, Health, and Safety Policy* only covers environmental and social risk management and basic compliance requirements, but also includes biodiversity risk assessments, labour safety and health systems, supplier management, stakeholder engagement, and employee training.

The Group continues to review its ESG-related management system and the division of responsibilities. Such reviews help improve the effectiveness of the supervisory system in our operations. The system includes management standards for guidelines and procedures related to the identification of material ESHS (Environmental, Social, Health, and Safety) topics, auditing, incident investigation and reporting, handling of occupational injuries, and contractors' ESHS management, among others. This management system promotes sustainable development within the Group and extends safety culture and relevant policies throughout the supply chain. In addition, the Group actively promotes the Points-Based ESHS Management Rules to encourage all employees and outsourced personnel to engage in safety management, supervise each other, and work together to advance the standardisation of safety management, thereby improving the proficiency of safety management.

The Group periodically reviews its sustainability policies and revises them as necessary.

可持續發展政策和體系

經過多年發展，本集團已建立一套完善的ESG體系，涵蓋從前期規劃到最終運營管理的項目全週期管理。該體系包括對環境和社會影響的篩選和分類、搬遷安置、原住民事務、環境影響評估、信息披露、公眾諮詢和參與、性別平等、申訴機制、盡職調查和審查，以及監測和報告等方面的要求，以確保本集團的運作符合國際環境和社會保護的原則和規範。此外，本集團的《運營守則》對運營中所涉及的大氣及溫室氣體排放、向水體及土地的排污、有害及無害廢棄物的產生及處置，以及能源、水資源、其他原材料使用等方面提供了明確指引，進一步加強並規範了本集團的環境和社會治理。本集團的《環境、健康與安全政策》不只涵蓋環境和社會風險管理與基本的合規要求，亦包括生物多樣性風險評估、勞工安全和保健制度、供應商管理、持份者參與及員工培訓等。

本集團持續檢討ESG相關的管理制度及分工，包括對重要ESHS議題的識別、審核、事故調查及匯報、工傷處理以及承包商ESHS管理等管理標準進行檢討，以完善監管體系在運營中的有效實踐。ESHS管理體系有助於促進本集團內部的可持續發展，並將安全文化和相關政策延伸至供應鏈。此外，本集團積極推行ESHS積分管理制度，努力推動員工與外協隊伍全員參與安全管理，互相監督，共同推進安全管理規範化，以提升安全管理水平。

本集團亦不時檢視可持續發展政策，並會在適當時作出相應修訂。

Corporate Governance Structure for Sustainable Development

Board Level

The Board is the highest governing body of the Group and is responsible for managing climate change risks, setting long-term strategic goals for sustainable development, and overseeing the implementation of these goals. The strategic direction of the Group is determined by the Board. In formulating strategic objectives and development directions, the Board incorporates climate change-related issues and corporate social responsibility into its considerations, establishes relevant management goals, and monitors the progress and completion of these objectives.

With the full support of the Risk Management Committee, the Board has ultimate oversight responsibility for the Group's risk management initiatives. The Risk Management Committee is responsible for risk management and conducts at least two assessments annually on enterprise risk management and internal controls. Our Board is responsible for reviewing and overseeing the Group's plans, activities, and performance related to sustainable development, as well as the risks and opportunities associated with climate change annually. The Group regularly organises briefings for the Board on the latest requirements related to sustainable development and climate disclosures to ensure that members are informed about the latest trends in sustainable development and climate-related risks and opportunities.

The Independent Non-executive Directors bring diverse experience and professional expertise to the Group. Apart from complying with the independence guidelines set out in Rule 3.13 of the *Listing Rules*, each of the Independent Non-executive Directors has confirmed that:

1. he/she has not been employed by the Company in an executive capacity within last year;
2. he/she has not been a partner or employee of the Company's external auditor during last year;
3. he/she is not a family member of an individual who is employed by the Company or by any parent or subsidiary of the Company as an executive officer;
4. he/she has no conflict of interest that the Board itself determines to mean they cannot be considered independent;
5. he/she has not been (and has not been affiliated with a company that is) an adviser or consultant to the Company or a member of the Company's senior management;

可持續發展企業管治架構

董事會層面

董事會是本集團最高管理機構，也是管理氣候變化風險、制定可持續發展的長期戰略目標以及督導落實相關目標的最高領導單位。本集團的戰略方向由董事會確立。在制定戰略目標和發展方向的同時，董事會將氣候變化相關議題和企業社會責任納入考慮，設立相關管理目標，並監督其落實進度與完成情況。

在風險管理委員會的全力支持下，董事會對光大環境的風險管理舉措負有最終監管責任。風險管理委員會負責風險管理，每年至少對企業風險管理和內部監控進行兩次評估。我們的董事會負責每年審視及監督本集團在可持續發展方面的計劃、活動及表現，以及氣候變化相關的風險和機遇。本集團定期為董事舉辦有關可持續發展及氣候披露新要求的簡介，確保董事會了解可持續發展及氣候相關風險及機遇的最新趨勢。

獨立非執行董事為本集團帶來多元化的經驗及專業知識。除符合《上市規則》第3.13條所載之獨立性指引外，各獨立非執行董事確認：

- (一) 他／她在過去一年內未曾以行政人員身份受僱於本公司；
- (二) 他／她在過去一年內未曾受僱於本公司外部核數師或出任其合夥人；
- (三) 他／她現時沒有家屬以行政人員身份受僱於本公司或其任何母公司或附屬公司；
- (四) 他／她現時沒有任何董事會認為會影響其獨立性的利益衝突；
- (五) 他／她現時不是本公司或本公司的高級管理人員的顧問或諮詢人（也不與作為本公司顧問或諮詢人之公司有關聯）；

- | | |
|---|---|
| 6. he/she has not been affiliated with a significant customer or supplier of the Company; | (六) 他／她現時與本公司的重要客戶或供應商並無關聯； |
| 7. he/she has not entered into personal services contract(s) with the Company or a member of the Company's senior management; | (七) 他／她現時與本公司或本公司高級管理人員沒有簽訂個人服務合同； |
| 8. he/she has not been affiliated with a not-for-profit entity that receives significant contributions from the Company; | (八) 他／她現時與獲本公司重大捐獻之非盈利性實體並無關聯； |
| 9. he/she has not accepted or has any family member who has accepted any payments from the Company or any parent or subsidiary of the Company in excess of US\$60,000 ⁽¹⁾ during FY2024. | (九) 他／她於二零二四財年沒有接受或有任何家屬接受過本公司或其任何母公司或附屬公司的超過60,000美元 ⁽¹⁾ 的款項。 |

Note:

⁽¹⁾ Other than those permitted by US SEC Rule 4200 Definitions, including i) payments arising solely from investment in the Company's securities; or ii) payments under non-discretionary charitable contribution matching programmes; or iii) compensation for the Board or the Board committee service.

附註：

⁽¹⁾ 但受美國SEC規則4200條款所允許的則不在此限，包括i)投資本公司的證券產生之款項；或ii)根據無裁量性慈善捐款配比方案所產生之款項；或iii)為董事會或董事會委員會服務的報酬。

Management Level

The Board's oversight of climate-related risks and opportunities is conducted with the support of the Management Decision Committee. Under this committee, the Safety and Environmental Management Committee, led by the CEO, plays a key role in guiding and supporting the Group's sustainability efforts. To ensure the effective implementation of the Group's sustainable management policies, the Safety and Environmental Management Committee provides practical guidance and support, formulates relevant strategies and management approaches, coordinates activities, regularly approves and reviews climate-related measures, and drives the Group's appropriate decision-making and actions regarding sustainable development and climate change response.

The Group places high importance on the risks posed by climate change and is committed to enhancing its resilience against these risks. A special task force has been established, covering the Group's headquarters, business units, regional centres, and project companies. The leaders of this task force primarily undertake leadership responsibilities and annually formulate, monitor, and review safety and environmental indicators and objectives, guiding different departments to take action to mitigate climate threats. To oversee the Safety and Environmental Management Committee's performance, climate-related performance targets are also established at the management level to assist the Board in evaluating the effectiveness of its climate strategies and measures.

管理層層面

董事會對氣候風險和機遇的監管是在管理決策委員會的支持下進行的。管理決策委員會下設有由總裁領導的安全與環境管理委員會。為確保本集團的可持續管理政策得到妥善實施，安全與環境管理委員會為本集團的可持續發展工作提供切實可行的指導和支持，包括制定相關的策略及管理方法，協調相關工作，定期批准及檢討與氣候相關的措施，推動本集團在可持續發展及應對氣候變化方面作出適當的決策和部署。

本集團高度重視氣候變化帶來的各種風險，致力提升抵禦這些風險的能力。本集團特別成立工作小組，涵蓋集團總部、各業務板塊、區域中心和項目公司四個主要層級。該工作小組的負責人主要履行領導職責，並每年制定、監察和審查安全與環境指標和目標，並指導不同執行部門採取行動以緩解氣候威脅。為監督安全與環境管理委員會履行職責，我們亦於管理層層面訂立氣候相關的表現目標，以協助董事會評估其氣候策略及措施的有效性。

Organisational Framework of
Sustainable Operations

可持續運營組織架構

LEGEND
圖例



Note:
⁽¹⁾ The Disclosure Committee was cancelled on 27 March 2024. Its work and duties are thereafter performed by the Board.

附註:
⁽¹⁾ 披露委員會已於二零二四年三月二十七日取消，其工作及職責隨後由董事會履行。



Risk Management

The Group is committed to developing a comprehensive risk management culture by implementing a “Risk-oriented, Policy-based, Procedure-linked, and System-driven” risk management model to strengthen risk management and control. Through the *Risk Management Policy*, *Risk Management Operation Manual*, *Internal Control Management Manual*, and *Internal Control Evaluation Measures*, the Group clearly stipulates its detailed workflows and specific implementation requirements for risk management and internal controls. To enhance the overall risk management of investment projects, all new investment projects are reviewed by the Project Investment Advisory Committee, which is composed of representatives from relevant departments and teams, including the Strategic Development Department, Financial Management Department, Risk Management and Legal Compliance Department, Construction Budgetary Management Department, Operation and Safety and Environmental Management Department, as well as the construction technology team and operation team. The regularly updated *Project Investment Advisory Committee Organisation and Review Workflow* further strengthens the risk management of investment projects.

During the Reporting Period, the Group continued to implement the *Compliance Management System*, so as to enhance the management of major risk prevention, as well as internal control and compliance. At the same time, the risk factor list was revised, not only to constantly improve the systematisation and normalisation levels of risk management, but also to enhance the quality and efficiency of project reviews.

In addition, the Group conducts an annual identification and assessment of its principal risks, analyses the effectiveness of its control measures, and continues to follow up on specific control outcomes.

風險管理

本集團致力於建立完善的風險管理文化，推行「以風險為導向、以制度為基礎、以流程為紐帶、以系統為抓手」的風險管理模式，全面強化管理和管控風險。根據《風險管理制度》、《風險管理操作手冊》、《內部控制管理手冊》及《內部控制評估辦法》，本集團清楚地列明風險管理和內部監控方面的詳細工作流程和具體執行要求。為有效加強對投資項目整體的風險管控，本集團所有新投資項目均經過項目投資評審委員會審議。該委員會由相關部門和工作小組人員組成，包括戰略發展部、財務管理部、風險管理與法律合規部、工程預算管理部、運營與安環管理部，以及工程技術小組和運營小組。定期修訂並下發的《項目投資評審委員會組織及評審流程》亦進一步強化了投資項目的風險管理。

在報告期內，本集團持續落實《合規管理制度》，加強重大風險防範及內控合規管理工作，並對風險要素清單進行修訂。除了不斷提升風險管理的系統化和常態化水準外，本集團也提高了項目評審的品質和效率。

此外，本集團每年對主要風險進行識別和評估，分析管控措施的有效性，並持續跟進具體的管控成效。

RISK MANAGEMENT FRAMEWORK

風險管治框架

Our risk management hierarchy, comprising three lines of defence, has helped to achieve risk management and internal controls at each level:

我們建立了由三道防線構成的風險管理組織體系，以實現風險及內部監控的逐級管理：

1 First Line of Defence 第一道防線

(Business Sectors, Regional Centres and Project Companies)
(各業務板塊、區域中心和項目公司)

Responsible for continuously identifying, assessing, monitoring, and reporting risks, as well as implementing specific risk management and internal control measures during operations.

負責在運營過程中不斷識別、評估、監察及匯報風險，並實施具體的風險管理及內部監控系統措施。

2 Second Line of Defence 第二道防線

(Functional Departments of the Headquarters, Functional Departments in All Business Sectors and Risk Management and Legal Compliance Department)
(總部職能部門、業務板塊職能部門和風險管理與法律合規部)

Responsible for regularly assessing the overall risk level and reviewing the effectiveness of key risk control measures. 負責定期評估整體的風險等級、審閱主要風險管控措施的有效性。

3 Third Line of Defence 第三道防線

(Audit Department)
(審計部)

Responsible for regularly auditing the implementation of enhancements to the risk management and internal control systems. 負責定期審核風險管理和內部監控系統改進的落實情況。



Everbright Environment is committed to raising risk awareness among all employees and views the establishment of a risk management culture as a critical component of the Group's development strategies. The Group has developed effective control measures to address various risks. Furthermore, through initiatives such as risk case education, case analysis, and training on systems and procedures, employees are equipped with a robust risk management mindset. These initiatives encourage employees to uphold ethical standards and proper conduct, transform their awareness into proactive actions, and integrate risk management practices into their daily work.

光大環境致力於提高全體員工的風險意識，並將建立風險管理文化作為本集團發展策略的重要一環。針對各項風險，本集團制定了有效的管控措施，並通過風險案例教育、個案分析及制度流程培訓等方式幫助員工樹立正確的風險管理觀念。這些培訓和教育活動旨在引導員工遵守良好的行為準則和道德規範，將風險管理意識內化為自覺行動，並進一步融入日常工作中。



For details of the Group's corporate governance, risk management and internal controls, please refer to the Annual Report 2024.
有關本集團的企業管治、風險管理及內部監控的詳情，請參閱二零二四年年報。

Supply Chain Management

The Group has implemented a rigorous supplier selection and management system, including the *Procurement Management System* and *Tendering and Procurement Management Measures*, maintaining close collaboration and communication with suppliers to mitigate procurement risks and promote responsible sourcing. Leveraging Everbright Environment's electronic transaction platform for online tendering and procurement, we have enhanced oversight and management of the tendering process to eliminate any regulatory breaches or disciplinary violations.

供應鏈管理

本集團實施嚴格的供應商選擇和管理制度，包括《採購管理制度》和《招標採購管理辦法》等，與供應商緊密合作和溝通，以減輕採購風險及推動負責任採購。我們通過光大環境招標採購電子交易平台進行線上招標採購，加強招標監督管理，致力於杜絕違規違紀行為。

At the same time, we proactively and consistently extend the Group's exemplary ESHS management practices across the entire value chain to ensure ESG considerations are integrated at every stage. The ESHS department at each regional centre conducts regular audits of the project companies under its jurisdiction. These audits include reviewing supplier screening records for any legal violations, such as child labour or forced labour, and evaluating suppliers' performance in areas such as service quality, safety measures, environmental performance, and social responsibility. To encourage suppliers to support sustainable development, project companies use audit results as a key factor in selecting suppliers for the following year. The Group prioritises environmentally and socially responsible suppliers whenever possible. This includes sourcing reusable or renewable products, hiring contractors who employ low-emission construction methods, and, where feasible, partnering with local suppliers within the same province as the Group's operations. This approach not only supports sustainable procurement but also contributes to local employment and demonstrates our commitment to corporate social responsibility.

The Group has continuously enhanced its tendering and procurement system by establishing Guangcai Tendering (Shenzhen) Co., Ltd.* to optimise its governance framework for tendering and procurement, as well as implementing the *Guangcai Tendering (Shenzhen) Co., Ltd. Administrative Measures for Management of Appraisal Expert Database*. Consistent efforts have been made to leverage advanced technologies to detect bid rigging and collusive bidding, further improving supplier management. During the Reporting Period, there were 213 external experts and approximately 16,852 registered suppliers in the system database. Major procurement includes equipment fitting, construction and installation works, etc.

同時，本集團積極且持續地將ESHS管理實踐延伸至整條價值鏈，確保在各階段中貫徹ESG的考量。各區域中心的ESHS主管部門會定期對所轄項目公司進行ESHS審核，檢視項目公司的供應商篩選紀錄，並查看是否存在任何違反法律的行為，如童工和強迫勞動。我們將從供應商的服務品質、安全措施、環保表現、社會責任等各方面進行分析，評估其表現及環境與社會風險。為鼓勵供應商支持可持續發展，項目公司會根據審核結果選擇來年的供應商。我們優先選擇對環境及社會負責的供應商，例如選購可重用或再生產品、聘用實行低排放建設的承建商等，並在全國各地發展業務時，優先與位於同省份的供應商合作，為當地創造就業機會，履行企業社會責任。

本集團不斷完善招標採購制度，成立光采招標（深圳）有限公司*，優化招採治理機制，落實《光采招標（深圳）有限公司評審專家庫管理辦法》，一如既往充分利用技術來甄別圍標、串標行為，以不斷完善供應商管理。報告期內，平台資料庫共錄記213名外部評審專家和約16,852家註冊供應商，採購內容包括設備、材料及服務等。

* For identification purpose only

* 僅供識別用途

In 2024, the Group further established or revised a series of management regulations and notices related to procurement, including the *Working Guidelines for Bid Rigging and Collusive Bidding*, the *Administrative Measures for "Briber Blacklist"*, the *Notice on Standardising Internal Procurement Procedures*, the *Notice on Further Strengthening Procurement Management*, the *Centralised Procurement Catalogue (2024 Edition)*, and the *Notice on Strengthening the Supervision and Management of Self-conducted Procurement*, etc to enhance the compliance level. To strengthen the supervision and management over processes, the Group has established a bidding supervision working group to carry out on-site supervision over key projects, conduct spot checks on the procurement projects handled by project companies, strengthen the professional skills training and warning education of procurement personnel, and establish a system of procurement inspections and unannounced inspections, building a higher firewall against non-compliance and non-disciplinary tendering and procurement practices.

Meanwhile, the Group's transaction platform for bidding and procurement has successfully passed the Chinese cybersecurity review and certification, as well as the certification review by the big data centre of market supervision for five consecutive years. It has obtained a three-star certification certificate for the electronic bidding and tendering system, becoming the first platform in the domestic solid waste industry to achieve such certification, providing reliable technical support and security guarantees for the compliance of the company's tendering and procurement. At the same time, in accordance with actual needs, continuous optimisation has been carried out in aspects such as compliance management, prevention and control of collusive bidding, process optimisation, risk early warning, and information sharing.

Supplier Management Measures

The Group has established a fair and transparent set of criteria for selecting and managing suppliers and contractors. We are committed to partnering with companies that demonstrate standardised management, complete qualifications, and align with Everbright Environment's corporate culture and values. Before selecting suppliers and contractors, we conduct thorough assessments of their capability to fulfill contractual obligations, environmental and social performance, service quality, and management philosophy, followed by a rigorous screening process. All suppliers are required to sign the *Integrity Declaration* during the bidding process, pledging to participate in the bidding process with integrity and fairness while avoiding any corrupt or unfair competitive practices.

二零二四年，本集團進一步制定或修訂採購管理相關制度，通過《圍標串標工作指引》、《「行賄人員黑名單」管理辦法》、《關於規範內部採購程序的通知》、《關於進一步加強採購管理的通知》、《集中採購目錄（2024年版）》、《關於加強自行採購監督管理的通知》等一系列管理制度、通知，提升合規水平。為加強過程監督管理，本集團成立招標監督工作組，對重大項目實行現場監督，對項目公司經辦的採購項目進行抽查，加強採購人員專業技能培訓和警示教育，建立採購巡檢、飛檢制度，築高招採工作違規違紀防火牆。

此外，本集團招標採購電子交易平台連續五年通過中國網絡安全審查認證和市場監管大數據中心認證審查，取得電子招標投標系統認證三星級認證證書，成為國內固廢行業首個取得認證的平台，為公司招標採購的合規性提供可靠的技術支撐和安全保障，同時根據實際需求對合規管理、圍標串標防控、流程優化、風險預警、信息共享等方面持續優化。

供應商管理準則

本集團已制定公正透明的準則，用於選擇和管理供應商和承包商。我們致力於選擇管理規範、資質齊全且企業文化或價值觀與光大環境相近的企業作為合作對象。在選擇供應商和承包商之前，我們會進行充分的考察，評估其履約能力、環境與社會表現、服務品質及管理理念等方面，並進行嚴格篩選。所有供應商在投標時都必須簽署《陽光宣言》，承諾廉潔、公平地參與投標，規避一切腐敗與不正當競爭的行為。

Everbright Environment has specifically developed and implemented the following supplier management guidelines, which apply to all suppliers of the Group and encompass environmental and social management across every stage of the supply chain:

光大環境特別制定並落實以下供應商管理準則，涵蓋本集團所有供應商，並在供應鏈的各個環節中進行環境與社會管理：

Supplier Code of Conduct 《供應商行為準則》

- The Group adopts a systematic approach to regulate supplier conduct in the economic, environmental, and social domains, encouraging suppliers to fulfill their responsibilities and collectively enhance the sustainability performance of the supply chain. Our *Supplier Code of Conduct* further motivates suppliers to apply the same standards to their subordinate suppliers, thereby contributing to the overall sustainability of the supply chain.

本集團以系統的方式規範供應商在經濟、環境及社會領域的行為，鼓勵供應商履行並共同提高供應鏈的可持續發展表現。我們的《供應商行為準則》更鼓勵供應商以相同的標準對待他們的從屬供應商，有助提升整體供應鏈的可持續性。

- In the economic domain, the Group requires suppliers to conduct business ethically, operate honestly, and comply with relevant local and international laws. In the environmental domain, suppliers are expected to strengthen monitoring in their operations to minimise pollution and reduce negative environmental impacts. In the social domain, suppliers must adhere to national labour policies and regulations, including prohibiting practices such as slavery, forced labour, bonded labour, child labour, and abusive behaviour, while upholding employees' fundamental human rights and considering public welfare.

在經濟層面，本集團規定供應商進行商業活動時需要從道德角度出發，誠實地進行經營，並遵守當地及國際的相關法律；在環境層面，要求供應商在其運營中加大監控力度，盡量減少對環境的污染及負面影響；在社會層面，要求供應商遵守國家的勞工政策和法規，包括避免任何奴役、強迫勞動、抵押勞工、使用童工及虐待行為，維護員工的基本人權，以及考慮公眾福利。

- All suppliers must comply with the *Supplier Code of Conduct* when conducting business with the Group or participating in any activities related to the Group.

所有供應商在與本集團進行業務往來或參與任何與本集團有關的活動時都應遵守《供應商行為準則》。

Supplier Management Measures 《供應商管理辦法》

- Covering supplier responsibilities, including equipment, main materials, construction units, design units, and operation centres. These regulations address supplier rankings and evaluations, the engagement of new suppliers, the continuous management of suppliers, the management of unqualified suppliers, and penalties for non-compliance.
涵蓋包括裝備、主材料、施工單位、設計單位、運營中心等供應商之職責、供應商等級及評價、新供應商的聘用、供應商的持續管理、不合格供應商的管理和違規處罰等。
- Current suppliers are subject to ongoing assessment based on their professional proficiency, financial status, and compliance records. They are categorised into four levels: A, B, C, and D. Suppliers in the lowest level who fail to meet the Group's requirements may face termination of business relationships.
依照供應商的專業水平、財務狀況及合規記錄等對現有供應商進行持續評估，並將供應商劃分為A、B、C、D四個等級，最低等級的供應商若未能證明能夠達到本集團的要求，本集團或會終止與其合作。
- Additionally, the Group enforces integrity management by recording suppliers with untrustworthy or improper conduct and assigning them to the unqualified suppliers list or blacklist based on the severity of their actions. Enterprises operated by relatives are included in the restricted enterprises list. Unqualified suppliers are prohibited from bidding in the sector of the concerned entity, blacklisted suppliers are barred from bidding within the Everbright Environment system, and restricted enterprises are prohibited from bidding in the corresponding system of Everbright Environment.
本集團同時也對供應商實行誠信管理，對具有失信、不良行為的供應商進行記錄，並根據嚴重程度將其列入不合格供應商名單或供應商黑名單。涉及親屬經商辦的企業，列入限制企業名單；不合格供應商將被限制參與涉事單位所在板塊的投標；列入黑名單的供應商被限制參與光大環境系統內投標；列入限制企業名單的，限制參與光大環境相應系統內投標。

Contractor ESHS Management Standards 《承包商ESHS管理標準》

- The Group evaluates contractors' backgrounds, qualifications, construction operations, and environmental protection performance to identify and manage potential environmental, social, and safety risks associated with outsourced work.
通過審視承包商在背景、資質、施工作業及環保等方面的表現，藉此識別和控制工作外包過程中產生的與環境、社會和安全相關的風險。
- Through the *Contractor ESHS Questionnaire* and relevant ESHS information provided by contractors, the Group compiles a list of qualified contractors, ensuring compliance with environmental and social responsibility laws, regulations, and applicable national and local government standards.
本集團通過承包商填寫的《承包商ESHS問卷調查表》和相關的ESHS資料整理達標承包商名單，並確保供應商和承包商遵守環境和社會責任的管理法律和規例，以及適用國家和地方政府的規定。
- Contractors are required to submit information such as whether they have obtained international environmental management certifications like ISO 14001, whether they have conducted ESHS training and assessments, and whether they provide appropriate protective equipment for their staff.
要求提交的信息包括承包商是否擁有ISO 14001等國際環境管理標準認證、有否進行ESHS培訓與考核、有否為員工提供適當的保護裝備等。
- The Group also offers guidance to its business partners to improve their sustainability performance by issuing policies and guidelines, including the *Procurement Management System and Management Measures*, *Tender Management Measures* and *Management Measures for Appraisal Expert Database for Project Construction Procurement*.
本集團的《採購管理制度及辦法》、《招標管理辦法》及《工程建設採購評審專家庫管理辦法》等相關政策和制度可有助引領業務夥伴提升其可持續發展表現。

Supply Chain Profile 2024

二零二四年供應鏈概況

		No. of Suppliers	Amount of Purchase (Billion RMB) 採購金額 (人民幣十億元)	Percentage in Total Amount of Purchase 所佔總採購 金額的百分比
Total	總數	16,852	10.3	100%
Critical/Major Suppliers ⁽¹⁾	關鍵／主要供應商 ⁽¹⁾	33	3.0	29.2%

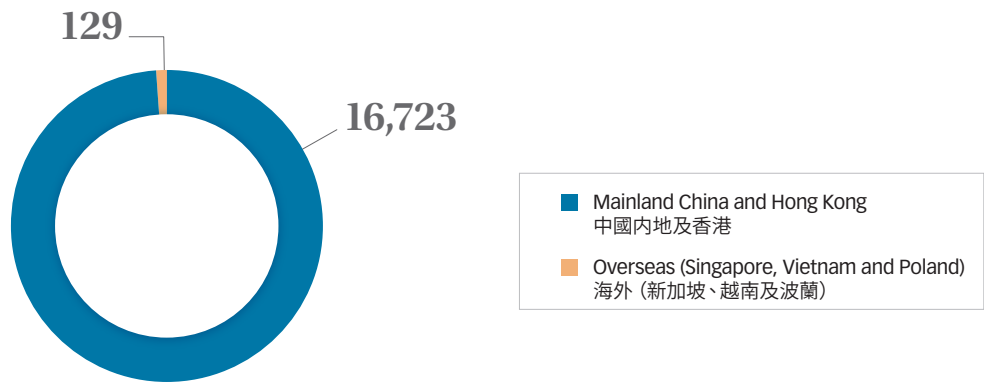
Note:

附註：

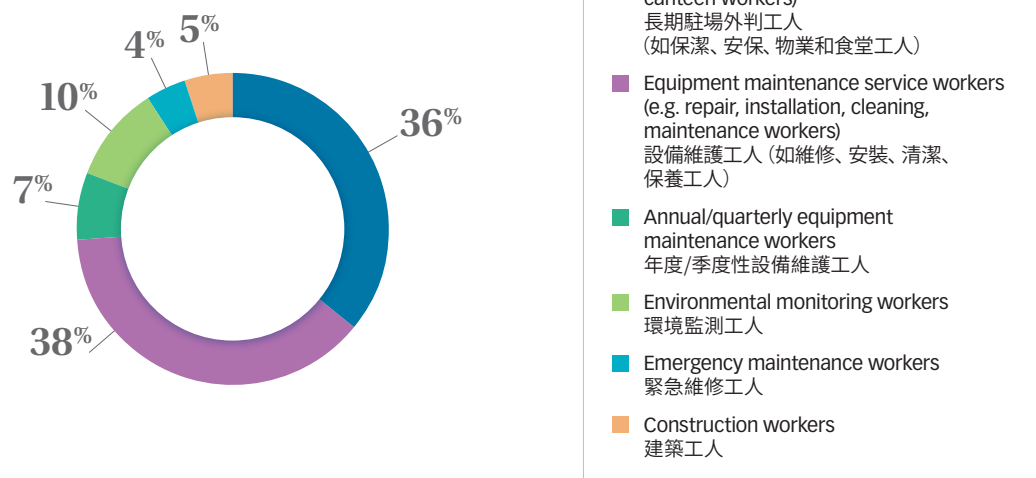
⁽¹⁾ Critical/Major suppliers mean suppliers whose goods, materials, and services have a significant impact on the competitive advantage, market success or survival of the Group.

⁽¹⁾ 關鍵／主要供應商是指其商品、材料、服務對本集團的競爭優勢、市場成功或生存空間產生重大影響的供應商。

Number of Suppliers by Geographical Region
按地區劃分的供應商數目



Number of On-site Outsourced Workers in 2024
二零二四年駐場外判工人數目



Number of On-site Outsourced Workers
駐場外判工人數目

31,315

Supplier Sustainability Risk Assessment

To gain deeper insights into the ESHS performance of various supplier categories, the Group commissions an external consultant annually to conduct sustainability risk assessments of its suppliers. In 2024, 242 suppliers, including all major suppliers, participated in the evaluation. These suppliers represented business categories such as electrical equipment, construction, lifting machinery, pumping equipment, air system technology, and water treatment equipment. The assessment focused on the suppliers' qualifications in production, operation, and safety, as well as the operation of their management systems in areas such as quality, environmental impact, social responsibility, and labour rights protection.

To integrate ESG standards into the evaluation process, participating suppliers were required to demonstrate how their services align with at least one of the following ESG objectives: 1. Sustainable Development and Strengthening Climate Resilience; 2. Improving Social Outcomes; 3. Facilitating Carbon Neutrality; and 4. Enhancing Governance. All of the assessed suppliers met the above criteria.

The overall result of the risk assessment was satisfactory and demonstrated the effectiveness of the Group's long-standing efforts in guiding suppliers on their ESHS performance. None of the assessed suppliers reported any ongoing commercial litigation or prosecution, nor had they been fined by relevant authorities for environmental or social issues. 80% of the surveyed suppliers had obtained internationally recognised certifications, including ISO 9001 for Quality Management, ISO 14001 for Environmental Management, and OHSAS 18001/ISO 45001 for Occupational Health and Safety, or were in the process of obtaining these certifications. Moreover, 17% of the surveyed suppliers had plans to establish and complete the certification process for their management systems within the next three years. Approximately 57% of the surveyed suppliers had established occupational health and safety policies, and 98% had provided relevant training to their employees. Only 1 suppliers reported a safety accident in the past three years, which involved a minor traffic incident. No risks related to child labour or forced labour were identified during this assessment.

Suppliers participated in the 2024 supplier sustainability risk assessment accounted for approximately 22.19% of the annual total purchasing amount of the Group.

供應商可持續發展風險評估

為深入了解各類型供應商在ESHS方面的表現，本集團每年都邀請外部顧問對本集團供應商進行可持續發展風險評估。二零二四年，共有242家供應商（包括所有主要供應商）參與評估，涵蓋業務範圍包括電力設備、工程施工、起重機械、泵類設備、空氣系統技術、水處理設備等。評估的範圍主要包括供應商在生產、運營及安全方面的資質，以及質量、環境、社會責任及保障勞工權益等方面管理體系的運營情況等。

為將ESG標準納入評估流程，參與評估的供應商需展示其服務與以下至少一項ESG目標的關聯：（一）可持續發展和增強氣候變化韌性；（二）改善社會成果；（三）促進碳中和；及（四）加強管治。評估結果顯示，所有供應商均符合上述標準。

本次風險評估的結果整體令人滿意，顯示出本集團多年來對供應商在環境、社會、健康與安全方面的表現所做的努力已取得顯著成效。所有接受評估的供應商均表示無任何正在進行中的商業訴訟，且無任何因環境及社會問題而受到有關部門的檢控或罰款。80%的受訪供應商已獲取國際認證的ISO 9001質量管理體系、ISO 14001環境管理體系及OHSAS 18001/ISO 45001職業健康和安全管理體系的認證，或現正進行相關認證。此外，17%的受訪供應商計劃在未來三年內建立並完成管理體系的認證流程。約57%的受訪供應商已制定了職業健康與安全政策，98%的受訪供應商為員工提供了相關的職安培訓。在受訪供應商中，僅有1家供應商在過去三年曾涉及輕微交通意外的安全事故。在本次評估中，我們沒有發現任何與童工和強迫勞動相關的風險問題。

參與二零二四年供應商可持續發展風險評估的供應商佔本集團全年總採購金額約22.19%。

Customer Satisfaction

Over the years, the Group has adhered to a customer-centric service philosophy, integrating high-quality customer service into its daily operations. We continuously evolve to address key challenges faced by customers and the industry at large, aiming to contribute to building a cleaner environment and a more efficient model of resource utilisation. This not only meets customer needs but also fosters industry development and benefits society as a whole. Customer satisfaction is one of the Group’s short-term social sustainability goals. To gain valuable insights, we invited an external consultant to conduct an annual customer satisfaction survey during the Reporting Period, gathering feedback to further enhance our service quality.

客戶滿意度

本集團多年來堅持以滿足客戶需求為中心的服務理念，在日常運營管理中提供優質的客戶服務。我們不斷與時俱進，致力於解決客戶乃至整個產業發展的關鍵問題，以幫助建立更清潔的環境和更高效的資源利用模式，從而滿足客戶需求、推動產業發展，並回饋社會。客戶滿意度是本集團在社會層面的短期可持續發展目標之一。我們在報告期內邀請了外部顧問為本集團進行年度客戶滿意度調查，以了解客戶對我們工作的評價，使本集團進一步提升服務品質。

		Average score (out of 10) 平均分 (滿分10分)
Indicators	指標	
Experience and professionalism of project teams	項目團隊的經驗及專業程度	9.36
Environmental, safety and health risk management	環境及安全健康風險管理	9.37
Outcome and quality of work	工作成果及質量	9.33
Effectiveness and timeliness in communication	有效和及時的溝通	9.43
Adherence to agreed project schedules	遵守商定的項目進度	9.35
Overall satisfaction rate	整體滿意度	9.37

A total of 103 valid questionnaires were collected in this survey, with the overall customer satisfaction rate reaching 9.37 (out of 10), and the percentage of satisfied customers (those who rated Everbright Environment's performance with an average score of 8 or above) being 92%. The majority of customers expressed a strong willingness to recommend Everbright Environment and are eager to collaborate with the Group again, which fully affirms our long-term efforts in providing quality services and meeting customer needs.

The survey results revealed that among 103 surveyed customers, 25 customers (accounting for 24%) were working with the Group for the first time. Encouragingly, 92% of these new customers gave ratings of 8 or above in terms of satisfaction. These positive feedbacks will serve as a driving force for the Group's future development. Moving forward, we will continue to uphold our customer-centric service philosophy, actively create added value, and strive for mutually beneficial outcomes.

是次調查共收集到103份有效問卷，客戶整體滿意度達9.37分(滿分10分)，其中滿意客戶(給予光大環境表現平均分8分及以上的客户)佔比92%。絕大部分客戶表示非常願意推薦光大環境，並樂意再次與本集團合作，充分肯定了我們在提供優質服務和滿足客戶需求上的長期努力。

調查結果顯示，在103位受訪客戶中，有25位客戶是首次與本集團合作，佔總受訪客戶的24%。令人鼓舞的是，其中有92%的客戶給出8分及以上的高滿意度分數。這些正面的反饋將成為我們未來前進的動力。我們將繼續堅持以客戶為中心的服務理念，積極創造附加價值，實現互利共贏。

Results of the customer satisfaction survey in 2024

二零二四年客戶滿意度調查結果

Valid questionnaires collected
共收到

103

份有效問卷

Overall satisfaction rate
整體滿意度

9.37

(out of 10)
(10分為滿分)

Percentage of satisfied customers
(customers rated Everbright Environment's
performance with an average score of 8 or above)
滿意客戶百分比(給予光大環境表現
平均分8分或以上的客戶)

92%

Stakeholder Engagement 持份者參與



We draw on collective wisdom,
advice & suggestions
集思廣益・建言獻策



Maintaining proactive, transparent, and timely communication with stakeholders is crucial to the Group's daily operations, as it serves not only as a key channel for information transmission but also as a fundamental approach to problem-solving. By listening and responding to stakeholder opinions through multiple channels, we can more effectively integrate sustainable development strategies into each project, thereby achieving mutual benefits with our stakeholders.

與持份者保持積極、透明和及時的溝通對本集團日常運營至關重要，因為這不僅是傳遞信息的關鍵途徑，也是解決問題的基礎。透過多個渠道傾聽並回應持份者的意見，我們能夠更有效地將可持續發展策略貫徹於每個項目中，從而與持份者實現共同的利益。

The Group's business scope is extensive, covering multiple stakeholder groups, including investors, shareholders, governments, regulatory bodies, villagers, local communities, business partners, suppliers, customers, employees, media, and NGOs. The Group follows five principles to effectively identify stakeholders:

本集團的業務範圍廣泛，涵蓋多個持份者組別，包括投資者、股東、政府、監管機構、村民、當地社區、業務夥伴、供應商、客戶、員工、媒體和非政府組織等。本集團遵循以下五個原則以有效識別持份者：

Responsibility 責任	Influence 影響力	Proximity 鄰近性	Dependency 倚靠性	Representativeness 代表性
Stakeholders linked to the Group through legal, financial, operational procedures, contracts, and/or policies 通過法律、財務、運營規則、合約及／或政策與本集團連繫的持份者	Stakeholders with formal decision-making power or informal influential capacity within the Group 具有本集團正式決策權或非正式影響力的持份者	Stakeholders located geographically close to the Group's operating plants and who interact closely with the Group's daily operations 居於本集團運營廠房附近及與本集團日常運營關係密切的持份者	Stakeholders who are highly dependent on the Group's business operations 很大程度上倚靠本集團業務運營的持份者	Stakeholders who are the representatives of the organisations that are closely connected with the Group 來自與本集團聯繫最緊密的業界代表的持份者代表

During the Reporting Period, we remained proactive and closely connected with various stakeholders through diversified channels of communication:

報告期內，我們繼續透過多元化的溝通途徑與各持份者進行積極和緊密的聯繫：

Stakeholder Group 持份者組別	Channel of Engagement or Communication 參與或溝通途徑	Engagement Frequency or Duration 參與頻率或時間
Investors, Shareholders 投資者、股東	Annual/extraordinary general meeting 股東週年／特別大會 Press release/announcement/circular 新聞稿／公告／通函 Results presentation 業績發布會 Interim report/annual report 中期報告／年報 Roadshow 路演 Meeting/telephone conference/email 會議／電話會談／電郵聯繫 Site visit 現場考察 Company website 公司網站	Annually/as needed 每年／根據需要 Regularly/as needed 定期／根據需要 Half-yearly/annually 半年／每年 Annually 每年 Regularly/as needed 定期／根據需要 Regularly/as needed/upon request 定期／根據需要／根據需求 As needed/upon request 根據需要／根據需求 As needed 根據需要
Governments and Regulatory Bodies 政府和監管機構	Progress report 進度報告 Site visit 現場考察 Meeting 會議 WeChat 微信 Phone or email 電話或電郵聯繫 Customer satisfaction survey 客戶滿意度調查	Weekly/monthly/quarterly 每週／月／季 Weekly/monthly/quarterly 每週／月／季 Weekly/monthly/quarterly 每週／月／季 As needed 根據需要 Weekly/monthly/quarterly 每週／月／季 Annually 每年
Villagers, Local Communities 村民、當地社區	Project visit/site visit 項目參觀／現場考察 Survey 意見調查 Public hearing 公聽會	Before construction/open day on the first weekend of every month/upon request 工程施工前／每月第一個週末之公眾開放日／根據需求 Before construction/as needed 工程施工前／根據需要 Before construction/as needed 工程施工前／根據需要
Business Partners, Suppliers 業務夥伴、供應商	Pre-tender meeting 採購招標會 Phone interview 電話回訪 Questionnaire 調查問卷 WeChat 微信	Every tender event 每次招標活動 As needed 根據需要 Ad hoc 不定期 As needed 根據需要

Stakeholder Group 持份者組別	Channel of Engagement or Communication 參與或溝通途徑	Engagement Frequency or Duration 參與頻率或時間
Customers 客戶	Meeting 會議 Phone or email 電話或電郵聯繫 Customer satisfaction survey 客戶滿意度調查	Weekly/monthly/quarterly 每週／月／季 Weekly/monthly/quarterly 每週／月／季 Annually 每年
Employees 員工	Work meeting/project meeting 工作會議／項目會議 Performance review meeting 表現評估會議 Internal publication 內部刊物 Charitable activity 公益活動 Face-to-face meeting/telephone conference/email 當面會談／電話會談／電郵聯繫 Email to CEO and/or the Chairman of the Audit Committee 電郵至總裁及／或審核委員會主席	Regularly 定期 Interim/year-end 年中／年末 Monthly 每月 As needed 根據需要 As needed As needed 根據需要 As needed 根據需要
Media 媒體	Project visit/site visit 項目參觀／現場考察 Press release/announcement 新聞稿／公告 Management interview 管理層採訪 Results presentation 業績發布會 Company website 公司網站	As needed/upon request 根據需要／根據需求 Regularly/as needed 定期／根據需要 Regularly/as needed/upon request 定期／根據需要／根據需求 Half-yearly/annually 每半年／每年 As needed 根據需要
NGOs 非政府組織	Charitable activity 公益活動 Site visit 現場考察 Meeting 會議	As needed 根據需要 Regularly/as needed 定期／根據需要 As needed 根據需要

Materiality Assessment

The Group conducts a comprehensive materiality assessment annually, engaging stakeholders through questionnaire surveys to identify the most critical economic, environmental, and social issues for both the Group and its stakeholders, and to establish the scope and boundaries of the sustainability report. In 2024, to align with internationally recognised best reporting practices, we introduced the “dual materiality” concept in our materiality assessment. This approach aims to measure the impact of sustainability issues on the Group’s corporate value and financial performance (financial materiality), as well as evaluate the Group’s impact on external environmental and social contexts (impact materiality). The materiality assessment process not only facilitates communication with stakeholders but also increases their level of engagement.

In 2024, we continue to maintain the four-stage methodology for materiality assessment and actively advance our sustainable development agenda. The four stages are as follows:

實質性評估

本集團每年都會進行一次全面的實質性評估，透過問卷調查的方式與持份者溝通，以確定對於本集團與各持份者而言最重要的經濟、環境和社會議題，並確立可持續發展報告範圍和邊界。二零二四年，為了向國際公認的最佳報告實踐標準看齊，我們於實質性評估引入了「雙重重要性」的概念，旨在衡量各個可持續發展議題對本集團企業價值和財務表現的影響（即財務重要性），以及本集團對外部的環境和社會所產生的影響（即影響重要性）。實質性評估的過程不僅促進了與持份者的溝通，也增加了他們的參與度。

二零二四年，我們依然採用四個階段作為實質性評估方法，並繼續致力推進可持續發展議程。四個階段如下：



Stage
第一階段



Identification of Sustainability Topics

識別可持續發展議題

The Group engages an external sustainability consultant to comprehensively identify sustainability topics most closely aligned with its business operations (refer to “List of Sustainability Topics”). The identification process draws from extensive information sources including GRI Standards, SDGs, stakeholder opinions, Board and management recommendations, internal publications, and media analysis. This multifaceted approach ensures the selected topics accurately reflect the Group’s business nature and capture insights from stakeholder communications.

本集團委聘外部可持續發展顧問，全面識別與業務最密切相關的可持續發展議題（見「可持續發展議題列表」）。議題的識別參考GRI準則、SDGs、持份者意見、董事會及管理層建議、內部刊物及媒體信息分析等廣泛來源，以確保這些議題充分反映本集團的業務性質及與持份者溝通的結果。



Stage
第二階段

2

Collection of Stakeholders' Opinions and Development of Materiality Matrix 收集持份者意見，建立實質性矩陣

The sustainability consultant conducts an engagement survey across eight key stakeholder groups, using the results to prioritise sustainability topics initially identified in Stage 1. Following the survey, a quantitative analysis is performed based on financial materiality and impact materiality scores. The analysis results are presented in a matrix format in the Report, with topics strategically arranged from the top right to bottom left, highlighting those mutually recognised as most important by both stakeholders and the Group.

可持續發展顧問針對八個重點持份者組別進行持份者參與調查，並根據結果對第一階段所識別的可持續發展議題進行優先排序。顧問隨後根據財務重要性和影響重要性的得分，進行實質性量化分析，並將分析結果以矩陣的形式呈現。矩陣中顯示的議題重要性從右上方到左下方斜向排序，選取持份者和本集團雙方均認為最重要的議題作為本報告的披露重點。



Stage
第三階段

3

Validation of Material Topics and Data Analysis

驗證實質性議題及分析數據

To guarantee the Report's reasonableness, balance, and completeness, the Board validates the prioritised material topics and their scope. The sustainability consultant subsequently reports these topics according to GRI Standards. Additionally, the Group implements a systematic data collection and monitoring mechanism across project companies to ensure regular, accurate, and comprehensive sustainability data reporting.

為確保本報告的合理性、平衡性及完整性，董事會對經過優先排序的實質性議題及其範圍進行作驗證。隨後，可持續發展顧問會按GRI準則報告這些實質性議題。此外，為確保所有項目公司能定期提供準確、全面的可持續發展數據，本集團各相關部門的專員亦會採用系統化的數據收集和監測機制。



Stage
第四階段

4

Review of Material Topics

檢視議題實質性

Prior to report preparation, the Group conducts a comprehensive review of material topics and disclosure practices from previous reports. An annual stakeholder engagement survey collects feedback on Everbright Environment's sustainability performance during the Reporting Period. All opinions and data are presented during Board meetings, where they are carefully reviewed and verified. This process facilitates deeper stakeholder participation in sustainable development management and disclosure, ultimately supporting the achievement of long-term sustainable development objectives.

在準備本報告前，本集團對過往報告中的實質性議題和披露工作進行了回顧及審閱，並透過年度持份者參與調查，收集持份者對光大環境於報告期內可持續發展表現的意見。所有意見及數據將提交至董事會會議中匯報，並由董事會檢視核實實質性，以助持份者更全面參與可持續發展的管理和披露過程，從而實踐長遠的可持續發展目標。

List of Sustainability Topics

In selecting sustainability topics, the Group primarily references GRI Standards and stakeholder feedback from previous years. In 2024, we comprehensively reassessed previously evaluated topics in light of evolving industry sustainability trends. This process involved merging topics with inherent interconnectedness and removing those with diminished relevance, ultimately identifying 25 sustainability topics most closely aligned with our Group’s operations. The following table arranges the identified sustainability topics across three domains: governance, environmental, and social aspects. These topics are presented in the stakeholder survey, allowing stakeholders to prioritise the importance of each topic in terms of their financial and impact materiality.

可持續發展議題列表

本集團在可持續發展議題的選擇上主要參考 GRI 準則以及持份者過往提出的意見。二零二四年，我們根據不斷變化的可持續發展行業趨勢，重新審視此前評估過的議題，合併部分有內在相關性的議題，並移除部分適用程度不高的議題，最終確定了 25 個與本集團最為相關的可持續發展議題。以下列表將所確定的可持續發展議題按照管治、環境和社會三個範疇排列，並呈現在持份者調查問卷中，讓持份者從財務重要性及影響重要性兩個角度對各議題的重要性進行優先度的排序。

Governance 管治	Environmental 環境	Social 社會
Cybersecurity and Data Privacy 網絡安全及數據私隱	Circular Economy 循環經濟	Employee Welfare and Training Development 員工福利與培訓發展
Technological Innovation 科技創新	Energy Efficiency 能源效益	Occupational Health and Safety 職業健康與安全
Anti-Corruption/Anti-Bribery 反貪污／反賄賂	Usage of Water Resources 水資源使用	Diversity and Equal Opportunity 多元化及平等機會
Corporate Governance 公司治理	Greenhouse Gas Emission 溫室氣體排放	Internal Communication 內部溝通
Business Ethics 商業道德	Climate Change Mitigation 應對氣候變化	Community Health and Safety 社區健康及安全
	Waste and Waste Water Management 廢物和污水管理	Rural Revitalisation 鄉村振興
	Biodiversity 生物多樣性	Child Labour and Forced Labour 童工與強制勞工
	Air Pollution Management 空氣污染管理	Stable Supply 穩定供應
	Environmental Education 環保教育	Community Engagement 社區參與
		Supply Chain Management 供應鏈管理
		Safety Production 安全生產

GRI 2-29

GRI 3-1

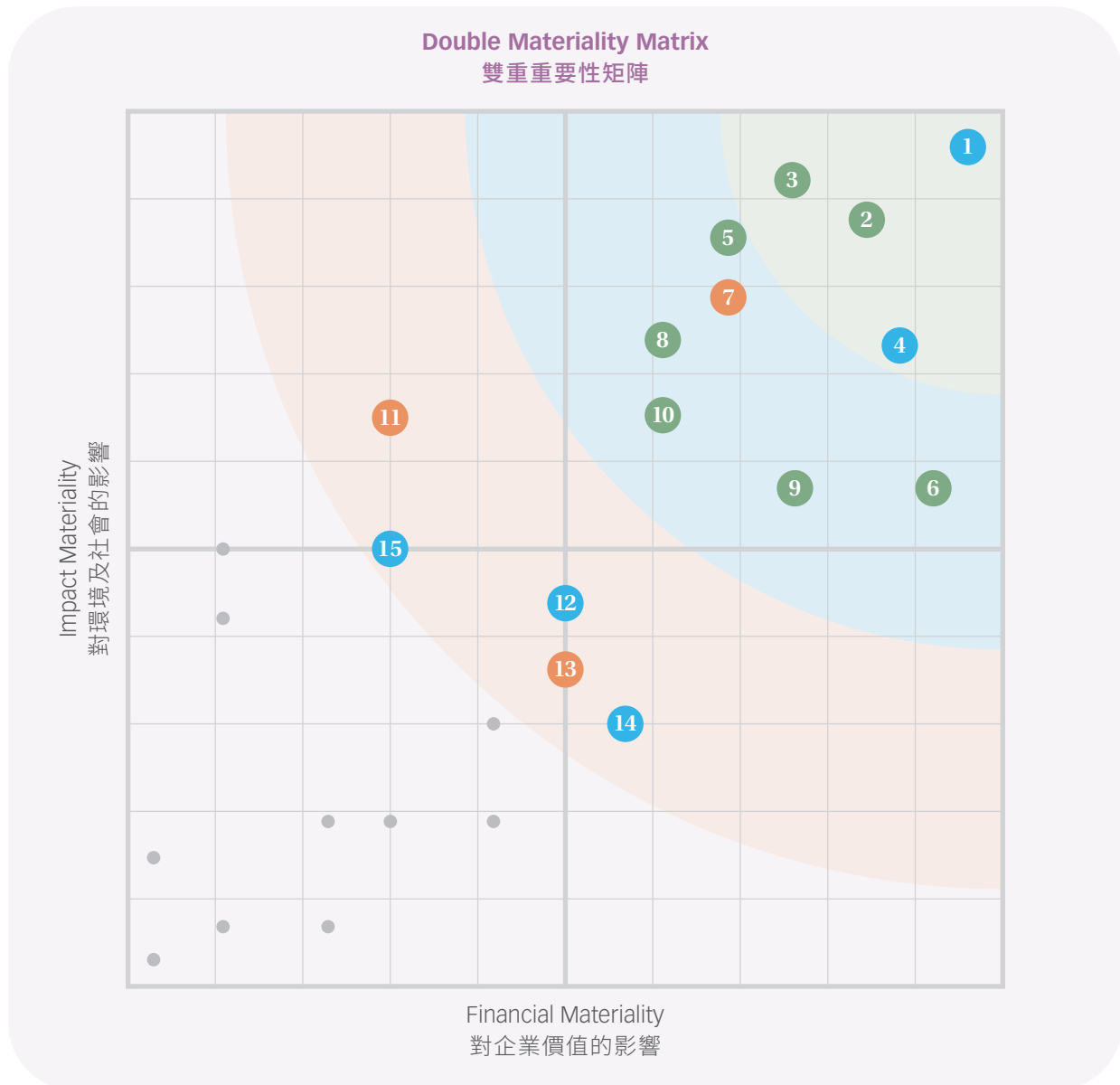
GRI 3-2

Materiality Matrix

Based on the results of our materiality assessment, we have identified the most 15 topics for the Group and ranked them in a priority matrix. This assessment distinguishes the impacts, boundaries, corresponding GRI Standards, and related SDGs for each identified topic.

實質性矩陣

根據實質性分析的結果，我們識別了與本集團相關性最高的15個重要議題，按優先次序按矩陣圖排列如下，並分辨相關議題的影響及範圍、其相應的GRI準則及相關的SDGs。



GRI 2-29

GRI 3-1

GRI 3-2

Key Topics/Stakeholder Concerns 主要議題／持份者的關注	Impact and Boundary 影響及範圍								GRI Standards GRI準則	Key Relevant SDGs 主要相關的 可持續 發展目標
	Investors, Shareholders 投資者、股東	Governments and Regulatory Bodies 政府和監管機構	Villagers, Local Communities 村民、當地社區	Business Partners, Suppliers 業務夥伴、供應商	Customers 客戶	Employees 員工	Media 媒體	NGOs 非政府組織		
1 Technological Innovation 科技創新	•	•	•	•	•	•			Not Applicable 不適用	 
2 Climate Change Mitigation 應對氣候變化	•	•	•	•	•	•	•	•	GRI 305 Emissions 2016 GRI 305 排放 2016	
3 Greenhouse Gas Emission 溫室氣體排放	•	•		•	•	•	•	•	GRI 305 Emissions 2016 GRI 305 排放 2016	
4 Anti-Corruption/Anti-Bribery 反貪污／反賄賂	•	•		•	•	•	•	•	GRI 205 Anti-corruption 2016 GRI 205 反腐敗 2016	
5 Air Pollution Management 空氣污染管理		•	•		•	•	•	•	GRI 305 Emissions 2016 GRI 305 排放 2016	 
6 Circular Economy 循環經濟	•		•	•	•	•			GRI 303 Water and Effluents 2018 GRI 303 水資源與污水 2018 GRI 306 Waste 2020 GRI 306 廢棄物 2020	
7 Occupational Health and Safety 職業健康與安全	•	•		•	•	•	•	•	GRI 403 Occupational Health and Safety 2018 GRI 403 職業健康與安全 2018	 
8 Waste and Waste Water Management 廢物和污水管理	•	•	•		•	•		•	GRI 303 Water and Effluents 2018 GRI 303 水資源與污水 2018 GRI 306 Waste 2020 GRI 306 廢棄物 2020	 
9 Energy Efficiency 能源效益	•		•	•	•	•			GRI 302 Energy 2016 GRI 302 能源 2016	 
10 Usage of Water Resources 水資源使用		•	•		•	•	•	•	GRI 303 Water and Effluents 2018 GRI 303 水資源與污水 2018	 
11 Child Labour and Forced Labour 童工與強制勞工	•	•			•	•	•	•	GRI 408 Child Labor 2016 GRI 408 童工 2016 GRI 409 Forced or Compulsory Labor 2016 GRI 409 強迫或強制勞動 2016	
12 Corporate Governance 公司治理	•	•		•	•	•	•		GRI 201 Economic Performance 2016 GRI 201 經濟績效 2016	
13 Safety Production 安全生產	•	•		•	•	•	•	•	GRI 403 Occupational Health and Safety 2018 GRI 403 職業健康與安全 2018	
14 Business Ethics 商業道德	•	•	•	•	•	•	•	•	GRI 205 Anti-corruption 2016 GRI 205 反腐敗 2016	
15 Cybersecurity and Data Privacy 網絡安全及數據私隱	•	•		•	•	•	•		GRI 418 Customer Privacy 2016 GRI 418 客戶隱私 2016	

Stakeholders' Feedback 持份者反饋

Average stakeholders' rating for the sustainable development performance of Everbright Environment in 2024:

持份者對光大環境二零二四年可持續發展表現的平均評分：

4.72 (out of 5)
(5分為滿分)

Average stakeholders' rating for the Sustainability Report 2023 of Everbright Environment:

持份者對光大環境二零二三年可持續發展報告的平均評分：

4.68 (out of 5)
(5分為滿分)

95%

of stakeholders agreed that Everbright Environment has sufficient engagement with them
的持份者認同光大環境與他們保持充足的聯繫

Voices of Stakeholders

Villagers, Local Communities

"We're very satisfied. There's absolutely no noise or smell emanating from the factory. After the residents' domestic waste has been sorted and collected in a regulated manner, it's transported to the factory for disposal. The entire process is very clean and won't in any way soil the surrounding environment at all."

**A resident from Changshou Village, Changchun Township,
Thai Binh District, Can Tho City, Vietnam**
越南芹苴市泰萊縣長春鄉長壽村居民

"Waste used to be piled up here and there, and it reeked. Thanks to this waste incineration plant, there has been a complete and dramatic transformation."

A resident of Boluo County, Guangdong Province
廣東省博羅縣居民

Employees

"My family members strongly support my working here, because it's close to home, and the benefits are better than those offered by similar companies in Vietnam. This job has enabled me to acquire a great deal of professional knowledge. The company also provides Chinese language training. The cultural exchanges with my Chinese colleagues have made my life colourful and really interesting."

A local employee of the Can Tho Project
芹苴市項目本地員工

持份者的聲音

村民、當地社區

「我們感到非常滿意，完全沒有噪音或氣味從工廠傳出。居民的生活垃圾經過規範的分類和收集後，被送往工廠進行處理，整個過程十分乾淨，完全不會弄髒周邊環境。」

「那個垃圾堆在這裏一堆、那裏一堆，堆到臭烘烘的，有這個焚燒廠，一個天翻地覆的改變了。」

員工

「家人非常支持我在這裏上班，因為離家近，而且福利比越南同類公司好。這份工作讓我學到了很多專業知識，公司還提供中文培訓，與中國同事的文化交流也讓我的生活豐富多彩，非常有趣。」

Governments and Regulatory Bodies

政府和監管機構

Letter of Appreciation from Nantong Ecological Environment Bureau 南通市生態環境局感謝信



Media

媒體

Reporters of China Media Group stationed in Vietnam pointed out in an in-depth report that, in terms improving urban domestic waste treatment, the success of Everbright Environment is of great demonstrative significance. This measure has not only set a demonstration model for encouraging the private sector to participate in this field, but also established standards for the market, assisting the Chinese government in formulating laws and regulations on domestic waste treatment at both the national and municipal levels. It is worth mentioning that the Vietnam Can Tho Project, as the first foreign direct investment project of Everbright Environment in the overseas environmental energy field, is crucial to the enterprise's internationalisation process.

中國中央廣播電視總台駐越南記者在深度報導中指出，在城市生活垃圾處理的改善方面，光大環境的成功極具示範意義。這一舉措不僅為鼓勵私營企業部門參與該領域打造了示範樣板，還為市場設定了標準，助力中國政府制定國家和城市一級的生活垃圾處理法律法規。值得一提的是，越南芹苴項目作為光大環境在海外環境能源領域的首個外商直接投資項目，對企業的國際化進程至關重要。

Responding to Climate Change 應對氣候變化



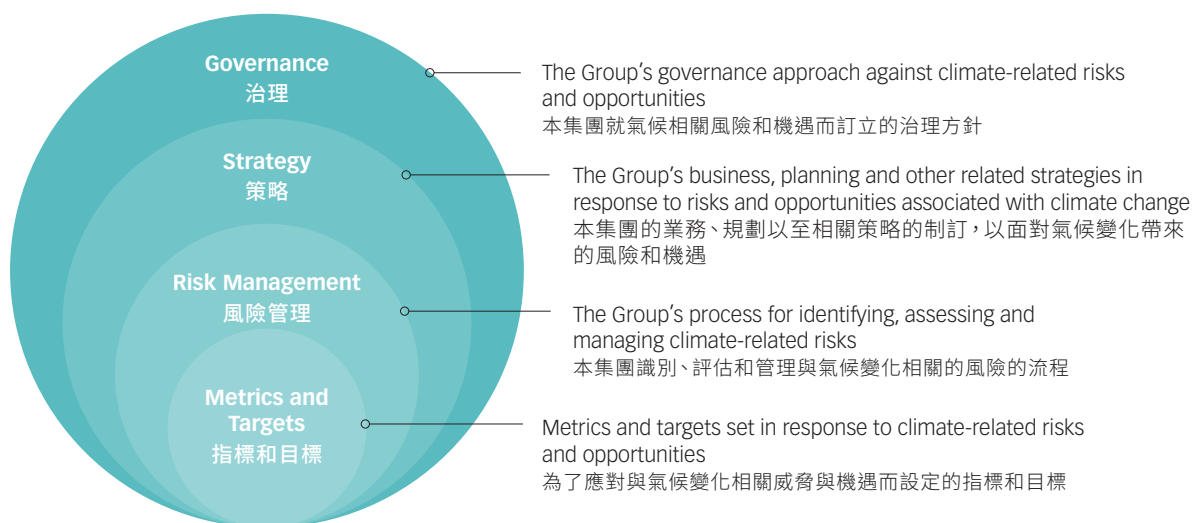
"Dual Carbons" blueprint for
a new green chapter
擘畫雙碳藍圖・續寫綠色篇章

Climate change is the primary risk threatening the world today and is also the most concerned sustainable development issue for the Group and its stakeholders. Given the increasing importance of sustainable finance, there has been a growing emphasis on disclosing climate-related information, especially regarding how companies incorporate climate-related risks and opportunities into their management decisions. At the same time, the Stock Exchange has also published a consultation summary on climate-related information disclosure in April 2024, outlining new requirements based on the TCFD framework.

As a TCFD supporter from 2020 to 2023, Everbright Environment will continue to structure this chapter based on the TCFD recommendations across four dimensions: governance, strategy, risk management, and metrics and targets. We have also referenced the new climate regulations from the Stock Exchange to enhance disclosure details, aiming to provide stakeholders, including investors and funding providers, with information on climate-related risks. This effort seeks to improve the transparency and reliability of information and to jointly address the challenges posed by climate change.

氣候變化是當下威脅全球的首要風險，亦是本集團及持份者最為關注的可持續發展議題。隨著可持續融資之重要性不斷提升，氣候信息的披露要求亦日益提高，尤其是關於企業如何將氣候相關風險與機遇納入管理決策等方面。聯交所亦於二零二四年四月刊發了有關氣候信息披露規定的諮詢總結，於TCFD的框架下，明確了關於氣候變化信息披露的新要求。

本集團於二零二零年至二零二三年曾為TCFD支持機構。我們會繼續以TCFD建議為基礎，從治理、策略、風險管理、指標和目標四個層面編寫本章節，並參考聯交所的新氣候規定完善披露細節，向包括投資者及資金提供者等持份者披露氣候相關風險信息，務求提升信息透明度及可靠性，共同應對氣候變化帶來的挑戰。



Governance

Everbright Environment has incorporated the concept of sustainable development into its corporate governance structure. The Group continuously focuses on the risks and opportunities related to climate change at both the Board and management levels. With a united approach, it formulates climate risk response goals and strategies, continuously improving its agenda. For more details on the Board and management's responsibilities in climate change governance, as well as the risk and opportunity governance processes, please refer to the "Organisational Framework of Sustainable Operations" section in the "Sustainable Operations Management" chapter of this Report.

Strategy

Everbright Environment acknowledges the various risks associated with climate change and has consistently adopted a prudent and proactive approach to develop response strategies. The Group's physical risks primarily include water stress, natural disasters such as floods and droughts, and other extreme weather events like heavy rainfall and heatwaves. Other risks are transition-related, including policy changes, reputational damage, and technological advancements or phase-outs. These risks may place negative pressure on assets and supply chains, potentially causing financial impacts. As a result, the Group is committed to reducing GHG emissions and enhancing the climate resilience of its projects, contributing to the creation of a more livable environment.

治理

光大環境將可持續發展理念融入公司治理結構，從董事會及管理兩個層面持續關注氣候變化的相關風險和機遇，以上下一心的態度制定應對氣候風險的目標與策略，並持續完善其議程。關於本集團董事會及管理層面在氣候變化議題管治上的職責以及風險機遇管治流程，請查閱本報告「可持續的運營管理」章節的「可持續運營組織架構」部分。

策略

光大環境深明氣候變化帶來的多種風險，一直採取審慎積極的態度制定應對策略。本集團業務面臨的實體風險主要包括水資源壓力、洪水乾旱等天然災害，以及暴雨、酷熱等其他極端天氣事件；其他風險則與轉型至低碳經濟相關，包括政策變動、聲譽損害、科技發展／淘汰等。該些風險或對資產及供應鏈造成負面壓力，構成潛在的財務衝擊。因此，本集團致力於避免和減少溫室氣體排放，同時強化旗下項目對氣候變化的應變能力，從而為建設更宜居的環境貢獻力量。

At the same time, Everbright Environment fully understands the opportunities presented by climate change and is committed to driving the overall sustainable development of cities through its initiatives to address climate change. Therefore, the Group has developed and implemented a series of strategies to respond to climate risks, aiming to maintain a clear position in an ever-changing world. The Group has adopted the following three strategies and is dedicated to tackling and mitigating the impacts of climate change with a more proactive approach:

與此同時，光大環境亦充分了解氣候變化所帶來的機遇，銳意通過本集團應對氣候變化的舉措來推動城市整體的可持續發展。因此，本集團制定和落實了一系列應對氣候風險的策略，旨在於持續變化的世界中維持清晰的定位。本集團採取了以下三大策略，並致力以更進取的姿態應對／減緩氣候變化帶來的影響：



Understanding Climate Risks Through “Climate Scenario Analysis”

Climate scenarios depict future climate conditions under varying levels of GHG emissions. To align with global climate governance and gain a deeper understanding of the significant climate risks the Group faces, the Group has conducted climate scenario analysis based on internationally recognised guidelines. Following the TCFD Recommendations, climate risks are categorised into two major types: physical risks and transition risks. This analysis enables the Group to evaluate the potential impacts of future climate change trends by quantifying and estimating risks to its various assets, including projects at different stages (such as under preparation, construction, commissioning, and operation). By conducting these risk assessments, the Group can proactively mitigate the potential impacts of climate change on its business while capitalising on emerging opportunities.

Physical Scenarios

In line with the *Sixth Assessment Report* (“AR6”) on climate change published by the IPCC and the TCFD Recommendations, the Group has evaluated chronic and acute physical risks using the “Shared Socioeconomic Pathways” (“SSP”) and “Representative Concentration Pathways” (“RCP”). This methodology facilitates the comparison of physical risk levels under baseline conditions and the most relevant climate change scenarios for the selected timeframes (i.e. 2030 and 2050). Considering that most projects have a concession period of approximately 20 to 30 years, the choice of 2030 and 2050 as the short-term and mid-term assessment years is deemed appropriate. Furthermore, the Group has not conducted long-term assessments up to 2100 due to the high level of uncertainty associated with such extended forecasting, as well as the fact that most projects will have reached the end of their concession periods and been transferred by that time.

通過「氣候情境分析」了解氣候相關風險機遇

氣候情境是指在不同程度的溫室氣體排放情境下對未來氣候條件的描繪。為深入了解本集團所面臨的重大氣候風險，並與全球氣候變化治理步調保持一致，本集團參照國際認可的指引對氣候情境進行模擬分析，遵從TCFD建議把氣候風險劃分為實體風險和轉型風險兩大類。氣候情境分析將有助本集團預估未來氣候變化趨勢的潛在影響，具體量化並估算其對各類資產（如在籌備中、建設中、投產及運營中的項目）的潛在風險。通過風險估算，本集團得以未雨綢繆，降低氣候變化對業務的影響，同時抓住各種新興機遇。

實體情境

本集團根據IPCC公佈的氣候變遷《第六次評估報告》（「AR6」）及TCFD建議，同時考慮「共享社會經濟路徑」（Shared Socioeconomic Pathways，簡稱「SSP」）與「代表濃度途徑」（Representative Concentration Pathways，簡稱「RCP」），評估慢性和急性實體氣候風險。此方法可以比較基準線條件下與所選時間範圍（即二零三零年和二零五零年）內最相關的氣候情境下的實體風險水平。考慮到大多數項目的特許經營年期約介乎於20至30年之間，本集團選用二零三零年和二零五零年作為未來短期及中期評估之年份。此外，鑒於長期氣候預測的高度不確定性，且大多數項目將在二一零零年前達到特許經營期限，故本集團沒有對直至二一零零年的長期實體氣候風險進行評估。

Scenario 情境	Scenario Simulation 模擬情境
Current trend scenario 當前趨勢情境	Current trend scenario pathway represents a world similar to current socioeconomic development trends (SSP2) and intermediate GHG emission levels (RCP4.5), leading to an increase of global mean surface temperature of approximately 2°C by the end of the 21st century. 當前趨勢情境中的路徑代表一個與當前社會經濟發展趨勢(SSP2)和中等溫室氣體排放水平(RCP4.5)相近的世界，導致二十一世紀末全球平均表面溫度升高約2度。
Pessimistic scenario 悲觀情境	Pessimistic scenario pathway represents a world with unequal and unstable socioeconomic development (SSP3) and high GHG emission levels (RCP6.0/RCP7.0), leading to an increase of global mean surface temperature of approximately 3.5-4°C by the end of the 21st century. 悲觀情境路徑代表一個社會經濟發展不均衡和不穩定(SSP3)以及高溫室氣體排放水平(RCP6.0/RCP7.0)的世界，導致二十一世紀末全球平均表面溫度升高約3.5到4度。

Physical Climate Scenario Analysis

Climate change has already resulted in various global impacts, including the destabilisation of climate systems and an increase in extreme weather events. These impacts directly threaten corporate assets and supply chains, leading to financial losses and damage to physical assets or asset portfolios.

In 2024, the Group conducted a review and updated the results of project-level modelling analysis based on the latest list of projects. Using the IPCC AR6 framework and climate scenarios that integrate SSPs and RCPs, the analysis evaluates the acute and chronic physical climate risks faced by the Group, aiming at assessing the current critical climate risks and anticipate potential future climate conditions. The assessment covered water stress and coastal flood risks across all assets under preparation, construction, and operation during the Reporting Period. Water stress was identified as a major climate risk for the Group's future projects, as most of the Group's operations, including waste-to-energy projects, biomass integrated utilisation projects, and hazardous and solid waste treatment projects, rely heavily on water for cooling processes. Long-term droughts or insufficient water supply could jeopardise the reliability of waste treatment systems. Coastal flood risks were also identified as a significant climate risk, posing direct threats to the safety of the Group's assets and personnel. To effectively evaluate and mitigate the impacts of these physical risks, the Group conducted scientific scenario analyses using the WWF Risk Filter Suite and the Coastal Risk Screening Tool developed by Climate Central.

實體氣候情境分析

氣候變化已經導致各種全球性影響，包括氣候系統的不穩定和極端天氣事件的增加。這些影響可直接危害企業資產和供應鏈，導致財務損失和實體資產／資產組合的損壞。

本集團於二零二四年根據我們最新的項目清單進行了項目層面模擬分析的回顧並更新了分析結果。我們根據IPCC AR6，以綜合考慮SSPs及RCPs的氣候情境的方式評估本集團所面對的急性和慢性實體氣候風險，旨在評估當前的關鍵氣候風險狀況，以及未來可能的氣候狀態。該評估涵蓋了光大環境於報告期內所有在籌備、建設及運營中的資產所面對的水資源壓力和沿海洪水風險。水資源壓力是未來本集團項目面臨的主要氣候風險。由於本集團的大部分項目，包括垃圾發電項目、生物質綜合利用項目、危廢及固廢處置項目等，在冷卻過程中均需大量消耗水資源，因此長期乾旱或供水不足將威脅廢物處理系統的可靠性。沿海洪水風險也是本集團面臨的主要氣候風險，因其將對本集團資產及員工的安全構成直接威脅。為有效評估和應對這些實體風險對本集團帶來的衝擊，本集團基於世界自然基金會的風險篩選工具庫(WWF Risk Filter Suite)及氣候中心(Climate Central)發布的海岸風險篩選工具，進行了科學的情境分析。

Water Stress Assessment 水資源壓力風險評估

Methodology 方法

The Group utilises the Water Risk Filter by WWF to evaluate water stress, incorporating metrics and modelling approaches that address seven dimensions of water scarcity: aridity index, water depletion, baseline water stress, blue water scarcity, available water remaining, drought frequency probability, and projected changes in drought occurrence. 本集團採用世界自然基金會的水風險篩檢工具 (Water Risk Filter)來評估水資源壓力。該工具整合了涵蓋水資源壓力七個方面的數據集及建模方法，包括：乾旱指數、水資源枯竭、基準線水壓力、藍水匱乏、剩餘可用水量、乾旱可能性以及乾旱頻率變化預測。

The assessment encompasses all projects under preparation, construction, or operation. It evaluates water stress risk levels under baseline conditions, the current trend scenario (2°C scenario), and the pessimistic scenario (3.5-4.0°C scenario) for 2030 and 2050. Results are presented as percentages of capital investment and the number of projects. 評估涵蓋了所有正在籌備、建設和運營中的項目，並針對基準線情境、二零三零年和二零五零年的當前趨勢情境(2°C情境)及悲觀情境(3.5-4.0°C情境)，對水資源壓力風險水平進行分析，並按資本投資和項目數目百分比呈現。

Water Stress Assessment 水資源壓力風險評估

Findings 分析結果



1. By Percentage of Capital Investment in Projects

1. 按項目資本投資的百分比

According to the Group's analysis, water resource stress is the main climate risk faced by the Group's projects. Under the baseline scenario, around 29% of the Group's capital investment for projects at planning, construction, commissioning or operational phases are exposed to high water stress levels or above.

根據本集團的分析，水資源壓力是本集團項目面臨的主要氣候相關風險。在基準線情境下，本集團正在籌劃、建設和運營中的項目投資，約有29%的資本投資屬於高水資源壓力或以上級別。

Under the current trend scenario (2°C scenario), the figure is expected to rise to 46% by 2030 and 59% by 2050. Under the pessimistic scenario (3.5-4°C scenario), the figure will be further increased to 55% by 2030 and 59% by 2050.

在當前趨勢情境（2°C情境）下，預計到二零三零年，該比例將升至46%，而到二零五零年將升至59%。在悲觀情境（3.5-4°C情境）下，該比例將在二零三零年進一步上升至55%，並在二零五零年上升至59%。



2. By Percentage of Number of Projects

2. 按項目數目的百分比

According to the Group's analysis, water resource stress is the main climate risk faced by the Group's projects. Under the baseline scenario, around 33% of the Group's projects at planning, construction, or operational phases are exposed to high water stress levels or above.

根據本集團的分析，水資源壓力是本集團項目面臨的主要氣候相關風險。在基準線情境下，本集團正在籌劃、建設和運營中的項目投資，約有33%屬於高水資源壓力或以上級別。

Under current trend scenario (2°C scenario), the figure is expected to rise to 49% by 2030 and 59% by 2050. Under the pessimistic scenario (3.5-4°C scenario), the figure will be further increased to 56% by 2030 and 60% by 2050.

在當前趨勢情境（2°C情境）下，預計到二零三零年該比例將升至49%，而到二零五零年將升至59%。在悲觀情境（3.5-4°C情境）下，該比例將在二零三零年進一步上升至56%，並在二零五零年上升至60%。

Everbright Environment's water stress assessment under various climate scenarios is as follows:

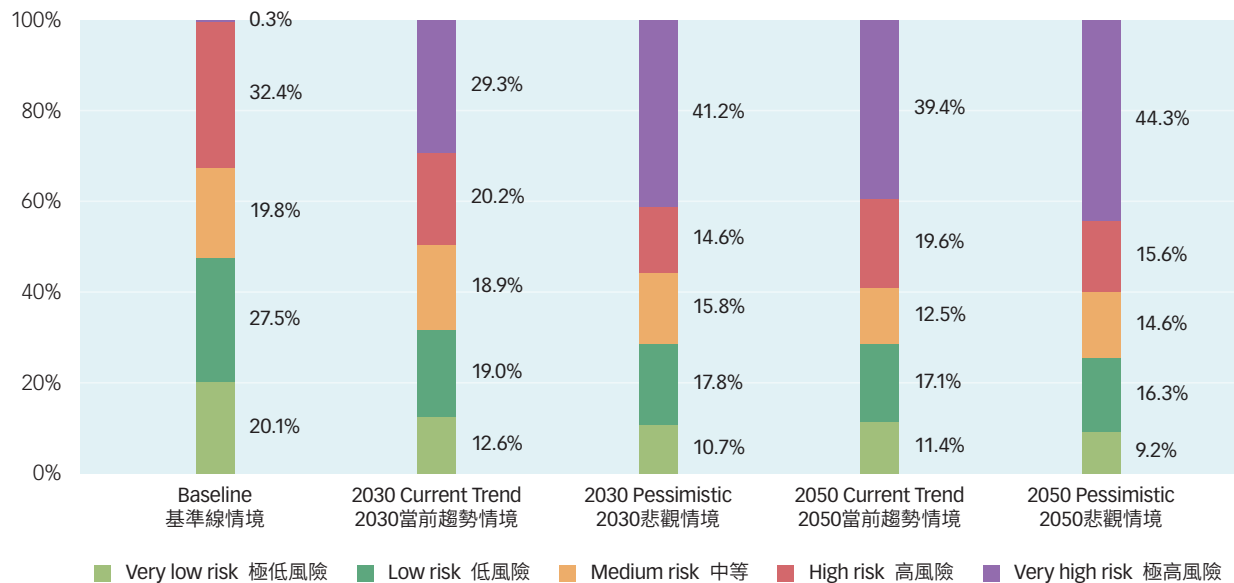
光大環境在各種氣候情境下的水資源壓力程度評估如下：

By Percentage of Capital Investment in Projects

按項目資本投資的百分比

As of 31 December 2024, the total amount of investment was RMB162.425 billion.

截至二零二四年十二月三十一日，投資總額為人民幣1,624.25億元。

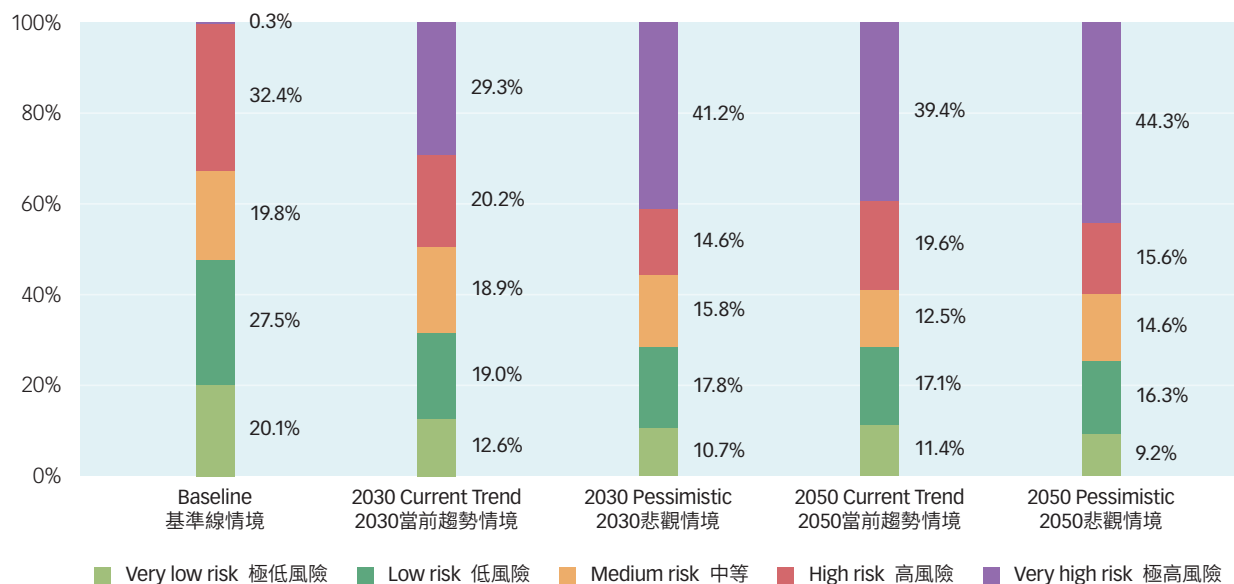


By Percentage of Number of Projects

按項目數目的百分比

As of 31 December 2024, the total number of projects was 604.

截至二零二四年十二月三十一日，本集團項目數量為604。



Mitigation Measures for Water Stress Risk

Water Stress Management

To effectively mitigate water stress, the Group has enhanced its standards for water reuse technology. For example, the third-generation leachate treatment technology has been implemented in the Group's Hangzhou Jiufeng Waste-to-energy Project ("Hangzhou Project"). This technology employs multiple processes, including ultrafiltration, nanofiltration, and reverse osmosis, to ensure that the treated water meets the required standards for use as cooling water. With a water recovery rate of 80%, this advanced waste water treatment process supports the Group's vision of achieving "Reuse All Water, Zero Discharge".

Reclaimed Water

Reclaimed water refers to waste water that has been effectively treated to ensure it is clear and safe for general industrial applications or non-potable uses, such as street cleaning, vehicle washing, landscaping, toilet flushing, and firefighting.

Reusable Water

Reusable water refers to water purified by environmental water reclamation projects. These projects further treat effluent from waste water treatment plants to meet the standards of the *Reuse of Urban Recycling Water – Water Quality Standard for Industrial Uses* (GB/T 19923-2005) or equivalent standards. Reusable water produced by these projects can be used in power plants and for general industrial purposes, effectively reducing the demand for freshwater in cities.

針對水資源壓力風險的緩解措施

水資源壓力管理

為有效減緩用水壓力，本集團提高了回用水的技術標準。例如，本集團的杭州九峰垃圾發電項目（「杭州項目」）採用第三代滲濾液處理技術，通過超濾、納濾和反滲透等多項技術，確保出水達到冷卻水所需標準。該技術可實現80%的水回收率，有助於達成「全回用、零排放」的目標。

再用水

再用水是指經過有效處理後可安全用於一般工業用途或非飲用水用途（如街道清潔、車輛清洗、環境綠化、沖廁、消防等）的廢水。

中水回用

中水回用指經由環保水務的中水回用項目淨化後的水。中水回用工程對污水處理廠出水進行進一步處理，並符合《城市污水再生利用工業用水水質》(GB/T 19923-2005)或等同標準。通過將中水回用產生的回用水用於發電廠和其他工業用途，可以有效減少城市所需的淡水量。

Coastal Flood Risk Assessment 沿海洪水風險評估

Methodology 方法

The Group evaluates coastal flood risk using Climate Central's Coastal Risk Screening Tool. For projects located in coastal areas, flood risk is assessed by determining whether the project will be below the combined level of projected sea level rise and local annual flood height in 2030 and 2050.

本集團使用氣候中心(Climate Central)發布的沿海洪水風險篩檢工具進行風險評估。針對沿海地區的項目，洪水風險是通過計算二零三零年和二零五零年預測的海平面上升及當地年度洪水疊加水位總和，來判斷項目是否處於風險範圍內。

The Group's assessment covers the coastal flood risk levels of all projects currently under preparation, construction, or operation in 2030 and 2050 under the current trend scenario (2°C scenario) and pessimistic scenario (3.5-4.0°C scenario), expressed as a percentage of capital investment and the percentage of number of projects.

本集團的評估涵蓋了所有正在籌備、建設和運營中的項目，並基於當前趨勢情境（2°C 情境）和悲觀情境（3.5-4.0°C 情境），分別在二零三零年及二零五零年對沿海洪水風險水平進行評估，結果以資本投資和項目數目百分比呈現。

Findings 分析結果



1. By Percentage of Capital Investment in Projects

1. 按項目資本投資的百分比

According to the analysis of the Group, 18% of the investments of the Group's projects under preparation, construction, and operation are located in coastal areas.

根據本集團的分析，在所有正在籌備、建設和運營的項目之中，約有18%的投資位於沿海地區。

The risk calculations for the current trend scenario (2°C scenario) and pessimistic scenario (3.5-4.0°C scenario) in 2030 and 2050 are similar: 13% of the investment will be below the combined level of projected sea level rise and local annual flood height. 在當前趨勢情境(2°C情境)和悲觀情境(3.5-4.0°C情境)下，二零三零年和二零五零年的風險計算結果相似：約有13%的投資將處於預測的海平面上升及當地年度洪水疊加水位以下。



2. By Percentage of Number of Projects

2. 按項目數目的百分比

According to the analysis of the Group, 22% of the number of the Group's projects under preparation, construction, and operation are located in coastal areas.

根據本集團的分析，在所有正在籌備、建設和運營的項目之中，約有22%的項目位於沿海地區。

The risk calculations for the current trend scenario (2°C scenario) and pessimistic scenario (3.5-4.0°C scenario) in 2030 and 2050 are similar: 12% of the projects will be below the combined level of projected sea level rise and local annual flood height. 在當前趨勢情境(2°C情境)和悲觀情境(3.5-4.0°C情境)下，二零三零年和二零五零年的風險計算結果相似：約有12%的項目將處於預測的海平面上升及當地年度洪水疊加水位以下。

Mitigation Measures for Coastal Flood Risk

Flood Risk Management

Raising the Height of Key Equipment/Machinery

Where feasible, the installation height of key equipment and machinery will be raised to avoid potential damage from flooding.

Flood Protection Measures Built into Projects

The Group's projects collectively feature over three million square meters of landscaped areas, which not only provide beautiful scenery but also incorporate flood protection design. The vegetation in these green spaces can absorb a significant amount of rainwater, reducing the direct flow of rainwater to the ground. The soil in areas with vegetation also has better water retention ability, allowing it to absorb and store moisture during heavy rainfall. Additionally, the vegetation helps lower the surrounding temperature and mitigate the urban heat island effect, causing water vapor to condense on the plants during rainfall, which further contributes to water retention.

針對沿海洪水風險的減緩措施

洪水風險管理

提升主要設備／機械的高度

在切實可行的範圍內，提高主要設備和機械的安裝位置高度，以避免洪水可能造成的損壞。

內置防洪措施的項目

本集團的項目總計擁有逾三百萬平方米的廠區綠化面積，提供了美麗的景觀之餘亦融入了防洪設計。綠化地區的植被可以吸收大量的雨水，減緩雨水直接流入地面。植被覆蓋的地區土壤保水性亦更好，當降雨較大時，土壤可以吸收並存儲水分。植被還可以降低周圍環境的溫度，減緩城市熱島效應，使得降雨時水汽凝結在植被上，同樣起到蓄水的效果。

Some Project Highlights:



Suzhou Waste-to-energy Project
蘇州垃圾發電項目

(Overall site greenery area: 23,000 m²)
(整體廠區綠化面積：23,000平方米)

部分亮點項目：



Dangshan Integrated Biomass and Waste-to-energy Project
碭山生物質及垃圾發電一體化項目

(Overall site greenery area: 38,000 m²)
(整體廠區綠化面積：38,000平方米)



Jiangyin Waste Water Treatment Project
江陰污水處理項目

(Overall site greenery area: 98,000 m²)
(整體廠區綠化面積：98,000平方米)



Ji'nan Waste Water Treatment Project
濟南污水處理項目

(Overall site greenery area: 94,000 m²)
(整體廠區綠化面積：94,000平方米)

River-Basin Restoration

The Group has initiated larger-scale river-basin restoration projects to protect water sources within catchment areas. River-basin restoration (or river-basin ecological restoration) involves the restoration of river ecosystems through artificial rehabilitation measures, aimed at creating a healthy, complete, and stable aquatic ecosystem. This is done while ensuring the basic river functions, such as flood prevention, stormwater drainage, and water diversion, are maintained within the boundaries of the river and its land.

流域治理

本集團已啟動更大規模的流域管理計劃，以保護集水區的水源。流域管理（又稱流域生態修復治理）是指在河道陸域控制線內，在確保防洪、排澇和引水等基本河道功能的基礎上，以人工修復措施促進河道水生生態系統恢復，營造健康、完整和穩定的河道水生生態系統。

Sponge City

The Group implements the “Blue-green Infrastructure” concept in its sponge city projects, which aims to enhance the city’s ability to absorb, retain, release, and purify rainwater while strengthening the urban ecosystem. This is achieved by constructing systems that effectively manage surface runoff and alleviate pressure on urban drainage channels. The projects incorporate key elements of the sponge city concept, including rainwater collection systems, pumping stations, drainage networks, waste water treatment plants, and ecological restoration measures.

海綿城市

本集團的海綿城市項目通過打造城市地表徑流管理系統和防洪排澇通道，提高城市對雨水的吸收、蓄水、緩釋、淨化能力，同時增強城市生態系統功能，推動實現「藍綠建造」的概念。該項目涵蓋了雨水收集系統、泵站、排水系統、污水處理廠和生態恢復措施，這些都是海綿城市概念的重要組成部分。



Zhenjiang Sponge City Construction Public-Private-Partnership (“PPP”) Project
鎮江海綿城市政府和社會資本合作（「PPP」）項目

Climate-Related Physical Risk Matrix

Based on the baseline condition and different climate scenarios in 2030 and 2050, the Group analysed the risks of relevant entities and created a physical risk matrix.

Key Findings:

- Medium impact was imposed on the Group’s water stress under the baseline condition and different climate scenarios in 2030 and 2050.
- Low impact was imposed on the Group’s projection on the coastal flood issue in the under current trend scenario and pessimistic scenario in 2030 and 2050.

與氣候相關的實體風險矩陣

基於基準線以及二零三零和二零五零年不同氣候情境，本集團分析了相關的實體風險，並建立了實體風險矩陣。

主要分析結果：

- 在基準線以及二零三零和二零五零年不同氣候情境下，水資源壓力對本集團的項目產生了中等程度的影響。
- 在二零三零年和二零五零年的當前趨勢情境和悲觀情境下，沿海洪水對本集團項目均產生了較低影響。

Impacts of Climate Change on Everbright Environment's Projects under Different Scenarios⁽¹⁾

光大環境項目在不同情境氣候變化下的受影響程度⁽¹⁾

	Baseline 基準線情境	Current trend (2030) 當前趨勢情境 (二零三零年)	Pessimistic (2030) 悲觀情境 (二零三零年)	Current trend (2050) 當前趨勢情境 (二零五零年)	Pessimistic (2050) 悲觀情境 (二零五零年)
Water Stress Risk 水資源壓力風險	M	M	M	M	M
Coastal Flood Risk 沿海洪水風險	/	L	L	L	L

L Low impact
輕度影響
<25%
of project investments impacted with
high risk or above⁽²⁾
的項目投資受高風險或以上影響⁽²⁾

M Medium impact
中度影響
≥25% and <75%
of project investments impacted with
high risk or above⁽²⁾
的項目投資受高風險或以上影響⁽²⁾

H High impact
高度影響
≥75%
of project investments impacted with
high risk or above⁽²⁾
的項目投資受高風險或以上影響⁽²⁾

Notes:

- ⁽¹⁾ Financial quantification of physical risk is being studied, as the anticipated value at risk (VaR) is subject to the particular built environment of assets and is case by case. Broad brush screening results cannot derive meaningful VaR for disclosure.
- ⁽²⁾ For coastal flood risk, the Group's projects that would be below the combined level of the projected sea level rise and local annual flood height by 2030 and 2050 were categorised as high risk.

附註：

- ⁽¹⁾ 對實體風險的財務量化尚在研究當中，由於預期的風險價值(VaR)取決於具體的資產建設環境，因此需要根據具體情況進行評估。簡要篩查結果無法提供有意義的VaR披露。
- ⁽²⁾ 在沿海洪水風險方面，本集團所有將在二零三零年和二零五零年位於低於預測的海平面上升及當地年度洪水疊加水位總和的項目均被評價為高風險。

Other Physical Risks

In addition to climate scenario analysis, the Group has also used the WWF Risk Filter Suite to assess the baseline risk levels associated with extreme heat and strong winds. According to the Group's analysis on the risks of extreme heat, around 54% of the Group's projects are located in areas with a very high extreme heat risk, where the daily maximum Wet Bulb Globe Temperature (WBGT) can reach 32°C within a five-year return period. Approximately 40% of the projects are located in areas with high risk, where the daily maximum WBGT can reach 30-32°C. Meanwhile, the analysis on the risks of strong winds shows that more than 8% of the projects are situated in regions with very high strong wind risk, where maximum wind speeds exceeding 120 mph are expected within a 50-year return period. Around 76% of the projects are located in areas at high risk of strong winds. During the 50-year return period, strong winds with a maximum wind speed of 80-120 mph may be encountered in these areas.

其他實體風險

除氣候情境分析外，本集團亦使用世界自然基金會的風險篩檢工具來評估與極端高溫 and 強風相關的基準線風險水平。根據本集團針對極端高溫風險的分析，約有54%的項目位於極端高溫風險非常高的地區。此類地區在5年回歸期內的日最高濕球黑球溫度(WBGT)可達32°C。約有40%的項目位於較高風險的地區，其日最高濕球黑球溫度可達30-32°C。而針對強風的分析顯示，超過8%的項目位於強風風險非常高的地區，預計在50年回歸期內將遇到超過120英里／小時的最大風速。大約76%的項目位於高強風風險地區，其於50年回歸期內可能會遇到最大風速達80-120英里／小時的強風。

Physical Risks 實體風險	Potential Impacts 潛在影響
Extreme Heat 極端高溫	- Health risks to employees due to hotter workplaces 工作場所溫度升高所引致的員工健康風險 - Increase in perceived odour impacts due to hotter ambient 因環境溫度升高而加劇的氣味影響
Precipitation Stress (resulting from changes in seasonal precipitation patterns leading to more humid, less snowy winters and drier, drought-prone summers) 降雨壓力 (由於季節降雨模式的改變，導致冬季更加潮濕，降雪減少，夏季更加乾燥，更易遭受乾旱)	- Changes to site hydrology 現場水文模式的改變 - Impose stressful environment to on-site vegetation 施加於現場植被的環境壓力 - Reduce water availability during dry seasons 乾旱季節供水減少
Strong Wind 強風	- Buildings and facilities (including photovoltaic panels) damaged by strong winds 建築物和設施 (包括太陽能光電板) 受強風損壞 - Increased strong wind-related disruption to critical transport routes for waste delivery 關鍵廢物運輸路徑受強風相關的干擾增加 - Increased risk of openly stored materials getting blown away 在戶外儲存位置缺乏掩蓋的材料被強風吹走的風險增加 - Increased health and safety risks to employees, particularly during working at height 特別是在高空作業時，員工的健康和安全風險增加 - Impacts on revenue due to interrupted operations (e.g. blockage in delivery of waste, unscheduled shutdown of facilities) 運營中斷而對收入造成的影響 (例如廢物運送受到阻塞或設施的非計劃停工)

Strategy to Mitigate Climate-Related Risks

Everbright Environment has implemented a series of adaptation measures to mitigate the potential adverse impacts of climate change on the Group’s human resources and projects. These measures will continue to be advanced over the next five years.

氣候變化相關風險的緩解措施

為減輕氣候變化可能對本集團的人力資源和項目造成的不利影響，光大環境已實施一系列的適應措施，並會在未來五年內繼續推進。

1. Emergency Response

The Group has strengthened its emergency preparedness for rapid response and recovery from extreme weather events such as heavy rainstorms, floods, typhoons, thunderstorms, and sandstorms. In anticipation of flood seasons and extreme weather occurrences, the Group has taken proactive measures by formulating the *Overall Emergency Plan for Sudden Incidents*, the *Holiday Duty Management Measures*, and issuing several work safety-related notices, including the *Notice on Further Strengthening Current Safety and Stability Work*, *Notice on Enhancing Work Safety During Recent Periods and Winter*, *Notice on Further Improving Flood, Disaster, and Heatstroke Prevention* and *Notice on Further Strengthening Disaster Prevention and Mitigation Efforts*. Since 2022, the Group has launched a safety and environmental risk information platform that integrates online monitoring and offline supervision. This system strengthens safety and environmental risk analysis and early warnings through technological means, leveraging innovation to enhance risk management and control.

At the project level, all project companies are required to regularly review protective measures related to adverse weather conditions. These measures include communication and logistics support, as well as ensuring the availability of emergency supplies, to guarantee the continued safe operation of the projects. Prior to the anticipated arrival of extreme weather events, all relevant project companies proactively implement contingency plans, which include stocking emergency supplies, strengthening backup power systems, and improving communication and coordination between frontline emergency response units.

The Group has also conducted dedicated investigations and rectification work to ensure that precautionary measures are effectively in place to address potential risks. Additionally, in order to improve employees' ability to handle and prevent accidents, emergency preparedness drills have been organised. These drills focus on key locations and positions, involving both on-site emergency planning and targeted drills. Specifically, practical, hands-on emergency response exercises are conducted for frontline workshop team employees, aimed at enhancing their ability to respond effectively during emergencies.

1. 應急響應

本集團提高了對暴雨、洪水、颱風、雷雨、沙塵暴等突發事件的快速反應和恢復能力。在應對汛期及極端天氣事件方面，本集團已提前做好準備，制定《突發事件總體應急預案》、《節假日值班管理辦法》，並發佈了多項安全生產相關通知，如《關於進一步做好當前安全穩定工作的通知》、《關於加強近期及冬季安全生產工作的通知》、《關於進一步做好防汛防災防暑工作的通知》、《關於進一步做好防災減災工作的通知》等。自二零二二年起，本集團啟動了安環風險信息化平台建設，通過線上監控與線下監管相結合，利用技術手段強化安環風險分析和預警，依靠科技創新提高風險管控水平。

在項目層面，所有項目公司必須定期檢討與惡劣天氣相關的防護措施，並實施通信、物流支援和應急物資援助，以確保項目始終安全運行。在預計極端天氣事件發生前，各相關項目公司均提前部署，做好應急準備工作，包括儲備應急物資、加強備用電源以及改善前線應急成員單位之間的溝通和工作聯繫等。

本集團還對可能存在的風險進行了專門的調查和應對工作，以確保未雨綢繆。另外，為提高員工處理和預防事故的能力，我們組織了針對重點場所和崗位的應急準備演習，特別是對車間班組一線員工進行實操式、實戰化的應急處置和現場處置演練，提升員工的應急反應能力。

2. Robust Preventive Maintenance Programme

To ensure the sustained normal operation of infrastructure under the impacts of climate change, the Group has implemented a robust preventive maintenance programme that features regular, frequent maintenance activities to be performed on key systems to reduce the change of failure and extend uptime. The programme allows project companies to address any problems before they arise.

3. Sustainable Financing

In March, May, and September 2024, the Group issued the first, second, and third tranches of its 2024 Medium Term Notes ("MTNs") in the PRC, amounting to a combined issue size of RMB5.5 billion. The proceeds will be used for the repayment of the interest-bearing debts of the Group, the repayment of the MTNs previously issued by the Company in the PRC, as well as the replenishment of the Group's working capital and repayment of bank loans.

In January and April 2024, Everbright Water issued the first tranche of its 2024 MTNs and asset-backed securities ("ABS") in the PRC, totaling RMB3.5 billion. The proceeds will be used to repay loans and interest-bearing debts borrowed by Everbright Water and its subsidiaries, as well as to replenish their working capital, as well as to replenish their working capital.

In May, July, and September 2024, Everbright Greentech issued the first, second, and third tranches of its 2024 green MTNs in the PRC, with a total issuance size of RMB3 billion. The proceeds were used to repay interest-bearing debts of Everbright Greentech and its subsidiaries, supplement working capital, and/or invest in and construct environmental protection projects, as well as pursue other business development purposes.

2. 健全的預防性維修計劃

本集團實施了全面的預防性維護計劃，對關鍵系統進行日常和頻繁的維修活動，以減少故障發生並延長設備運行時間，確保在氣候變化的影響下仍可以保持基礎設施的正常運行。該計劃使項目公司可以在問題發生之前進行處理，有效維護運行穩定性。

3. 可持續融資

於二零二四年三月、五月、九月，本集團於全國銀行間債券市場先後發行二零二四年度第一期、第二期及第三期中期票據，總發行規模人民幣55億元，用於償還本集團的有息債務及本公司在中國已發行的中期票據及補充本集團的營運資金及償還銀行貸款。

於二零二四年一月及四月，光大水務於全國銀行間債券市場先後發行二零二四年度第一期中期票據及二零二四年資產支持證券，用於償還光大水務及其附屬公司借款、計息債務及補充營運資金，總發行規模人民幣35億元。

於二零二四年五月、七月及九月，光大綠色環保於全國銀行間債券市場先後發行二零二四年度第一期、第二期及第三期綠色中期票據，用於償還光大綠色環保及其附屬公司的有息債務、補充營運資金及／或投資和建設環保項目及其他業務發展用途，總發行規模人民幣30億元。

4. Climate-Related Risk Insurance

The Group has obtained insurance coverage against climate-related natural hazards, including lightning, rainstorms, floods, storms, tornadoes, hail, typhoons, hurricanes, sandstorms, blizzards, landslides, collapses, mudslides, and other natural disasters. This insurance provides compensation for project damages, operational interruptions, and workers' health, among other aspects.

To better understand the impact of climate change on operations, the Group has established the following climate-related indicators. These indicators will be continuously disclosed and monitored to track the effectiveness of adaptation measures implemented by each project company, while further enhancing the Group's risk management processes.

4. 氣候相關風險的保險

本集團已為與氣候相關的自然災害風險投保，包括閃電、暴雨、洪水、風暴、龍捲風、冰雹、颱風、颶風、沙塵暴、暴風雪、滑坡、塌陷、泥石流和其他自然災害。該保險包括對項目損害、運營中斷及工人健康等方面的賠償。

為更好地了解氣候變化對運營所帶來的影響，以下為我們設立的氣候變化有關的指標。本集團會持續披露和監測指標，以便追蹤各項目公司適應措施的成效，並進一步完善本集團的風險管理流程。

Climate Risk Indicators 氣候風險指標	Unit 單位	2024
Number of forced outage days due to extreme weather 由極端天氣所導致而被迫停運天數	Day 天	25
Number of employee sick days due to extreme weather 由極端天氣所導致的員工病假天數	Day 天	0
Number of employee injury days due to extreme weather 由極端天氣所導致的員工工傷天數	Day 天	0
Hours of drills for tackling climate change 應對氣候變化演練的時數	Hour 小時	1,075
Area that incorporates flood retention & sponge city design 採用排水防洪及海綿城市設計的綠化面積	m ² 平方米	1,020,787

Exploring Future Adaptation and Mitigation Measures Against Climate Change Risks

Everbright Environment recognises the long-term challenges posed by climate change and continues to actively explore measures to adapt to and mitigate physical and transition risks. These efforts span the entire project lifecycle, from early-stage planning and design to construction and ongoing operation and management. The adaptation and mitigation measures for physical risks will be gradually implemented across all applicable projects of the Group over the next decade.

探索應對未來氣候變化風險的適應及減緩措施

因應氣候變化帶來的長期挑戰，光大環境持續積極探索適應及減緩實體風險和轉型風險的措施，務求覆蓋從早期計劃、設計到建設及運營管理的整個項目週期。相關的實體風險適應和減緩措施將覆蓋本集團所有項目，並計劃在未來十年內逐步落實。

* For identification purpose only

* 僅供識別用途



Planning 規劃

Climate-Sensitive Site Selection

氣候敏感的選址

- Introduce climate change considerations into the project site selection process, aiming to avoid locations with unfavourable hydrometeorological parameters and/or potential exposure to extreme weather conditions whenever possible.
項目選址過程中將引入氣候變化的因素。盡可能避免選擇水文氣象參數不利和／或可能面臨極端天氣的地點。

Green Building/Infrastructure Development

綠色建築／基礎設施開發

- Explore the impacts of climate change on the building lifecycle and obtain green building certifications for new buildings and infrastructures where feasible. The Group will also adopt advanced technologies, such as real-time energy monitoring for smart energy management, to closely monitor the energy performance of existing buildings, thereby reducing GHG emissions.
探討氣候變化對建築物生命週期相關的影響，並在可能的情況下為新建建築物／基礎設施取得綠色建築物認證。本集團還會引入先進技術（例如用於智能能源管理的實時能源監控），密切監控現有建築物的能源效能，從而減少溫室氣體排放。



Design 設計

Improve Structural Integrity

改善結構完整性

- Improve the structural integrity of plants by incorporating more stringent wind load factors, accommodating larger temperature variations, and accounting for increased snow loads in resilient building designs, where appropriate.
在適當的情況下，在彈性建築設計中採用更嚴格的風荷載系數，更大的溫差以及增加的雪荷載，來改善工廠的結構完整性。

Drainage and Flood Prevention

防洪及排水設計

- Adopt climate resilient drainage design that caters for a higher rainfall intensity and shorter return period.
採用氣候適應性排水設計，滿足更高的降雨強度和更短的返回期。
- Install flood gates in areas that are prone to flooding.
在易發生水災的區域安裝水閘。
- Enhance the design to ensure the proper functioning of drainage systems along key access roads, preventing disruptions in the transportation of waste and biomass raw materials to the plants.
改進設計，確保主要通道的排水系統妥當運作，避免垃圾和生物質原料運輸的中斷。



Design 設計

Improve Performance of Equipment under High Temperatures

提高設備在高溫下的性能

- Conduct thermodynamic modelling to assess the impact of higher temperatures and humidity on the long-term performance of plants. This modelling enables simulations of future plant performance under various scenarios, helping to identify performance limitations and opportunities for improving operational efficiency. The results can support adjustments in operations and maintenance or the installation of additional infrastructure, such as inlet cooling, to adapt to long-term changes in ambient conditions.
使用熱力學模型研究較高的溫度和濕度對項目長期性能的影響。熱力學模型可以模擬發電廠在未來不同情況下的性能，有助於識別發電廠的性能和在可獲得運行效率領域的局限性，並促進操作維護調整或額外基礎設施（如入口冷卻）的安裝，以適應環境條件的長期變化。

Rainwater Harvesting

雨水收集

- Explore opportunity to increase rainwater harvesting.
探索增加雨水收集的可能性。

Transportation Route

運輸路線

- Carefully design transportation routes to reduce climate-related impacts that may affect the delivery of waste and raw materials.
精心設計運輸路線，以減少氣候變化對垃圾和原材料運輸的潛在影響。



Construction 施工

Sustainable Construction

可持續施工

- Select suitable low-carbon materials for construction.
選擇合適的低碳材料進行施工。
- Use biodiesel to lower the construction projects and equipment to lower carbon emission.
在建設項目及設備中使用生物柴油，以減少碳排放。



**Operation and
Management**
運營及管理

Improve Flood Resilience of Operating Assets

提高運營資產的抗洪能力

- Review and improve design and operation of existing assets to enhance waterproofing ability of buildings.
審查並改進現有資產的設計和運營，提高建築物的防水性能。

Assessing Climate Resilience of Utilities

評估公用設施的氣候適應能力

- Communicate with utility authorities to assess climate resilience of utilities with consideration given to rerouting of pipelines, use of underground pipelines, etc.
與公用事業當局進行溝通，評估公用設施的氣候適應能力，考慮管道的重新分佈、地下管道使用等措施。

Capacity Building

能力建設

- Implement the *Management Regulations for Flood Control and Prevention* and conduct relevant training for all staff to ensure their awareness of potential climate-related impacts.
落實《防洪防汛工作管理規定》並對所有員工進行相關培訓，以提高他們對潛在氣候影響的認識。

Supply Chain: Implementing Climatic Guidance for Procurement

供應鏈：實施採購中的氣候相關指引

- Where practical, procurement specifications should clearly define the climatic conditions (current and future), under which the equipment or asset is expected to operate.
採購規範應盡可能清晰標識設備或資產運行所需的氣候條件（當前和將來）。

Carbon Reduction and Climate Resilience Measures in the Boao Zero-Carbon Demonstration Zone 博鰲零碳示範區的減碳與氣候適應力舉措

In the context of global efforts to combat climate change, the achievements of Everbright Environment in the construction of the Boao Zero-carbon Demonstration Area have emerged as an industry exemplar for sustainable development. Through innovative initiatives, this project comprehensively embodies the concepts of low carbon and climate resilience across waste disposal, energy utilisation, architectural design, and water resource management.

Waste Disposal and Energy Utilisation

Everbright Environment employs the “aerobic composting” technique (utilising oxygen to decompose organic matter) to handle landscaping and kitchen waste, effectively diminishing GHG emissions and achieving resource utilisation. The photovoltaic power generation system substitutes approximately 12% of the electricity consumption within the area, reducing carbon emissions. The accompanying organic fertiliser green planting zone realises resource recycling and elevates public awareness of low carbon through science popularisation and education.

Environmental-friendly Architectural Design

The Coconut Grove Settlement Station utilises natural materials such as bamboo and wood, reducing building carbon emissions. Its 1,518 photovoltaic panels on the roof supply energy for garden lighting, lessening the reliance on traditional electricity. The low-carbon garden prioritises the use of local and recycled materials (such as waste concrete and local stones), reducing the energy consumption associated with the extraction and transportation of new materials. The rain garden and solar courtyard lights harness natural precipitation and solar energy to achieve water conservation and clean energy supply.

在全球應對氣候變化的背景下，光大環境在博鰲零碳示範區的建設成果成為可持續發展的行業典範。該項目通過創新舉措，從廢棄物處理、能源利用、建築設計到水資源管理，全面踐行低碳與氣候韌性理念。

廢棄物處理與能源利用

光大環境採用「好氧堆肥」工藝（利用氧氣分解有機物）處理園林綠化和廚餘垃圾，有效減少溫室氣體排放並實現資源化利用。光伏發電系統替代園區約12%的電耗，降低碳排放。配套的有機肥綠化種植區實現資源循環，並通過科普宣教提升公眾低碳意識。

環保建築設計

椰林聚落驛站採用竹木等天然材料，減少建築碳排放。其頂部1,518塊光伏板為園林照明供能，降低傳統電力依賴。低碳花園優先使用鄉土及再生材料（如廢棄混凝土和本地石塊），減少新材料開採和運輸的能耗。雨水花園和太陽能庭院燈利用自然降水與太陽能，實現節水與清潔能源供應。

Carbon Reduction and Climate Resilience Measures in the Boao Zero-Carbon Demonstration Zone (Continued) 博鰲零碳示範區的減碳與氣候適應力舉措 (續)



Climate Adaptation and Water Resource Management

The Boao Forum for Asia Conference Centre Square and other locations have undergone sponge city transformation using self-developed permeable materials, enhancing the infiltration capacity of rainwater and reducing the risk of waterlogging. The silica sand honeycomb rainwater storage pool simulates the “nephron” structure, enabling multi-stage purification and on-site irrigation of rainwater, and promoting the low-carbon and efficient recycling of water resources.

Through these measures, Everbright Environment has enhanced the carbon reduction capacity and climate adaptability of the Boao Zero-carbon Demonstration Zone, providing a replicable “China Model” for global sustainable development.

氣候適應與水資源管理

博鰲亞洲論壇會議中心廣場等地採用自主研发的透水材料進行海綿化改造，提升雨水滲透能力，減少內澇風險。矽砂蜂巢雨水調蓄池模擬「腎單元」結構，實現雨水多級淨化與就地灌溉，促進水資源低碳高效循環。

通過這些措施，光大環境提升了博鰲零碳示範區的減碳能力和氣候適應力，為全球可持續發展提供了可複製的「中國樣板」。

Transition Scenario

To analyse the various transition climate risks faced by the Group and formulate appropriate management approaches, the Group’s assessment references and adopts the climate change scenarios outlined in the International Energy Agency’s *World Energy Outlook 2023* report. Additionally, our analysis follows the recommendations of the TCFD’s *Scenario Analysis Guidance for Non-Financial Companies* by adopting the 1.5°C scenario. This scenario aligns with the latest scientific research from the IPCC and reflects the international trend of many countries committing to achieving net-zero emissions by 2050.

轉型情境

為分析本集團正面臨的各種轉型氣候風險及制定應採取的管理方針，本集團的評估參考並採用了國際能源署發布的《二零二三年世界能源展望》報告中的氣候變化情境。此外，我們的分析採納TCFD《非金融公司情境分析指南》的建議，採用攝氏1.5度情境。此情境符合IPCC最新的科學研究，同時亦能反映全球多國承諾在二零五零年達到淨零排放的國際趨勢。

Scenario 情境	Simulated Scenario 模擬情境
Stated Policies Scenario 既定政策情境	The Stated Policies Scenario is an energy system forecast that assesses the current progress based on existing policies and measures, without assuming that governments will meet all of their stated targets. This scenario evaluates specific sectoral policies, industry actions, and implementation measures adopted as of August 2024, including Nationally Determined Contributions (NDCs) under the <i>Paris Agreement</i>. It also considers detailed sectoral information such as pricing policies, efficiency standards, electrification plans, and infrastructure projects to determine their impact on energy goals. 既定政策情境是一種能源系統預測，基於目前的政策和措施評估當前的進展方向，但不假定政府將實現其所有既定目標。該情境評估了截至二零二四年八月採用的具體部門政策、產業行動和實施措施，包括《巴黎協定》下的國家確定貢獻，並考慮了詳細的部門信息，如定價政策、效率標準、電氣化計劃和基礎設施項目，以確定其對能源目標的影響。
Net Zero Emissions by 2050 Scenario 二零五零年淨零排放情境	The Net Zero Emissions by 2050 Scenario is a normative scenario that demonstrates the pathways for achieving net-zero carbon dioxide emissions in the global energy sector by 2050, with developed economies reaching net-zero emissions earlier than other economies. In this scenario, key sustainable development goals (SDGs) related to energy are realised, particularly the achievement of universal energy access and significant improvements in air quality by 2030. This scenario aligns with the emission reduction targets assessed by the IPCC in its Sixth Assessment Report, aiming to limit global temperature rise to below 1.5°C with at least a 50% probability. 二零五零年淨零排放情境是一種規範情境，展示了全球能源部門到二零五零年實現二氧化碳淨零排放的途徑，其中發達經濟體比其他經濟體更早實現淨零排放。在該情境下，與能源相關的主要可持續發展目標(SDGs)得以實現，特別是到二零三零年實現能源普及和空氣品質的重大改善。該情境與IPCC在其第六次評估報告中評估的減排目標一致，將全球氣溫上升控制在1.5°C 以內（至少50%以上機率）。

Transition Climate Scenario Analysis

The rapid development of the low-carbon economy brings numerous transition risks to enterprises. Governments and regulatory agencies around the world have introduced various policies and measures to support industries in their green and low-carbon transformation to achieve carbon reduction goals. As companies adopt cutting-edge technologies in their shift towards low-carbon operations, uncertainties may arise in their operations. As investors pay increasing attention to climate change issues, companies are also facing pressure from investors and competitors in the industry to enhance their reputation by developing low-carbon transition strategies and improving GHG accounting and disclosure.

The identified transition risks, potential impacts, and management approaches for the “Net Zero Emissions by 2050 Scenario” and the “Stated Policies Scenario” are detailed as follows.

轉型氣候情境分析

低碳經濟快速發展，企業面臨諸多轉型風險。各國政府和監管機構紛紛出台相關政策措施，支持各行各業綠色低碳轉型，達成減碳目標。企業在向低碳運營轉型的過程中，將採用尖端技術，可能給運營帶來不確定性。隨著投資者越來越關注氣候變化問題，公司也將面臨來自投資者和同行業競爭對手的壓力，須通過制定低碳轉型戰略、改進溫室氣體核算和披露來提高聲譽。

針對「二零五零年淨零排放情境」及「既定政策情境」所識別的轉型風險、潛在影響及管理方針詳列如下。

Factor 因素	Transition Risks 轉型風險		Management Approaches 管理方針
Sector 行業			
Underlying Sector Risks and Stigmatisation of the Sector: Carbon-intensive industries face the risk of being stigmatised due to their perceived negative impacts on the environment. 潛在的產業風險與產業污名化： 碳密集型產業由於其對環境的負面影響，面臨污名化的風險。	Stated Policies Scenario 既定政策情境	Everbright Environment’s main business is waste-to-energy, which, although currently classified as an environmentally friendly industry by regulatory authorities, is carbon-intensive and may face potential stigmatisation and increased regulatory pressure in the future due to its associated environmental emissions. 光大環境的主要業務是垃圾發電，儘管目前仍被監管單位列為環保產業，但由於屬於碳密集產業及其相應環境排放，未來可能面臨一定污名風險和更多的監管壓力。	Enhance environmental management performance, strengthen popular science education to improve information transparency, and improve accountability mechanisms. 提升環境管理表現，加強科普教育以提升信息透明度，以及完善問責機制。
	Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境	More stringent environmental laws might render the industry much less financially viable. 更嚴格的环境法規可能會降低該行業的財政可行性。	

Factor 因素	Transition Risks 轉型風險	Management Approaches 管理方針
Regulatory 監管		
Carbon Pricing Mechanisms: The <i>Paris Agreement</i> Nationally Determined Contribution (NDC) signifies that the relevant country is committed to implementing measures in reducing carbon emissions, contributing to potentially more stringent regulations such as carbon pricing or carbon taxes. 碳定價機制： 《巴黎協定》中的國家自主貢獻(NDC)標誌著相關各國承諾實施減碳措施，促使碳定價或碳稅等法規變得更為嚴格。	Stated Policies Scenario 既定政策情境	PRC's national Emissions Trading Scheme (ETS) has included waste-to-energy in the carbon trading market, and Everbright Environment is expected to increase its revenue through the sale of waste-to-energy green certificates. In line with recent developments in carbon trading policies, Everbright Environment has been actively advancing the development of the international Verified Carbon Standard (VCS) program, converting GHG reductions and removals from certified projects into tradable carbon credits under voluntary emission reduction and trading mechanisms. 中國的國家排放交易計劃(ETS)已將垃圾發電納入碳交易市場，光大環境有望通過出售垃圾發電綠證來增加收入。結合碳交易政策的最新進展，光大環境積極開展國際核證碳減排標準（「VCS」）計劃的開發工作，通過自願減排和自願碳排放權交易機制，將認證項目中的溫室氣體減排量和清除量轉化為可交易的碳信用額。
	Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境	The transformation of the entire electricity sector is crucial for achieving net zero emissions by 2050. Although the Net Zero Emissions by 2050 scenario does not rely on carbon credit offsetting as a decarbonisation measure, the carbon pricing mechanism will still actively encourage decarbonisation investments. In the long term, there is also a possibility that waste-to-energy may no longer be eligible for the green certificate market. 推動全電力產業轉型對於二零五零年實現淨零排放至關重要。儘管二零五零淨零排放情境並不依賴碳信用額抵銷作為脫碳手段，但碳定價機制仍會積極鼓勵脫碳投資。從長遠來看，也存在垃圾發電可能不再具備綠證市場交易資質的可能性。 It is foreseeable that Everbright Environment will need to invest more heavily in decarbonising its waste-to-energy operations to generate additional revenue, thereby compensating for the shrinking income due to reduced municipal household waste feedstock. 可以預見的是，光大環境須加大垃圾發電脫碳投入，以獲取更多收入，從而彌補由於城市生活垃圾原料減少帶來的收入萎縮。

Factor 因素	Transition Risks 轉型風險	Management Approaches 管理方針
Regulatory 監管		
Enhanced Emissions-Reporting Obligations: With applicable mandatory GHG emissions and climate reporting regulations, companies will face higher operating costs such as higher compliance costs. 排放報告義務日益強化： 根據適用的強制性溫室氣體排放和氣候報告法規，公司將面臨更高的運營成本，例如更高的合規成本。	Stated Policies Scenario 既定政策情境 Everbright Environment must comply with the climate reporting obligations of the Stock Exchange. In addition to reporting on climate strategies and evaluation results, the enhanced GHG emissions reporting requirements will be expanded to cover all Scope 3 emissions, including upstream and downstream activities. To address this, Everbright Environment is actively investing additional resources and has developed a carbon emissions and carbon asset management system to achieve systematic, process-oriented, and digital management of carbon assets. 光大環境須遵守聯交所的氣候報告義務。除報告氣候策略和評估結果外，強化後的溫室氣體排放報告要求將擴展至涵蓋所有範圍三排放，包括上游和下游活動。為此，光大環境積極投入額外資源，開發了碳排放與碳資產管理系統，以實現碳資產的系統化、流程化和數字化管理。	Allocate a substantial budget for an extended ESG consultancy service with broader coverage, considering the potential need to purchase proxy data, install sensors/meters, conduct lab tests and relevant R&D, and other expenses in line with long-term market trends. 配置充足的預算以委聘更全面的ESG諮詢服務，並將購買代理數據、安裝感測器／儀表、進行實驗室測試以及其他符合長期市場發展趨勢的相關支出納入整體考慮。
	Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境 The anticipated advancements in the methodology for calculating Scope 3 emissions and stricter climate reporting requirements are expected to apply across the entire value chain. As a result, Everbright Environment will need to invest additional human and financial resources to develop, maintain, and improve its management system, as well as purchase relevant proxy services to collect higher-quality emission data for subsequent calculations and compliance. 預期範圍三排放計算方法的進步和更嚴格的氣候報告要求將適用於整個價值鏈，因此光大環境需投入額外的人力和財力資源來開發、維護和完善管理系統，並購買相關代理服務，以收集更高質量的排放數據，以利於後續計算與合規。	

Factor 因素	Transition Risks 轉型風險	Management Approaches 管理方針	
Regulatory 監管			
Exposure to Litigation: Climate-related litigation (due to ever tightened standards and evolving claim attitude of stakeholders) can expose a company to potential fines and liabilities. 訴訟風險： 由於標準日益嚴格和持份者索賠態度的變化，氣候相關訴訟可能會使公司面臨潛在的罰款和法律責任。	Stated Policies Scenario 既定政策情境	There is no ongoing or previous climate-related litigation cases on the project companies of Everbright Environment. However, under the current prevailing policies in the PRC, while the electricity industry is deemed as a carbon-intensive sector, waste-to-energy is included in PRC's green industry taxonomy. Thus, waste-to-energy is potentially under increasing regulatory scrutiny. Nevertheless, Everbright Environment will uphold a high standard of integrity and professionalism, disclosing its carbon emissions and displacement transparently. 目前，光大環境下屬項目公司尚無進行中或過往的氣候相關訴訟案件。然而，在中國現行政策下，雖然電力產業被視為高排放產業，但是垃圾發電亦在綠色低碳轉型產業目錄之中。因此，垃圾發電有可能會面臨更為嚴格的監管審查。儘管如此，光大環境將堅持高標準的誠信和專業精神，以透明的方式披露其碳排放和替代排放量的情況。	Enhance sustainability practices to meet societal expectations and regulatory compliance. 加強可持續發展實踐，以滿足社會期望和監管合規性。
	Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境	Everbright Environment's project companies have not been involved in any climate-related litigation cases, neither currently nor in the past. However, under Net Zero Emissions by 2050 Scenario, there is a chance that waste-to-energy plants, being energy-consuming public utilities infrastructures, may be subject to greater regulatory and public oversight. 目前，光大環境旗下項目公司並無進行中或過往的氣候相關訴訟案件。然而，在二零五零淨零排放情境下，垃圾發電廠作為耗能的公共市政基礎設施，可能會受到更嚴格的監管和公眾監督。	

Factor 因素	Transition Risks 轉型風險		Management Approaches 管理方針
Technology 技術			
Mandates on and Regulation of Existing Products and Services: For carbon intensive companies whose business is highly dependent on prevailing regulatory measures, they could face increased costs or reduced revenue due to the dynamic evolution of domestic climate change regulatory developments. 對現有產品和服務的授權及監管： 對於高度依賴現行監管措施高度影響的碳密集型企業而言，基於國內氣候變化監管的發展趨勢，其可能面臨成本攀升或收入減少的情況。	Stated Policies Scenario 既定政策情境	While there are no current climate-related mandates specific to both waste-to-energy and waste water treatment industries in the PRC, as relevant emission-related environmental regulations become increasingly stringent, it might compel Everbright Environment to invest more in relevant technologies and equipment. 儘管中國目前尚未針對垃圾發電及水務產業制定專門的氣候變化相關法規，但隨著與碳排放相關的法律日益嚴格，光大環境可能需增加在相關技術和設備上的投資。	Explore and implement initiatives to reduce carbon intensity and increase green electricity consumption. 探索並實施有助於減少碳排放的舉措，同時探討提高綠色電力消耗的可能性。
	Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境	International Energy Agency expects that around 90% of energy supply will be provided by renewables by 2050. The government will likely impose additional regulatory measures such as carbon emission cap on waste-to-energy and waste water treatment operators. 國際能源總署預計到二零五零年，約90%的能源供應將由可再生能源提供。政府可能會實施額外的監管措施，例如為垃圾發電及污水處理運營商制定碳排放上限。	

Factor 因素	Transition Risks 轉型風險	Management Approaches 管理方針
Technology 技術		
Transitioning to Lower Emissions Technology: Companies are facing the market trend towards green production and transportation, with various lower emissions options available. These include low-carbon operation models, improved energy efficiency, the use of renewable energy, switching to cleaner fuels, and adopting electric vehicles. If a company fails to transition to lower emissions options to meet its decarbonisation goals (if any), its market competitiveness will inevitably be impacted in the context of climate change. 向低排放技術過渡：面對綠色生產和運輸的市場趨勢，公司擁有多元的低排放選擇，包括低碳運營模式、提高能源效率、使用再生能源、改用清潔燃料、採用電動車等。如果企業未能順利轉型至低排放方案以實現其脫碳目標（如有），在氣候變遷的背景下，其市場競爭力將不可避免地受到衝擊。	Stated Policies Scenario 既定政策情境 Recent policy guidelines have been issued to encourage waste-to-energy and water utility companies to adopt lower emissions technologies, Everbright Environment has demonstrated a proactive approach by spearheading the experimentation and implementation of these measures and technologies, in line with its market peers. 最近推出的政策指引鼓勵垃圾發電和水務企業採用低排放技術。光大環境與同儕攜手率先試驗和實施這些措施和技術，展現了積極主動的態度。 Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境 Under the ambition to transition towards net zero, Everbright Environment will encounter increased demands and expectations from the clients, government, investors, and the public, necessitating more frequent and stringent commitments to ambitious carbon reduction goals. As a result, Everbright Environment might be required to pay extra decarbonisation efforts in construction and operation, even though the effectiveness of such efforts in such domain may be constrained. 在邁向淨零排放的轉型進程中，光大環境將面臨來自客戶、政府、投資者和公眾日益高漲的要求和期望，需對碳減排目標作出更頻繁、更嚴格的承諾。因此，光大環境在建設和運營中必須投入額外的脫碳努力，儘管此類努力的具體成效可能有限。	Enhance adoption of lower emissions technology in company projects. 在公司項目中加強採用較低排放技術。

Factor 因素	Transition Risks 轉型風險		Management Approaches 管理方針
Technology 技術			
Investment in Technological Breakthroughs: Investment in low-carbon technological breakthroughs such as microbial fuel cells can be impactful but new technology developments could have an associated risk of being unsuccessful. 投資技術突破： 針對微生物燃料電池等低碳技術突破的投資可能會取得顯著進展，但新技術的開發也可能存在未能成功的風險。	Stated Policies Scenario 既定政策情境	For Everbright Environment, upcoming transformative factors include the adoption of application of solar water heater and heat drying of waste, allowing for decreasing GHG emissions. Another potentially disruptive technology for Everbright Environment’s businesses is the implementation of artificial intelligence (AI), which enables enhanced automation and optimisation of process controls. Advancements such as those above have the potential to generate long-term reductions in electricity and resource consumption. 對光大環境而言，即將出現的轉型因素包括採用太陽能熱水器和廢物熱乾燥技術，以減少溫室氣體排放。另一項可能具備顛覆性影響的技術是人工智能，其有助於提升自動化水平，優化程序控制過程，進而可能長遠減少電力和資源消耗。	Enhance investment in relevant R&D as well as industry- academia collaboration, leading to the adoption of big-data based waste-to-energy management systems. 加強相關研發投入及產學合作，推廣基於大數據的垃圾發電廠管理系統。
	Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境	Under the rapid change of regulatory and market landscapes, Everbright Environment may have to venture into emerging technologies as an attempt to pursue all possible means to curb carbon emissions. Especially in areas where options are limited, new technologies such as carbon capture will have to be adopted prior to their maturation. 鑒於監管和市場格局快速變化，光大環境可能需要涉足新興技術，盡全力控制碳排放。尤其在選擇有限的領域，須在諸如碳捕集等新技術成熟前採取相應措施。	

Factor 因素	Transition Risks 轉型風險		Management Approaches 管理方針
Market & Reputation 市場及聲譽			
Increased Cost of Raw Materials: The fluctuations in the price of raw materials and fuel can be caused by climate change. Projects that depend significantly on such material will therefore be exposed to risks of higher production costs in the future. 原料成本增加： 氣候變遷可能導致原料和燃料價格波動。因此，高度依賴此類材料的項目未來將面臨生產成本上升的風險。	Stated Policies Scenario 既定政策情境	Decreasing solid waste feedstock as a result of increased recycling awareness might lead to a lack of raw materials for Everbright Environment’s waste-to-energy-related business unit. 隨著回收意識的提高，作為原料的固廢數量減少，可能會導致光大環境垃圾發電相關業務部門面臨原料短缺的挑戰。	Enhance budgetary preparedness for potential supply chain disruptions and increased costs of energy and raw materials. Take feedstock prediction into account when planning for new waste-to-energy and waste water treatment plant projects. 妥善做好預算分配，以應對潛在的供應鏈中斷及能源、化學品等原材料成本上漲的危機。在規劃新的垃圾發電和污水處理項目時，將原料預測納入全面考量。
	Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境	Net zero ambitions will lead to strong public demand for the use of clean production mechanisms and renewable energy across the entire supply and transportation chain, which will result in significant cost implications for the construction and operation of Everbright Environment’s projects. 淨零目標將引發民眾強烈訴求，要求在整個供應和運輸鏈中使用清潔生產機制及可再生能源，此舉將對光大環境項目的建設和運營產生較大成本影響。	

Overall Risk/Opportunity

整體轉型風險／機會

Legend

圖例

High Risk 高風險	Medium Risk 中風險	Low Risk 低風險	Neutral 中性	Low Opportunity 低機會	Medium Opportunity 中機會	High Opportunity 高機會
------------------	--------------------	-----------------	---------------	------------------------	---------------------------	-------------------------

Aspect 方面	Factor 因素	Stated Policies Scenario 既定政策情境		Net Zero Emissions by 2050 Scenario 二零五零淨零排放情境	
		2030 二零三零年	2050 二零五零年	2030 二零三零年	2050 二零五零年
Sector 行業	Underlying Sector Risk and Stigmatisation of Sector 潛在的產業風險與產業污名化				
Regulatory 法規	Carbon Pricing Mechanisms 碳定價機制				
	Enhanced Emissions-Reporting Obligations 排放報告義務日益強化				
	Exposure to Litigation 訴訟風險				
	Mandates on and Regulation of Existing Products and Services 對現有產品和服務的授權及監管				
Technology 技術	Transitioning to Lower Emissions Technology 向低排放技術過渡				
	Investment in Technological Breakthroughs 投資技術突破				
Market & Reputation 市場及聲譽	Increased Cost of Raw Materials 原料成本增加				

Other Climate-related Opportunities

其他氣候相關轉型機遇

Aspect 因素	Major Opportunities 主要機遇	Potential Financial and/or Operational Opportunities 對財務或運營的影響	Management Approach in the Next Five Years 未來五年管理方針 市場及聲譽
Market & Reputation 市場及聲譽			
ESG investments ESG投資	Climate change leads to ESG investment opportunities, and investors will make investment decisions based on the corporate's ESG performance. 氣候變化為ESG領域帶來投資機遇，投資者將根據企業在ESG方面的績效作出投資決策。	• Increase value of assets. 提升資產價值。 • Enhance the Group's reputation and competitiveness. 提高本集團聲譽及競爭力。	• Adopt international best practices in sustainability reporting. 採用國際的最高標準撰寫可持續報告。 • Increase transparency in ESG information disclosure. 提高披露ESG資料的透明度。 • Incorporate ESG considerations into the Group's operations. 在本集團的運營中納入ESG考量。 • To grasp green financing should opportunities arise. 及時把握出現的綠色融資機會。
Sustainable waste treatment solutions 可持續的廢棄物處理方案	In the era of climate change, the market has been looking for more effective and sustainable waste treatment solutions that facilitate landfill diversion and generate green electricity, which is in line with Everbright Environment's business practice. 在氣候變化的時代，市場趨勢與光大環境的業務方向一致，皆在尋求更有效且可持續的廢棄物處理方案，以促進廢棄物從填埋場的分流與綠色電力的生產。	• The significant increase in demand for sustainable waste management solutions enhances the Group's reputation and market position. 可持續廢棄物管理方案的需求大幅增加提高本集團聲譽及市場地位。	• Waste-to-energy will remain a core business of Everbright Environment. The Group will step up the efforts in technology R&D in order to improve operational efficiencies in waste treatment and supply of green electricity. 垃圾發電將繼續是光大環境未來的核心業務，本集團將加強技術研發，以提升在廢棄物處理及綠色電力供應方面的運營效率。 • The Group will actively explore alternative waste management models such as waste sorting and resource recycling to support the development of "Zero-waste Cities". 本集團會積極探索廢棄物管理的替代模式，如垃圾分類與資源回收，以支持「無廢城市」的發展。

Aspect 因素	Major Opportunities 主要機遇	Potential Financial and/or Operational Opportunities 對財務或運營的影響	Management Approach in the Next Five Years 未來五年管理方針 市場及聲譽
Market & Reputation 市場及聲譽			
Changing Customer Behaviours 客戶行為模式改變	If the services are elastic and there are competitors in the market, clients have the option to choose an alternative provider for the same services. It is probable for clients to lean towards services that are more climate friendly. 若服務具備彈性且市場上存在競爭對手，客戶可選擇提供相同服務的替代提供者，且客戶可能會傾向於選擇更具氣候友善性的服務。	• Everbright Environment’s key business operations involve waste-to-energy and waste management, which represents an essential public utility that possesses an inelastic nature, making it irreplaceable. 光大環境的核心業務是垃圾發電和廢物處理，作為重要的公共設施，具有非彈性特徵，因此不可替代。 • As cities continue to grow and environmental laws become increasingly stringent in the PRC, waste-to-energy presents itself as a greener alternative to landfills for waste treatment, Everbright Environment is presented with stable opportunities – particularly in country-level regions where waste management infrastructures are not yet equipped. 隨著中國城市化進程加快及環境法規日益嚴格，垃圾發電作為較堆填更為綠色環保的垃圾處理方式，其角色日漸重要，並為光大環境提供穩定的機遇，特別是在垃圾處理基礎設施尚未成熟的縣域。	• Seize the opportunity to provide green waste management solutions and remain steadfast to our commitment to provide green waste management solutions to our clients. 把握市場機會，堅定不移地履行為客戶提供綠色垃圾處理方案的承諾。

To address and manage the risks and opportunities posed by climate change to its business, Everbright Environment is committed to reducing or mitigating GHG emissions through the development of renewable energy and the adoption of advanced decarbonisation technologies, thereby building a cleaner and more environmentally friendly future.

為應對及管理上述氣候變化對其業務帶來的風險和機遇，光大環境致力於通過發展可再生能源及採取先進減碳技術等方式避免或減少溫室氣體排放，從而建立更清潔和環保的未來。

Promote the Development of Renewable Energy

推動發展可再生能源

Following the implementation of the “Dual Carbons” goals in the “14th Five-Year Plan”, the Group continues to focus on the sustainable development of both project operations and the broader environmental management industry, prioritising energy conservation and emission reduction as a key area of work.

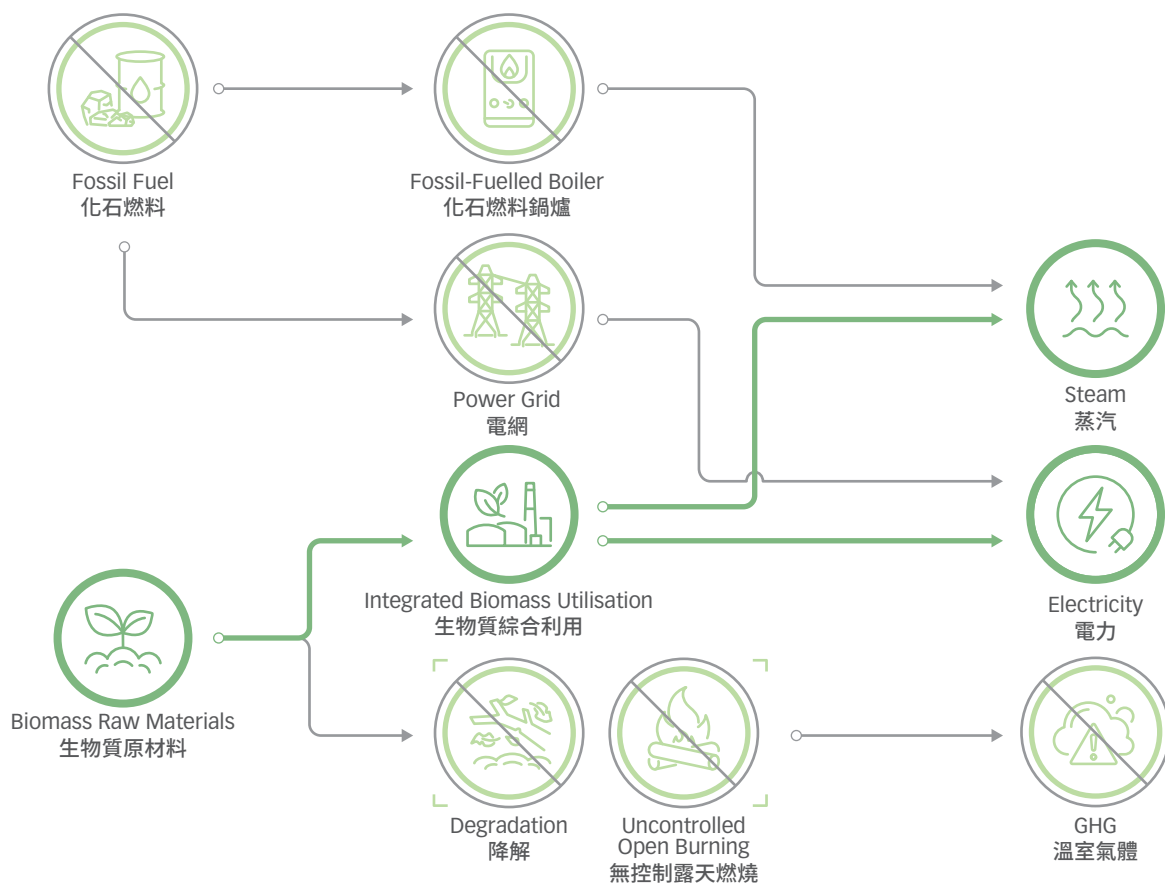
配合「十四五」規劃中「雙碳」目標的實施，本集團持續關注項目運營及整個環境綜合治理行業的可持續性，並將節能減排作為重點工作方向之一。

As a result, the Group actively promotes the generation of electricity and heat from renewable sources such as waste, biomass, wind power, and solar energy, to reduce reliance on non-renewable energy.

為此，本集團積極推廣垃圾、生物質、風力及光伏等可再生能源發電及供熱，以降低對非再生能源的依賴。

GHG Emissions Displacement through Integrated Biomass Utilisation

以生物質綜合利用方式替代溫室氣體排放

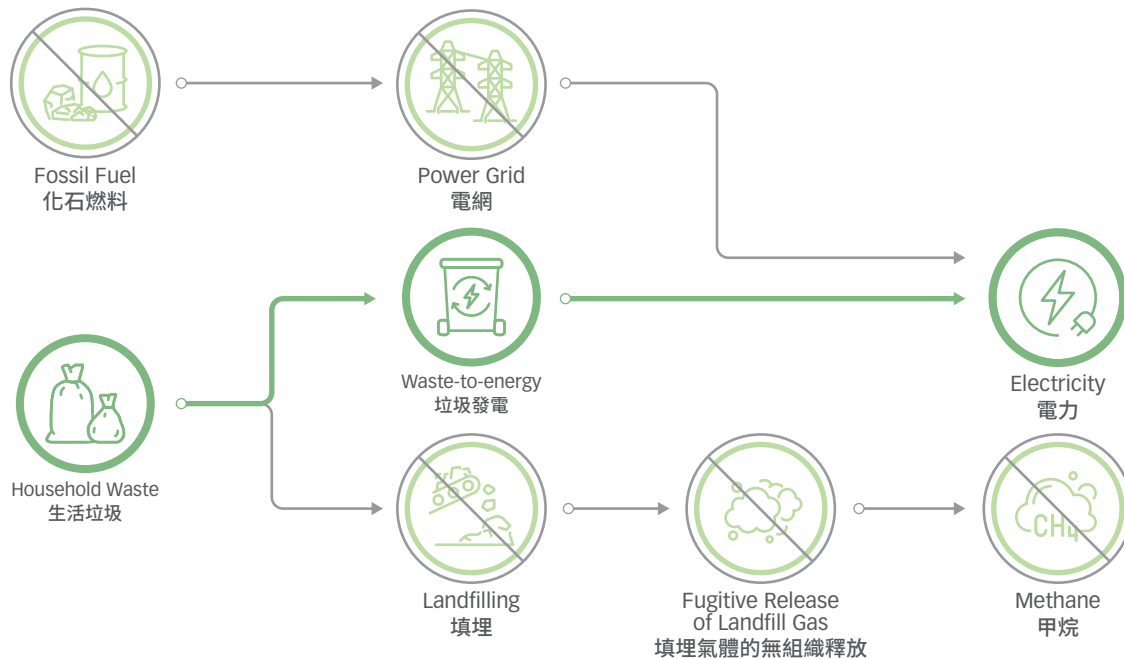


Apart from operating waste-to-energy projects, the Group's biomass integrated utilisation projects generate electricity and provide heating using biomass raw materials, replacing fossil fuels and avoiding open-air burning or degradation of biomass, thereby reducing GHG emissions.

除運營垃圾發電項目外，本集團的生物質綜合利用項目使用生物質原材料發電及供熱，替代了化石燃料及避免生物質露天燃燒或降解，從而減少溫室氣體的排放。

GHG Emissions Displacement through Waste-to-Energy

以垃圾發電方式替代溫室氣體排放



The Group's waste-to-energy projects recover the heat generated from the incineration of household waste for electricity generation and heating, thereby replacing the use of fossil fuels and displacing GHG emissions. Additionally, by diverting household waste from landfills, the Group reduces the anaerobic degradation of organic waste in landfills that would otherwise release fugitive landfill gases, which are rich in methane, a potent GHG.

本集團的垃圾發電項目通過回收生活垃圾焚燒所產生的熱能來發電及供熱，從而取代化石燃料能源的使用，以替代溫室氣體排放。此外，將生活垃圾從填埋場分流，減少有機廢棄物在填埋場厭氧降解所釋放的無組織填埋氣體（富含甲烷，一種強力的溫室氣體），從而避免溫室氣體排放。

GHG Emissions Displacement through Waste Water Treatment

以污水處理方式替代溫室氣體排放

Through waste water nitrogen removal treatment, reducing nitrous oxide (N₂O) released from effluent: The amount of N₂O emissions depends on the nitrogen content of the effluent. Therefore, reducing the nitrogen content in the effluent through waste water nitrogen removal treatment can help mitigate GHG emissions.

通過污水除氮處理工藝，減少從出水中釋放的氧化亞氮：污水出水的氧化亞氮排放量取決於污水的氮含量，因此，通過污水除氮處理工藝降低出水的氮含量能夠緩解溫室氣體排放。

Risk Management

The Group has assessed the potential climate-related risks and opportunities across various areas, and based on the results of physical and transition risk scenario analyses, has formulated and implemented climate risk control measures. At the same time, the Group also analyses the effectiveness and execution risks of these measures to improve and enhance overall operational efficiency.

The diagram below shows an overview of the Group's key climate-related risks and opportunities.

風險管理

本集團評估了各個範疇的潛在氣候相關風險及機遇，並根據實體風險和轉型風險的氣候情境分析結果，制定及實施氣候風險控制措施。同時，本集團亦分析了各項措施的有效性以及執行風險，以改善並提升整體運營效率。

下圖概述了本集團的主要氣候相關風險和機遇。

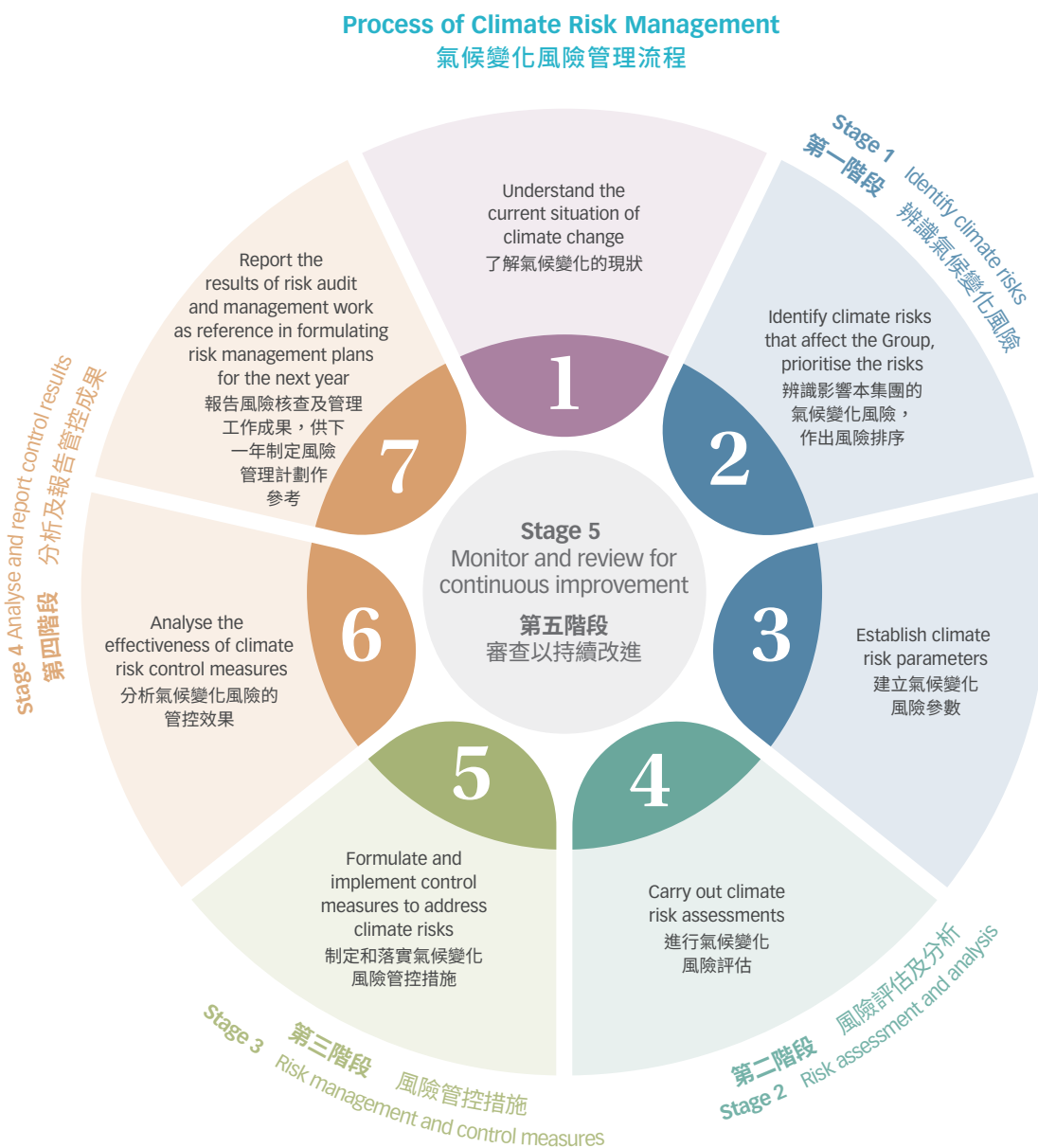


Risk Management Process

According to the risk management plan, the Group has formulated and implemented a risk management process to effectively identify potential risks through clear contingency instructions and to formulate and implement relevant measures for each project in a timely manner. These systematic measures provide a comprehensive and reliable set of decision-making principles and steps, ensuring the Group's steady operation and development in an ever-changing environment.

風險管理流程

根據風險管理計劃，本集團制定並實施了風險管理流程，務求通過清晰的應變指令有效識別潛在風險，適時為各個項目制定和落實相關措施。該些系統化的措施能夠提供一套完整可靠的決策原則及步驟，確保本集團在持續變化的環境之下維持穩健經營和發展。



Metrics and Targets

The Group has used the internationally recognised CDM under the *United Nations Framework Convention on Climate Change* (“UNFCCC”) to estimate the projects’ GHG emissions and displacement. Data on the Group’s GHG emissions and displacement can be found in the chapter of “Environmental Protection” in the Report.

GHG emissions (Scope 1) from the incineration of household waste are calculated based on the fraction of fossil carbon in the total carbon content of the household waste. Due to the varying composition of the household waste and its impact on GHG emissions, these emissions may fluctuate significantly. As such, the Group is currently unable to set an overall reduction target for Scope 1 GHG emissions, as this is beyond Everbright Environment’s control.

The Group has commissioned the Hong Kong Quality Assurance Agency as a third-party certification and audit agency to independently audit and verify the Group’s GHG inventory during the Reporting Period in accordance with ISO 14064-1. The relevant verification statement is appended to the Report, demonstrating the Group’s commitment to managing, quantifying, and reporting GHG emissions. This marks an important step in promoting a low-carbon economy. To further improve its GHG accounting framework, the Group is establishing a Scope 3 GHG emission calculation framework, aiming for a more comprehensive disclosure of the environmental performance across the corporate value chain.

Under the guidance of the national “Dual Carbons” goals, Everbright Environment adheres to the integrated development strategy of “environment, resources, energy, and climate”, leading with innovation, actively exploring low-carbon development pathways, and making significant progress in both “Pollution and Carbon Reduction” and “Synergy”. To promote long-term decarbonisation and align with the targets set by the *Paris Agreement*, we are actively considering setting relevant emissions reduction goals for different business sectors. Additionally, we are working to comprehensively assess the baseline fuel and electricity consumption of our assets, seeking opportunities to establish long-term decarbonisation goals. Specific targets are currently under development, and details will be disclosed in due course.

指標和目標

本集團根據國際認可的《聯合國氣候變化框架公約》(「UNFCCC」)下的CDM溫室氣體排放計算方法來估算項目的溫室氣體排放量及替代量。本集團的溫室氣體排放及替代數據可於本報告的「環境保護」章節查閱。

焚燒生活垃圾所產生的溫室氣體排放(屬於範疇一)可根據生活垃圾中化石碳佔總碳的比例計算。考慮到生活垃圾成分的差異及其對溫室氣體的影響可能會有較大波動,此部分排放並不在光大環境的控制範圍內。因此,本集團目前無法為範疇一的溫室氣體排放定下總體減排目標。

本集團已委託香港品質保證局作為第三方核證機構,並按照ISO 14064-1標準,對本集團於報告期內的溫室氣體清單進行獨立審計及認證。相關審核聲明已附載於本報告中,展示出本集團在管理、量化及報告溫室氣體排放方面的責任,並為推動低碳經濟邁出重要的一步。為進一步完善溫室氣體核算框架,本集團正在建立範疇三溫室氣體排放計算框架,務求更加全面地披露企業價值鏈的整體環境表現。

在國家「雙碳」目標引領下,光大環境秉承「環境、資源、能源、氣候」四位一體的發展戰略,堅持創新引領發展,積極探索低碳發展路徑,在「減污降碳」與「協同增效」兩方面著力探索,並取得良好進展。為推動長期脫碳,達成《巴黎協定》設定的目標,我們正在積極考慮為各業務板塊設定相應的減排目標。此外,我們也在積極研究全面評估我們資產的基準線燃料和電力使用量的方法,以尋找設定長期減碳目標的機會。我們目前正在制定具體目標,有關細節將在適當時候披露。

Environmental Protection 環境保護



Implementing green operation,
protecting blue sky and lush water
踐行綠色運營・保護藍天碧水

The Group's environmental protection business is primarily divided into three major sectors: environmental energy, environmental water, and greentech. Among these, environmental energy is the Group's largest business, focusing on processing household waste using green technologies to significantly reduce per capita environmental footprints, while also protecting the city's valuable land resources. Environmental water business strictly adheres to national standards, professionally treating urban and industrial waste water, providing high-quality industrial reclaimed water, and improving water quality and sanitation issues. Greentech utilises biomass materials such as agricultural and forestry waste to convert them into electricity and thermal energy, preventing the open burning of agricultural residues, thereby significantly improving air quality in rural areas. Environmental energy and greentech sectors develop synergistically, significantly increasing the proportion of renewable energy use in China, highlighting Everbright Environment's contribution to China's green energy development. In addition, envirotech serves as the core driver of Everbright Environment's technological innovation and results transformation platform, continuously tracking cutting-edge international environmental technologies and promoting the strategic vision of technological innovation leading development. The equipment manufacturing sector upgrades to create "Zero-carbon Factories" based on the national "Green Factories", promoting the deep integration of advanced manufacturing and modern services, and building a new pattern of "Intelligently Made by Everbright".

本集團的環保業務主要分為環保能源、環保水務、綠色環保三大板塊。其中環保能源業務是本集團最具規模的核心業務板塊，主要透過綠色科技處理生活垃圾，有效減少人均環境足跡，並致力保護城市珍貴的土地資源；環保水務業務嚴格遵循國家標準，專業處理城市及工業污水，提供高質量的工業用回用水，改善水質和衛生問題；綠色環保業務則利用農林廢棄物等生物質原材料，將其轉化成電力和熱能，避免農林秸稈露天焚燒，大幅改善農村地區的空氣質素。其中，環保能源和綠色環保業務兩項業務協同發展，顯著提升了中國可再生能源的使用比重，彰顯出光大環境對中國綠色能源發展的貢獻。此外，環境研究院作為光大環境核心科技創新的引擎及成果轉化平台，持續追蹤國際環保前沿技術，推動科技創新引領發展的戰略構想；裝備製造板塊以國家「綠色工廠」為基礎升級打造「零碳工廠」，促進先進製造與現代服務的深入融合，構建「光大智造」的嶄新格局。

While focusing on the development of environmental protection business, Everbright Environment actively implements measures to reduce the negative impacts of its operations on the environment and natural resources. We put forward the concept of “Reduce Pollution and Carbon to Enhance Green Performance Together” and are committed to providing high-quality environmental services, continuously improving human settlements and the ecological environment. We maintain our established development plan while actively pursuing the national goals of “Peaking Carbon Emissions” and “Achieving Carbon Neutrality”. At the same time, through cooperation with all sectors of society, we fulfil our corporate citizenship responsibilities and promote a shared interest community between the government, businesses, and the public. Our goal is to jointly build an ecological society, promote green and low-carbon development with practical actions, and fully support the nation’s environmental protection initiatives to address climate change.

在發展環保業務的同時，光大環境積極推行多項措施，以減少公司運營對環境和自然資源的負面影響。我們提出「減污築綠、降碳添綠、共建共融」的理念，致力於提供優質環境服務，持續改善人居及生態環境；在保持既定發展規劃的同時，積極踐行國家「碳達峰」和「碳中和」的目標；同時透過與社會各界的合作，履行企業公民之責，促進「政企民」利益共同體。我們的目標是共建生態社會，並以實際行動推動綠色低碳發展，全力支持國家應對氣候變化的環保倡議。

Highlights 2024 二零二四亮點

Everbright Environment was included in the Dow Jones Sustainability Emerging Markets Index for the ninth consecutive year

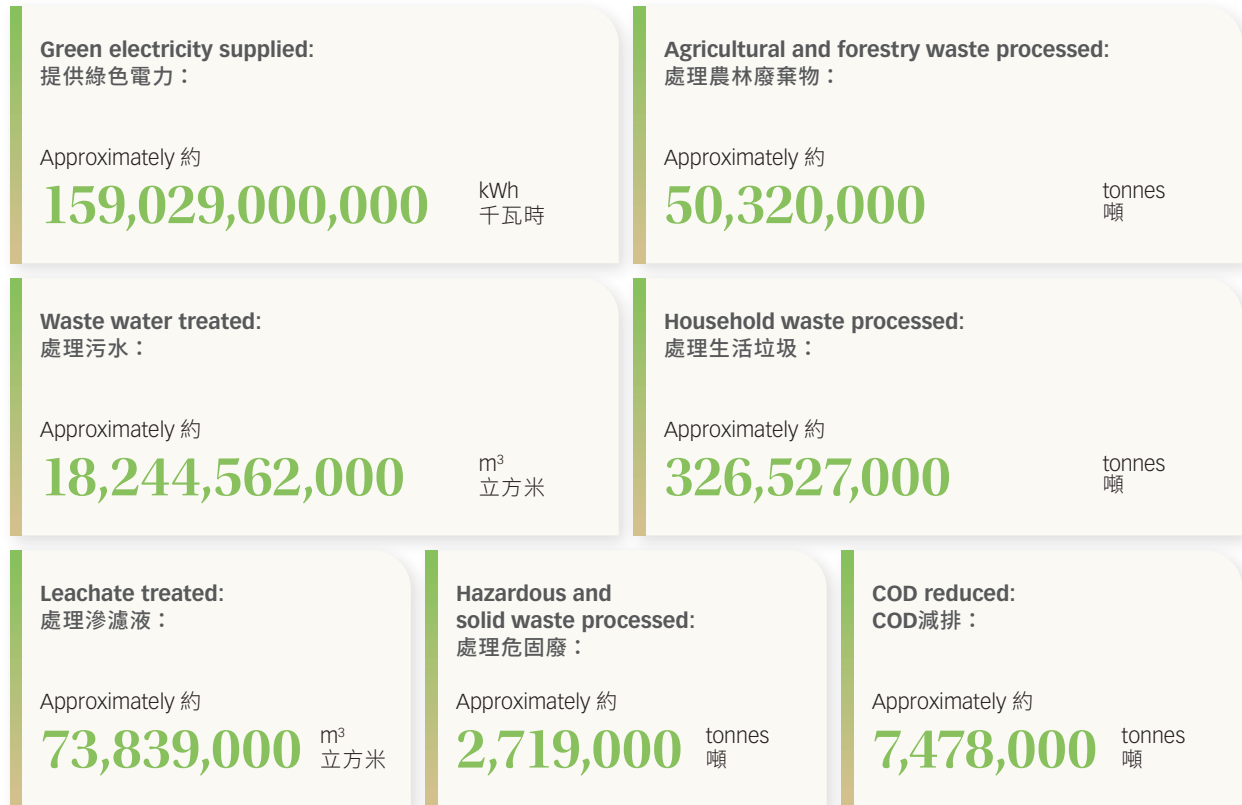
光大環境連續第九年入選道瓊斯可持續發展新興市場指數

With its continuous outstanding performance, Everbright Environment has been selected into the Dow Jones Sustainability Emerging Markets Index for the ninth consecutive year. It is one of the only six companies from the PRC that have been included in the index this year.

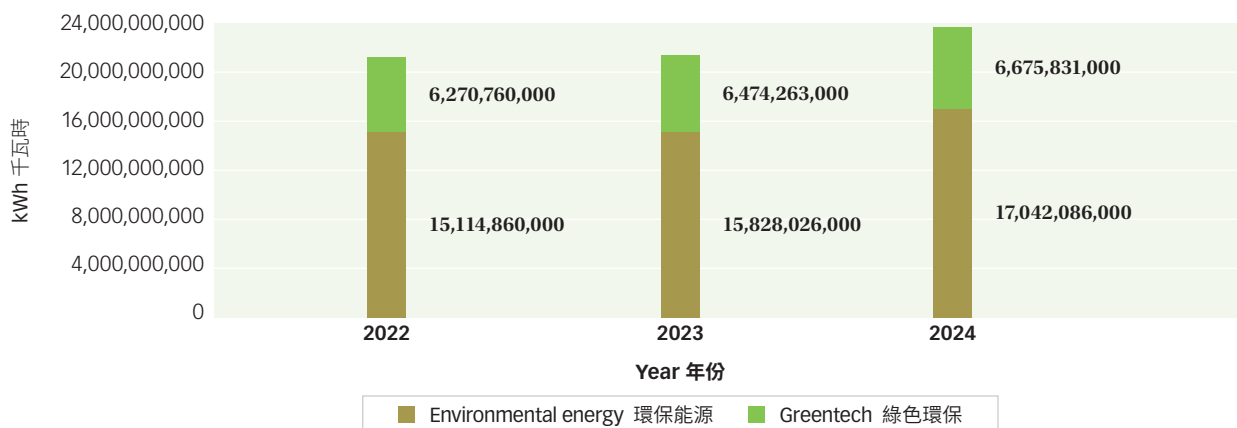
光大環境憑藉持續優異的表現，連續第九年入選道瓊斯可持續發展新興市場指數，成為入選的六家中國內地企業之一。

Since the commissioning of the Group's first environmental protection project in 2005

自二零零五年本集團首個環保項目運行以來



On-grid Green Electricity Sold by Sector 按板塊分類的綠色上網電量



Environmental Management Overview

The Group adheres to the development goal of “To Become a World-class Integrated Environmental Service Provider with Chinese Characteristics” and places great importance on the environmental impacts of its business operations. The Group upholds its mission of being “Devoted to Ecology and Environment for a Beautiful China” and its core value of “To Create Investment Value and Undertake Social Responsibility”. We focus on the environmental impacts brought by our operations and maintain strict oversight over the environmental management of all projects.

General Principles of Safety and Environmental Management serves as an important guideline, providing a clear framework for establishing a comprehensive environmental management system for the Group. It effectively promotes the implementation of environmental management and minimises the burden on the environment and natural resources caused by the Group. This policy not only offers detailed and specific guidance but also presents a comprehensive and clear view of the potential environmental impacts arising from the Group’s operations. The Group has also developed a series of supporting systems and guidelines, as well as provided institutionalised training mechanisms to ensure the effective implementation of these systems. Please refer to Appendix V for the relevant systems and guidelines.

環境管理概覽

本集團堅守「打造具有中國特色的世界一流環境綜合服務商」的發展目標，高度重視企業運營帶來的環境影響，秉持「情繫生態環境，築夢美麗中國」的企業使命，以「創造投資價值，承擔社會責任」作為企業追求，在所有項目中對環境管理嚴格把關。

《安全環境管理總則》作為我們的重要綱領，為公司建立完善的環境管理體系提供了明確的框架，有效推進環境管理的實施，並減輕光大環境對環境及自然資源造成的負擔。該政策不僅提供了詳盡具體的指引，更全面清晰地呈現了本集團運營中可能產生的各類環境影響。本集團亦制定了一系列配套制度及指引，同時提供制度化培訓機制，以確保制度之有效落實。相關制度與指引請參見附錄V。

Six Key Areas of the Corporate Policy on Environmental Management

《環境管理企業政策》的六大領域



The Group continues to thoroughly enforce the ESHS Management System, ISO 14001 Environmental Management System, and environmental and safety protocols, while extensively utilises technology to enhance the operational effectiveness of the entire system. The Group also sets up the Safety and Environmental Management Committee to further enhance the efficiency and reliability of environmental monitoring.

光大環境堅持全面且深入地落實ESHS管理體系、ISO14001環境管理體系及環境與安全制度，並廣泛利用科技，增強全系統的運營成效。本公司亦成立了安全與環境管理委員會，進一步提升環保監督工作的效率與可靠性。



Promote the ESHS Management System and strictly implement various environmental and safety protocols

推動ESHS管理體系，嚴格執行各環境與安全制度

Standardise the management of project investment, construction, and operational processes to improve overall operational efficiency and effectiveness.

增強項目投資、建設及運營管理流程中各環節的規範化管理，提升整體運營效率和成效。



Promote ISO 14001 Environmental Management System in operating projects

於運營項目推行ISO 14001環境管理體系

Regularly review the collected environment-related data, evaluate the effectiveness of the environmental management process, and continuously improve the environmental management system.

定期審查所收集的環境相關數據，評估環境管理流程的有效性，並持續改善環境管理體系。



Set up Safety and Environmental Management Committee

成立安全與環境管理委員會

Regulate, monitor, and supervise the implementation of environmental and safety measures across all business sectors of the Group.

重點規範、監督、督導本集團各板塊環境及安全工作的實施。



Strengthen environmental management through technology

以科技加強環境管理

By connecting to the Ministry of Ecology and Environment's database, the air emissions and waste water discharge data of all Everbright Environment projects are updated in real-time on the relevant platforms; adopting new management models such as "Internet +" and "Digitalisation and Intelligence", and utilising advanced technologies like cloud computing, the Internet of Things (IoT), and big data, a new online environmental management information platform is being developed.

通過與生態環境部資料庫聯網，實時更新光大環境下各項目廢氣和廢水的排放數據；並採用「互聯網+」和「信息化、智慧化」的新型管理模式，透過雲計算、物聯網、大數據等新技術建立新型在線環境管理信息平台。

Meanwhile, the Group conducts a comprehensive evaluation of environmental and social risks before making investments in any projects and ensures that all necessary permits and environmental impact assessment reports are obtained prior to project commencement. From the construction phase to the completion and commissioning of each project, we strictly adhere to relevant environmental laws and regulations and proactively cooperate with local environmental authorities for monitoring. This includes continuous real-time emissions monitoring, regular sampling and analysis, as well as ad hoc environmental due diligence audits. Through this comprehensive monitoring and auditing system, we can promptly identify and mitigate potential environmental risks, minimising the environmental impact of project operations.

Community Development

During the planning stage of each project, the project company must develop a stakeholder participation plan, which serves as an essential reference for monitoring and reporting on community engagement efforts for each project. The plan should include the identification of stakeholders, proposed consultation methods and frequency, resource allocation and responsibility planning, as well as key performance indicators. This plan will be managed and updated throughout the entire project lifecycle, from planning to operation. Based on this participation plan, the Group is committed to:

- identifying local stakeholders and their needs, as well as supporting and collaborating with local community groups;
- establishing a consultation mechanism with the community, effectively allocating resources to address community development needs;
- creating job opportunities in local communities to foster long-term economic growth; and
- encouraging employees to use their expertise in volunteering and supporting community development, benefiting local communities.

與此同時，本集團在投資前會對項目的環境和社會風險進行全面的評估，並確保在項目開工前取得必要的許可證和環評報告。從項目建設至竣工投產的每一個階段，我們均嚴格遵守相關環保法律法規，並主動接受當地環保部門的監測，包括環境排放連續在線監測、定期採樣分析，以及不定期環境盡職審核等。通過這套完整的監測和審核體系，我們得以及時發現並規避潛在的環境風險，並將項目運營對環境的影響最小化。

社區發展

在項目的規劃階段，持份者參與計劃是項目公司必須制定的材料，也是監測和匯報每個項目在社區開展工作的重要參考。該計劃須涵蓋如何辨認持份者、建議協商方法和頻率、資源配置與責任規劃，以及關鍵績效指標。此份參與計劃將在項目的全生命週期（從規劃到運營）中不斷進行管理及更新。基於此份參與計劃，本集團致力於：

- 明確當地持份者及其需求，深化與當地社區團體的合作關係；
- 確立與社區協商的機制，有效分配資源以積極解決社區發展的需求；
- 為當地社區創造就業機會以促進長期經濟增長；及
- 積極鼓勵員工發揮專業知識，參與各類志願服務支持社區發展，造福當地社區。

Developing Environmental Protection Business

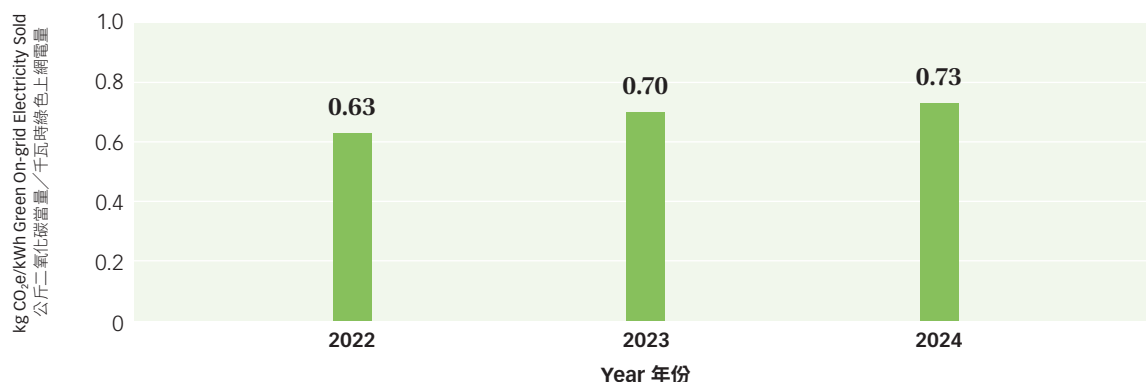
The “Not-In-My-Backyard” (“NIMBY”) effect is a significant issue for waste disposal companies. With the goal of “Creating High-Quality Products and Building Brands”, Everbright Environment strives to achieve four key performance aspects for each project: plant appearance (garden-like factories), odour management (no unpleasant smells), noise control (no noise), and emissions standards (meeting emission requirements). The Group’s 19 waste-to-energy projects invested and constructed in Suzhou, Beilun, Boluo, Wujiang, Changzhou, Changzhou Xinbei, Nanjing, Rizhao, Weifang, Sanya, Ma’anshan, Yiyang, Hangzhou, Lantian, Nanyang, Harbin, Ninghai, Xinyang, and Wuxi Xidong have been awarded the “National AAA-Rated Waste-to-Energy Plants” certification, with the Group’s Shenyang and Xiqing projects also being awarded the “National AAA Tourist Attractions”, fully recognising the Group’s efforts to improve project quality and environmental performance.

In addition, envirotech has actively promoted the pilot development of carbon assets under the international VCS program. It has completed the VCS registration filing for the Group’s Wuwei Project and the collection and collation of relevant data for more than ten of its waste-to-energy projects, in preparation for the resumption of the CCER scheme.

GHG Emissions Management

Everbright Environment discloses all three carbon emissions scopes in absolute figures and intensities. In 2024, the Group generated 0.73 kg of CO₂e per kWh of on-grid green electricity sold.

GHG Emissions Intensity in the Past Three Years 過往三年溫室氣體排放強度



發展環保業務

對於垃圾處理企業來說，「鄰避效應」是一個重要話題。光大環境以「建精品、創品牌」為目標，力爭每個項目做到「四個經得起」，即經得起看（花園式工廠）、經得起聞（沒有異味）、經得起聽（沒有噪音）、經得起測（達標排放）。本集團在蘇州、北崙、博羅、吳江、常州、常州新北、南京、日照、濰坊、三亞、馬鞍山、益陽、杭州、藍田、南陽、哈爾濱、寧海、信陽及無錫錫東投資建設的十九個垃圾發電項目，已獲得國家「AAA級生活垃圾焚燒廠」評定，本集團的沈陽及西青項目亦被評為「國家AAA級旅遊景區」，本集團一直以來為提升項目品質和環境表現作出的努力獲得充分肯定。

此外，環境研究院積極推進國際VCS計劃的碳資產開發試點工作，並已完成旗下武威項目的VCS註冊備案以及旗下十餘個垃圾發電項目相關資料的收集整理，為國家核證自願碳減排的重啟做好準備。

溫室氣體排放管理

光大環境積極披露碳排放三個範圍的絕對數值和強度。二零二四年，本集團每提供一度上網綠色電力產生0.73公斤二氧化碳當量。

The increase in Scope 1 emissions is attributed to the growing number of operating projects each year. The large project portfolio leads to a rise in total GHG emissions. To ensure comprehensive transparency in carbon emissions disclosure, we have continued to expand the reporting boundary for Scope 3 emissions and enhance the accuracy of third-party data since 2021. This includes indirect emissions from the third-party transportation of waste and biomass to project companies, as well as indirect emissions from the transportation of stabilised fly ash and bottom ash from project companies to final disposal sites.

GHG Emissions and Displacement Calculation Methodology

During the Reporting Period, we continued to use the same GHG emission and displacement calculation methods as last year. Our calculation principles are primarily based on the CDM (Clean Development Mechanism) methodology, but we have adjusted certain key parameters to better align with the PRC context.

For example, in the calculation of emissions from waste incineration, we referred to the total carbon content (FCC) of various types of waste as documented in *Household Waste Incineration Engineering Technology* by Bai Liang Cheng. For the calculation of landfill emission displacement from waste-to-energy projects, we selected methane conversion factors (MCF), the proportion of degradable organic carbon (DOCj), and the degradation rates (Kj) of different types of waste that are more applicable to the local context, instead of the default values used in the CDM methodology.

Since 2023, we have adopted the actual measured moisture content of municipal solid waste to better reflect the real situation and improve data accuracy, replacing the previously used higher default moisture content values. There are no discrepancies between the GHG emissions and displacement data.

由於本集團每年運營的項目數量在增加，整體範疇一的排放量也隨之增加。龐大的項目組合意味著溫室氣體總排放量的增加。為實現碳排放披露的全面透明，我們自二零二一年起持續擴大範疇三排放的匯報範圍和改善第三方數據準確度，包含第三方運送垃圾及生物質至項目公司的間接排放，以及從項目公司運送穩定化處理後的飛灰和爐渣至最終處置點的間接排放。

溫室氣體排放量及替代量計算方法

報告期內，我們繼續沿用與去年相同的溫室氣體排放和替代量計算方法。我們的計算原則主要基於CDM方法學，但在某些關鍵參數上進行調整，以更符合中國國情。

例如，在垃圾焚燒排放計算中，我們參考了白良成著作《生活垃圾焚燒處理工程技術》中的各類垃圾總碳含量(FCC)。而在垃圾發電排放替代量計算中，我們選用了符合更符合項目當地情況的甲烷轉換因子(MCF)、可降解有機碳比例(DOCj)及各類垃圾的降解率(Kj)，而非CDM方法學中的默認數值。

自二零二三年起，為進一步提高數據準確性，我們採用各項目實測的生活垃圾含水率替代之前較高的默認值。溫室氣體排放和替代數據沒有不相符之處。

The calculation methods for GHG emissions and emission displaced are primarily referred to the following reference materials: 溫室氣體的排放量及替代量的計算方法主要參考資料如下：

GHG Emissions and Emission Displacement 溫室氣體的排放量及替代量	<i>ACM0022: Alternative Waste Treatment Processes (Version 2.0)</i> 《ACM0022：多選垃圾處理方式（2.0版）》 <i>AM0080: Mitigation of Greenhouse Gases Emissions with Treatment of Waste Water in Aerobic Waste Water Treatment Plants (Version 1.0)</i> 《AM0080：透過在有氧污水處理廠處理污水減少溫室氣體排放（1.0版）》 <i>ACM0018: Electricity Generation from Biomass Residues in Power-Only Plants (Version 3.0)</i> 《ACM0018：純發電廠利用生物廢棄物發電（3.0版）》 <i>ACM0006: Electricity and Heat Generation from Biomass (Version 14.0)</i> 《ACM0006：生物質熱電聯供（14.0版）》 <i>AMS-I.C.: Thermal Energy Production With or Without Electricity (Version 20.0)</i> 《AMS-I.C.：電力或非電力用戶提供熱能（20.0版）》 <i>Household Waste Incineration Engineering Technology</i> 《生活垃圾焚燒處理工程技術》 <i>Methodological tool: Project and Leakage Emissions from Transportation of Freight</i> 《工具公路貨運導致的項目和洩露排放計算工具》 ICAO Carbon Emissions Calculator 國際民用航空組織碳排放計算器
Emissions Factors Related to Energy Combustion 與能源燃燒有關的排放因子	<i>2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories</i> 《二零零六年IPCC國家溫室氣體清單指南二零一九年修訂版》
Emissions Factors Related to Electricity Emissions 電力排放因子	2023 Regional Baseline Grid Emissions Factor for Emission Reduction Projects in China 二零二三年度減排項目中國區域電網基線排放因子 2022 National Average CO₂ Emission Factor for Electricity in China 二零二二年全國電力平均二氧化碳排放因子 2023 Singapore National Average Grid Emission Factor 二零二三年新加坡平均電力排放因子 2023 Poland National Average Grid Emission Factor 二零二三年波蘭平均電力排放因子 2023 Vietnam National Average Grid Emission Factor 二零二三年越南平均電力排放因子 2023 Hong Kong Grid Emission Factor (from CLP and Hong Kong Electric) 二零二三年香港平均電力排放因子 (來自中華電力和香港電燈)
Global Warming Potential 全球暖化潛勢	<i>IPCC Sixth Assessment Report</i> 《IPCC第六次評估報告》

GHG Emissions Statistics in 2024

二零二四年溫室氣體排放統計

Unit: tonnes of CO₂e
單位：噸二氧化碳當量

Operation Unit 運營單位	Emission/Displacement Sources 排放源／替代排放源	GHG Amounts 溫室氣體量
Total GHG Emissions 溫室氣體排放總量		17,273,758
Total Scope 1 (Direct Emission) 範疇一（直接排放）排放總量		16,460,790
Environmental energy 環保能源	Fuel consumption by operation of facilities; incineration of household waste ⁽¹⁾ ; fugitive methane emissions from waste water treatment plants 設備運營的燃料消耗、生活垃圾 ⁽¹⁾ 焚燒、污水處理設施的無組織甲烷排放	14,772,448
Environmental water 環保水務	Fuel consumption by operation of facilities; fugitive methane emissions from waste water treatment projects; nitrous oxide emissions from the biological treatment process 設施運營的燃料消耗、污水處理項目的無組織甲烷排放、生物處理過程中的氧化亞氮排放	28,547
Greentech 綠色環保	Fuel consumption by operation of facilities; incineration of household waste ⁽¹⁾ and general industrial waste; incineration of biomass raw material; incineration of hazardous waste; fugitive methane emissions from waste water treatment plants 設備運營的燃料消耗、生活垃圾 ⁽¹⁾ 和一般工業固廢焚燒、生物質原材料焚燒、危險廢物焚燒、污水處理設施的無組織甲烷排放	1,642,700
Others ⁽²⁾ 其他 ⁽²⁾	Fuel consumption by operation of facilities 設施運營的燃料消耗	17,094
Total Scope 2 (Energy Indirect Emission) 範疇二（能源引致的間接排放）排放總量		466,031
Environmental energy 環保能源		15,587
Environmental water 環保水務	Consumption of purchased non-renewable electricity and heat 消耗的外購非再生能源電力和熱力	388,471
Greentech 綠色環保		53,437
Others ⁽²⁾ 其他 ⁽²⁾		8,536

Unit: tonnes of CO₂e
單位：噸二氧化碳當量

Operation Unit 運營單位	Emission/Displacement Sources 排放源／替代排放源	GHG Amounts 溫室氣體量
Total Scope 3 (Other Indirect Emission) 範疇三 (其他間接排放) 排放總量		346,937
Environmental energy 環保能源	Fuel consumption from the delivery of waste by third parties; fuel consumption for the delivery of stabilised fly ash by third parties; fuel consumption for the delivery of bottom ash by third parties; air travel by employees 第三方運送垃圾至項目公司的燃油消耗、第三方運送穩定化的飛灰的燃油消耗、第三方運送爐渣的燃油消耗、員工飛機差旅	246,543
Environmental water 環保水務	Fuel consumption for the transportation of sludge by third parties; nitrous oxide released from effluent; air travel by employees 第三方運送污泥的燃油消耗、從出水中釋放的氧化亞氮、員工飛機差旅	25,919
Greentech 綠色環保	Fuel consumption from the delivery of biomass and waste by third parties; fuel consumption for the delivery of stabilised fly ash by third parties; fuel consumption for the delivery of bottom ash by third parties; air travel by employees 第三方運送生物質原材料及垃圾至項目公司的燃油消耗、第三方運送穩定化的飛灰的燃油消耗、第三方運送爐渣的燃油消耗、員工飛機差旅	73,750
Others ⁽²⁾ 其他 ⁽²⁾	Air travel by employees 員工飛機差旅	724
GHG emissions intensity (kg CO₂e/kWh) 溫室氣體排放強度 (公斤二氧化碳當量／千瓦時綠色上網電量)		0.73
GHG emissions intensity (kg CO₂e/HK\$'000) 溫室氣體排放強度 (公斤二氧化碳當量／港幣千元)		571
GHG emissions displacement (Tonne CO₂e)⁽³⁾ 溫室氣體排放替代量 ⁽³⁾		26,414,402
Environmental energy 環保能源	Household waste decomposition in landfills; fossil fuel-based electricity and heat 填埋場生活垃圾分解、化石燃料發電與供熱	21,124,949
Environmental water 環保水務	Reduction of N ₂ O released from effluent through waste water treatment; fossil fuel-based electricity 透過污水處理減少氧化亞氮排放、化石燃料發電	118,777

Unit: tonnes of CO₂e
單位：噸二氧化碳當量

Operation Unit 運營單位	Emission/Displacement Sources 排放源／替代排放源	GHG Amounts 溫室氣體量
Greentech 綠色環保	Household waste decomposition in landfills; uncontrolled burning or natural degradation of biomass; fossil fuel-based electricity and heat 填埋場生活垃圾分解、生物質無序燃燒或自然降解、化石燃料發電與供熱	5,170,676
Others ⁽²⁾ 其他 ⁽²⁾	Not Applicable 不適用	—
GHG emissions reduction (Tonne CO ₂ e) ⁽⁴⁾ 溫室氣體減排量 ⁽⁴⁾		9,140,644

Notes:

附註：

- (1)

GHG emissions (scope 1) from the incineration of household waste are calculated based on the fraction of fossil carbon in total carbon content of the household waste. Therefore, the amount of such GHG emissions may substantially fluctuate from time to time due to the varying composition of the household waste received, which is beyond Everbright Environment’s control.
- (2)

Other operation units include envirotech, equipment manufacturing, headquarters, representative offices and offices.
- (3)

“GHG Emissions Displacement” refers to the emissions that could otherwise have been produced from sources such as the use of fossil fuel power and from waste decomposition at the landfills, in the absence of Everbright Environment’s key projects (waste-to-energy and integrated biomass utilisation in particular). It is an optimistic estimation based on referenced CDM methodologies. The actual contribution is dependent on the “without project” scenario of each location, which may vary case by case. The value is not a confirmation of GHG removal from the atmosphere and is for reference only.
- (4)

GHG emissions reduction refer to total GHG emissions displacement minus total GHG emissions. The emissions reduction in 2024 is lower than in previous years, mainly due to the decrease in the regional baseline grid emission factors in China. Changes in the emission factors led to a decrease in GHG emissions displaced per kWh of on-grid electricity, thereby affecting the overall GHG emissions reduction. This figure is for reference only.
- (1)

生活垃圾焚燒引致的溫室氣體排放（範疇一）以生活垃圾中化石碳佔總碳的比例為計算基礎。因此，生活垃圾成分的差異可對此溫室氣體排放不時造成大幅波動，這不屬於光大環境的控制範圍之內。
- (2)

其他運營單位包括了環境研究院、裝備製造、總部、代表處及辦事處。
- (3)

「溫室氣體排放替代量」是指在沒有光大環境的重點項目（尤其是垃圾發電和生物質綜合利用）的情況下原本可能產生的排放量，例如使用化石燃料發電和垃圾在填埋場分解產生的溫室氣體排放。這是基於參考CDM方法得出的一個樂觀估計。實際貢獻取決於每個地點的「沒有項目」情境，而個別具體狀況可能會有所不同。該值並非從大氣中移除溫室氣體的確認值，數字僅供參考。
- (4)

溫室氣體減排量是指溫室氣體排放替代總量減去溫室氣體排放總量。二零二四年減排量較往年低，主要是因為中國區域電網基準線排放因子的下降。排放因子的變化導致每單位綠色上網電量所替代的碳排放量減少，進而影響整體溫室氣體減排量。該數字僅供參考。

Project Development under the International VCS Program 國際VCS計劃下的項目開發

Everbright Environment has been at the forefront in the areas of carbon asset management and carbon emission reduction. In 2022, envirotech launched the project developmental work under the international VCS Program. Envirotech is committed to proactively developing and managing the carbon assets by working closely with the operation department of the environmental energy sector, in order to convert the GHG emission reductions and removals from certified projects into tradable carbon credits under voluntary emission reduction and trading mechanisms. VCS is a voluntary emission reduction mechanism established by the non-profit organisation VERRA and is the most widely used and largest voluntary emission reduction mechanism in the world. Everbright Environment has opened an official VCS carbon asset management account and is qualified for independent trading. The Group's Wuwei Project has completed the emission reduction project identification, the project design document preparation, and the third-party review, which has successfully been registered as a VCS project. According to preliminary estimates, the Wuwei project can contribute an average of about 37,200 tonnes of carbon emission reduction per year, with a total of about 372,000 tonnes in ten years. In addition, envirotech has also independently developed a carbon emission and carbon asset management system, which has obtained phased progress, and is currently promoting the trial of some functional modules, including the project management system for waste-to-energy emission reduction, corporate carbon emission accounting, as well as accounting and trading strategic support. The research and development of this system will assist with developing the VCS project and help us realise the systematic, process-based, and digital management of carbon assets.

光大環境在碳資產管理和碳減排領域一直走在行業前沿。環境研究院於二零二二年開展國際VCS計劃下的項目開發工作，通過與環保能源板塊運營部緊密合作，在自願減排和自願碳排放權交易的機制下，將認證項目中的溫室氣體減排量和清除量轉化為可交易的碳信用額，致力於對碳資產進行積極主動的開發與管理。VCS是由非盈利組織VERRA設立的自願減排機制，也是全球範圍內使用最廣、規模最大的自願減排機制。光大環境已開設VCS官方碳資產管理帳戶，並具備自主交易資格，本集團武威項目也已經完成減排項目識別、項目設計文件編制以及項目的第三方審核工作，並成功注冊備案為VCS項目。初步測算，武威項目年平均可貢獻的碳減排量約3.72萬噸，十年共計約37.2萬噸。此外，環境研究院還自主開發了一個碳排放與碳資產管理系統，並取得了階段性成果，目前環境研究院正在推進部分功能模組的試用，包括垃圾發電減排項目管理系統、企業碳排放核算，以及核算與交易策略支持等功能。該系統的研發有助於配合正在開發的VCS項目，幫助企業實現碳資產的系統化、流程化、數字化管理。

Air Emissions Management

With the continuous advancement of industrialisation and urbanisation, air pollution has become an increasingly severe issue, posing unprecedented challenges to society. In response to the air pollution problem, Everbright Environment actively fulfils its social responsibilities, striving to improve domestic environmental quality and promote sustainable development, while working to minimise the negative impacts of air emissions on the environment.

The Group implements a series of stringent operational procedures, high-frequency monitoring mechanisms, and meticulous supervision to ensure the effective control of various air pollutants emitted during combustion processes, such as particulate matter (PM), sulphur dioxide (SO₂) and nitrogen oxides (NO_x). At the same time, the Group also emphasises the control of fugitive emissions at projects. All odour-generating areas are maintained under negative pressure to ensure that odorous gases are properly collected and treated to prevent air pollution. In biomass integrated utilisation projects, the Group applies self-developed technologies, including low-nitrogen combustion, flue gas recirculation, selective non-catalytic reduction (SNCR) for denitrification optimisation, and active molecular oxidation, to achieve ultra-low emission levels (with NO_x concentrations below 50 mg/m³), ensuring that flue gas emissions meet environmental standards. Environmental emission targets and performance for all operating waste-to-energy projects can be found in the "Environmental Management" section of Everbright Environment's website (www.cebenvironment.com). During the Reporting Period, all of the Group's projects met the required environmental standards for emissions.

大氣排放管理

隨著工業化和城市化進程加速，空氣污染問題日益嚴峻，給社會帶來前所未有的新挑戰。在應對空氣污染問題的方面，光大環境積極履行社會責任，致力於推動國內環境質量提升和可持續發展，全力減少廢氣排放對環境的負面影響。

本集團通過一系列嚴密的操作程序、高頻率的檢測機制和精細化的監督，確保在燃燒過程中所排放的各類大氣排放物，如顆粒物 (PM)、二氧化硫 (SO₂) 及氮氧化物 (NO_x) 等得到有效控制。同時，本集團亦重視對項目無組織排放的管控，在各臭氣產生區域均保持負壓狀態運作，以確保合理收集和處理臭味氣體，避免造成空氣污染。在生物質綜合利用項目中，本集團廣泛應用了自主研發的低氮燃燒、煙氣再循環、選擇性非催化還原脫硝技術 (SNCR) 優化、活性分子氧化等技術，致力於使得生物質的燃燒實現超淨排放 (NO_x 排放濃度低於 50mg/m³)，確保項目的煙氣達標排放。各運營垃圾發電項目的環境排放濃度目標及達標表現可於光大環境網站的「環境管理」部份 (www.cebenvironment.com) 查看。在報告期內，光大環境所有項目的環境排放均達標。

Waste-to-energy Projects 垃圾發電項目	The Group's waste-to-energy projects are designed and operated fully in compliance with all applicable national environmental regulations and standards, including the <i>Standard for Pollution Control on the Municipal Solid Waste Incineration</i> (GB 18485-2014), local standards, as well as other requirements as set forth in the environmental impact assessment reports approved by the local government⁽¹⁾, while the daily average values of online continuously monitored parameters are well below the respective emissions limits as stipulated under the <i>Industrial Emissions Directive</i> (2010/75/EU) and its relevant annexes and amendments ("EU 2010 Emission Standards"). 本集團的垃圾發電項目的設計和運營完全符合所有適用的國家環境規例和標準，當中包括《生活垃圾焚燒污染控制標準》(GB 18485-2014)、相關地方標準及獲當地政府審批的環境影響評價報告中的其他要求⁽¹⁾。煙氣在線監測指標日均值更全面優於歐盟《工業排放指令》(2010/75/EU)及其相關附表／修訂中的相關排放限值（「歐盟2010排放標準」）。	Other air pollutants such as dioxins and various heavy metals are tested by Everbright Environment with frequencies much higher than the national requirements. For instance, the testing of dioxins for all the Group's waste-to-energy projects in the PRC is conducted at least four times a year, which is significantly higher than the national requirement of once per year. Dioxin concentrations of all samples are substantially lower than the emissions limits of the <i>Standard for Pollution Control on the Municipal Solid Waste Incineration</i> (GB 18485-2014). 光大環境對煙氣二噁英和重金屬等其他污染物的監測頻率均高於國家要求。其中，本集團在中國的所有垃圾發電項目的煙氣二噁英的檢測頻率高至每年至少四次，遠高於國家每年一次的要求，所有煙氣二噁英檢測樣本濃度均低於《生活垃圾焚燒污染控制標準》(GB 18485-2014)中所列的限值。
Integrated Biomass Utilisation Projects 生物質綜合利用項目	Apart from household waste incineration operations as explained above, all of the Group's biomass combustion operations meet the <i>Emission Standard of Air Pollutants for Thermal Power Plants</i> (GB 13223-2011), local standards, as well as other requirements as set forth in the environmental impact assessment reports approved by the local government⁽²⁾. 除上述生活垃圾焚燒運營概況外，本集團生物質燃燒的運營則達《火電廠大氣污染物排放標準》(GB 13223-2011)、相關地方標準及獲當地政府審批的環境影響評價報告中的其他要求⁽²⁾。	

Notes:

附註：

⁽¹⁾ Air pollutants regulated by relevant national laws and regulations mainly include dioxins, PM, SO₂, NO_x, hydrogen chloride, carbon monoxide, mercury and other heavy metals (and their chemical compounds), odour pollutants.

⁽¹⁾ 受相關國家法律及規例規管的大氣污染物主要包括二噁英、顆粒物、二氧化硫、氮氧化物、氯化氫、一氧化碳、汞和其他重金屬（及其化合物）、惡臭污染物。

⁽²⁾ Major air pollutants regulated by relevant national laws and regulations include PM, SO₂, NO_x.

⁽²⁾ 受相關國家法律及規例規管的大氣污染物主要包括顆粒物、二氧化硫、氮氧化物。

The Group strives to ensure that all stakeholders can conveniently access its projects' environmental performance information. Since August 2015, the Group has proactively implemented a real-time disclosure mechanism for emissions data and environmental management information related to its projects. Specific measures include updating the hourly average emissions data for all operating waste-to-energy projects on Everbright Environment's website, which has significantly enhanced the real-time nature and transparency of information disclosure. Since 2 January 2020, in accordance with the environmental management requirements of the Ministry of Ecology and Environment of the PRC, the Group has ensured that the daily average values of five flue gas indicators and furnace temperature data from its waste-to-energy projects are uploaded in real-time to the Ministry's automatic monitoring data information disclosure platform: <https://ljgk.envsc.cn/index.html>. Furthermore, to improve the efficiency and process of information sharing, the Group has actively upgraded its information-sharing platform, allowing the Hong Kong and Shenzhen headquarters to access real-time operational information of all projects. This ensures that all projects are in compliance with environmental standards and enables the timely reporting of project performance to stakeholders.

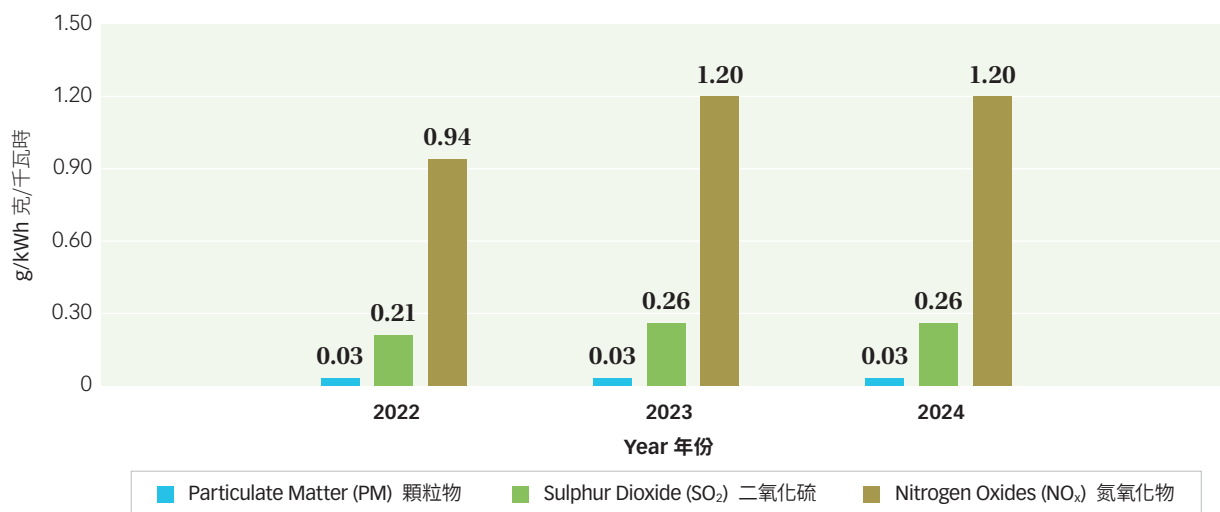
為確保各持份者能夠隨時隨地掌握我們項目的環境表現，自二零一五年八月起，本集團主動實施了項目的排放數據和環境管理信息的即時披露機制。具體措施包括每小時於光大環境網站更新旗下所有運營的垃圾發電項目的煙氣在線監測均值，開創性地增強了信息披露的實時性與透明度。自二零二零年一月二日起，本集團按照國家生態環境部環境管理要求，確保所有運營中的垃圾發電項目均將煙氣五項指標日均值和爐膛溫度數據實時接入國家生態環境部自動監測信息公開平台：<https://ljgk.envsc.cn/index.html>。此外，為進一步優化信息共享的效率與流程，本集團積極改進信息共享平台，讓香港及深圳總部能夠實時掌握所有項目運營狀況，確保所有項目達標運營，並能及時向本集團持份者報告項目的運營表現。

Key Air Emissions in 2024

二零二四年主要煙氣排放情況



Air Emissions per kWh of Green Electricity Generated in the Past Three Years 過往三年每千瓦時產生綠色電量的煙氣排放量



Energy and Materials Usage

In terms of energy conservation and consumption reduction, the Group actively explores low-carbon and low-energy consumption demonstration projects, focusing on waste-to-energy green technologies, including the waste-to-energy and methane-to-energy projects in the environmental energy sector; and the integrated biomass utilisation projects, solar energy and wind power projects in the greentech sector, all of which make use of the projects' own electricity to minimise the consumption of purchased electricity from non-renewable energy sources. On the other hand, due to the characteristics of the projects, waste treatment projects of environmental energy and greentech sectors pay special attention to the performance and efficiency of the boilers. Through regular maintenance and the use of advanced environmental protection and energy-saving technologies, the effective use of energy can be ensured, while at the same time reducing the use of boiler fuel and the consumption of energy and materials. In addition, the project companies of the Group also formulate various energy-saving measures according to their own circumstances, such as implementing electronic processes to reduce the number of official documents and the scale of meetings, formulating concrete energy-saving targets and measures, setting up dedicated energy-saving and consumption-reducing leading group to supervise energy saving practices, etc.

To ensure proper energy and inventory management, the Group records in detail the monthly energy and main materials consumption of each project company, with the regional management centre coordinating the integration work. Through analysing the collected data, the Group could clearly understand the resource utilisation situation in the business development process, thus allocate and adjust the energy and material usage accordingly. Data recording is also conducive to the Group's long-term resource management strategy to reduce resource wastage, so as to achieve sustainable energy saving and consumption reduction in the long run.

能源及物料使用及管理

在節能降耗方面，本集團深耕垃圾發電綠色技術，積極探索低碳低能耗示範項目建設。環保能源板塊的垃圾發電及沼氣發電項目，以及綠色環保板塊的生物質綜合利用、光伏發電及風電項目等，均可透過自產電力來盡量降低對外購非再生能源電力的依賴。同時，鑒於鍋爐的性能與效率是環保能源及綠色環保的各類垃圾處理項目中的關鍵因素，本集團通過定期維護保養及採用先進的環保節能技術，有效提升鍋爐燃料利用效率，並減少能源及物料的消耗。除此之外，本集團的各項目公司亦會按照各自情況自行制定針對性的節能措施並採取行動，如推行電子辦公以減少紙質公文數量和簡化會議規模、制定具體的節能目標、設立專門的節能降耗工作領導小組以監督節能工作等。

本集團建立了完善的能源管理體系，每月都會詳盡記錄各項目公司的能源和主要材料消耗量，並由區域管理中心統籌整合，確保能源的使用效益最大化和庫存的精確管理。通過數據收集與分析，本集團得以全面掌握各類資源在運營過程中的使用效率，進而優化能源和材料配置。這些數據記錄有助於本集團制定長期的資源管理計劃，有效防止資源浪費，以實現長期可持續的節能降耗。

Ideas on Energy Conservation

During the Reporting Period, project companies under the Group all actively carried out energy-saving and consumption reduction activities and implemented effective energy-saving measures. In the meantime, a number of projects even established their own energy-saving targets and evaluation systems. The key measures and targets are detailed below:

Energy-saving Measures

- Eliminate outdated and inefficient electrical equipment, and install industrial variable frequency drives on high-power motors in the production system to reduce electricity consumption
- Retrofit the cooling fans of the boilers' auxiliary burners to lower their power consumption rate
- Strengthen the inspection and cleaning of dust accumulation in the flue, to prevent blockages and reduce the energy consumption of the fans
- Incorporate equipment energy consumption management into the procurement process and prioritise the use of energy-efficient equipment and spare parts
- Enhance the management of waste water and overflow water in the plant to reduce the frequency of activating the rainwater pumps, thus decreasing their power consumption

節能巧思

報告期內，本集團旗下的各項目公司均積極展開內部的節能降耗活動及推進有效的節能措施。同時，更有多個項目自行建立了節能目標及評價考核制度。重點措施及目標詳列如下：

節能措施

- 淘汰落後低效的電器設備，並為生產系統的大功率電機加裝工業變頻調速器，降低用電消耗
- 對鍋爐輔助燃燒器的冷卻風機進行改造，以降低廠用電率
- 加強檢查及清理煙道的積灰，防止煙道堵塞，從而減少風機的運行耗能
- 將設備耗能管理納入採購流程，盡量採用低能耗的設備和備件
- 加強廠區排污及溢流水管理，減少雨水泵啟動次數，降低雨水泵電耗

In 2024, the Group's electricity consumption was 4,768,876,491 kWh; the proportion of self-generated electricity consumption was 83%.
二零二四年，本集團的電力消耗為4,768,876,491千瓦時；自發用電量比例為83%。

Energy-saving Targets

- The leachate transformers and waste circulation water transformers in the plants shall attain Grade II efficiency as specified in *Minimum Allowable Values of Energy Efficiency and the Energy Efficiency Grades for Power Transformers* (GB 20052-2020)
- The main transformer in the plants shall attain Grade II efficiency as specified in *Minimum Allowable Values of Energy Efficiency and the Energy Efficiency Grades for Power Transformers* (GB 20052-2020)
- Strive to reduce power consumption continuously and to increase the proportion of self-generated electricity consumption within the projects
- Retrofit the lighting system in the plant area so that the switching time is adjusted according to the hours of sunlight

Several waste-to-energy projects from the Group were selected as part of the first batch of green PPP project case studies by the National Development and Reform Commission ("NDRC"). These projects are aimed at setting an example for other environmental energy projects, while also promoting advanced green technologies and concepts to the industry and society to enhance the effectiveness of ecological development and environmental protection. The selected projects include the Jiangsu Changzhou Waste-to-energy Project ("Changzhou Project"), Hainan Sanya Waste-to-energy Project ("Sanya Project"), and Hunan Yiyang Waste-to-energy Project. The three projects collectively provide green electricity totalling about 580 million kWh per year.

節能目標

- 廠內的滲濾液變壓器、垃圾循環水變壓器需達到《電力變壓器能效限定值及能效等級》(GB20052-2020)中二級能效要求
- 廠內的主變壓器需達到《電力變壓器能效限定值及能效等級》(GB20052-2020)規定的二級能效要求
- 致力不斷降低電力消耗及提高項目自發電比例
- 技術改造廠區照明系統，根據日照時間變化調整開關時間

本集團多個垃圾發電項目入選國家發展和改革委員會(「國家發改委」)首批綠色PPP項目典型案例，致力於為其他環保能源項目發揮榜樣作用，同時向產業及社會推廣綠色先進技術和理念，提升生態建設和環境保護的效果。入選項目包括：江蘇常州垃圾發電項目(「常州項目」)、海南三亞垃圾發電項目(「三亞項目」)以及湖南益陽垃圾發電項目，三個項目每年共提供綠色電力約5.8億千瓦時。

Energy Consumption Statistics in 2024⁽¹⁾
二零二四年能源消耗統計⁽¹⁾

Unit: GJ 單位：吉焦

Operation Unit 運營單位	Diesel 柴油	Petrol 汽油	Natural Gas 天然氣	Liquefied Petroleum Gas 液化石油氣	Non-renewable Electricity 非再生能源電力	Renewable Electricity 可再生電力消耗
Environmental energy 環保能源	850,821	30,006	181,777	2,078	95,960	11,039,742
Environmental water 環保水務	674	4,290	296	3	2,530,265	33,539
Greentech 綠色環保	262,436	19,619	207,709	2	326,208	3,093,061
Others ⁽²⁾ 其他 ⁽²⁾	57,572	99,167	1,051	71	49,181	0
Total 總計	1,171,502	153,081	390,833	2,155	3,001,614	14,166,342

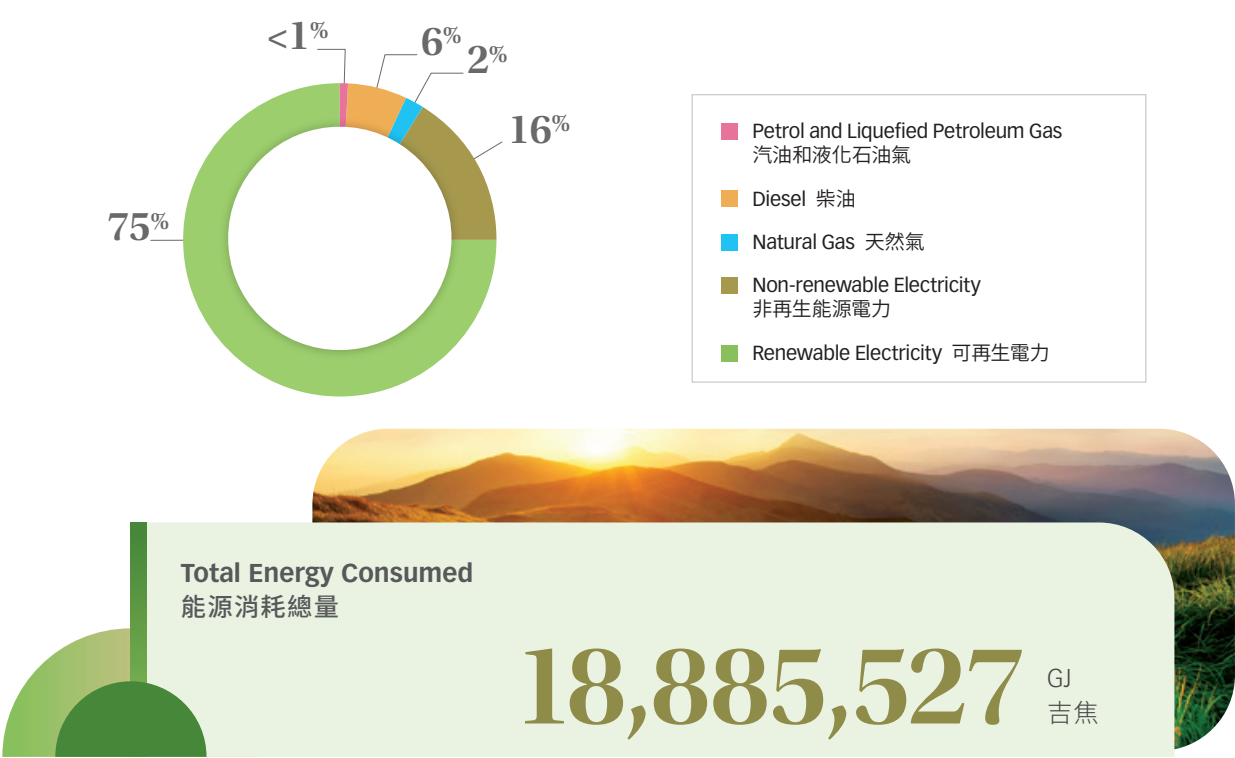
Notes:

- ⁽¹⁾ Relevant energy conversion factors from *China Energy Statistical Yearbook 2023* are adopted.
- ⁽²⁾ Other operation units include envirotech, equipment manufacturing, headquarters, representative offices and offices.

附註：

- ⁽¹⁾ 能源單位根據《中國能源統計年鑒2023》的參考系數作換算。
- ⁽²⁾ 其他運營單位包括環境研究院、裝備製造、總部、代表處及辦事處。

Energy Consumption Statistics in 2024
二零二四年能源消耗統計



Key Production Materials Consumption in 2024

二零二四年主要生產物料使用統計

Environmental energy 環保能源				Unit: Tonne 單位：噸
Lime 石灰	Activated carbon 活性碳	Ammonia water 氨水	Carbamide 尿素	
425,033	19,350	83,632	3,259	
Industrial sulphuric acid 工業硫酸	Industrial hydrochloric acid 工業鹽酸	Scale inhibitor 阻垢劑	Bactericide 殺菌劑	
2,252	20,002	1,125	924	
Cationic polyacrylamide (CPAM) 陽離子聚丙烯醯胺	Anionic polyacrylamide (APAM) 陰離子聚丙烯醯胺	Sodium hydroxide 氫氧化鈉	Sodium hypochlorite 次氯酸鈉	
1,729	9	335	1,532	
Liquid alkali 液碱	Citric acid 檸檬酸	Reducing agent (sodium bisulphite) 還原劑 (亞硫酸氫鈉)	PAC 聚合氯化鋁	
2,089	274	1,350	988	
Environmental water 環保水務				Unit: Tonne 單位：噸
pH adjustment 酸鹼調整	Coagulant & flocculant 凝結劑及絮凝劑	Disinfectant 消毒劑	Chemical oxidise 化學氧化劑	
38,350	168,167	46,185	22,830	
Carbon source 碳源	Biological treatment 生物處理	Other 其他		
275,535	185	16,502		
Greentech 綠色環保				Unit: Tonne 單位：噸
Lime 石灰	Activated carbon 活性碳	Ammonia water 氨水	Chelating agent 螯合劑	
117,506	1,882	39,933	3,760	

Water Use and Management

Water scarcity is an increasingly severe ecological and environmental issue facing humanity. However, Everbright Environment uses a significant amount of water resources in its daily operations, including drinking water, cleaning water, and washroom water. In addition, various production processes, such as unit cooling for waste-to-energy projects and integrated biomass utilisation projects, as well as the preparation of chemical solvents for projects like waste water treatment, also require large amounts of water. As a responsible enterprise, Everbright Environment actively responds to the national policies related to water use and water conservation, striving to reduce water consumption across projects and ensure the proper treatment of waste water. In the process of environmental impact assessments, we also consider the impacts on water resources to ensure that the rights of other stakeholders to access water are not violated.

During the Reporting Period, we adopted the Water Risk Filter tool released by the WWF to comprehensively assess the water stress of our projects, and to develop corresponding countermeasures for projects in areas with high water resource pressure.

Furthermore, through the network of environmental water companies spread across the country, the Group actively promotes the construction of a series of integrated water environmental treatment projects, including municipal and industrial waste water treatment, reclaimed water reuse, waste water source heat pumps, and river basin management projects. These initiatives have significantly improved the water conditions and sanitation standards in the PRC, substantially reducing the environmental damage caused by waste water discharge and ensuring public health and well-being. This series of actions highlights the Group's commitment to social responsibility in water resource management.

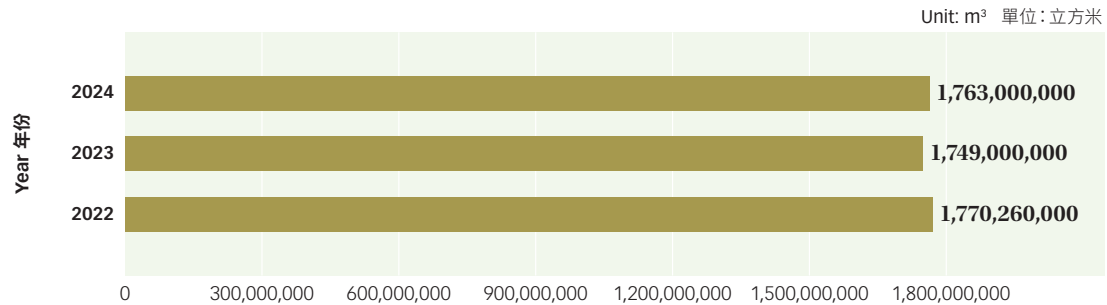
水資源使用及管理

水資源短缺是人類面臨的一項日益嚴峻的生態環境問題。然而，光大環境在日常運營中需要運用到大量水資源，例如飲用水、清潔用水、洗手間用水等。此外，多個生產過程中，例如垃圾發電項目及生物質綜合利用項目的機組冷卻、污水處理項目在內的各項目製備化學溶劑等，也需大量用水。因此，作為負責任的企業，光大環境積極響應國家相關的用水及節水政策，致力於減少項目耗水並確保污水得到妥善處理。在各項環境影響評估過程中，我們亦會考慮水資源的相關影響，確保項目不會侵害其他持份者的用水權益。

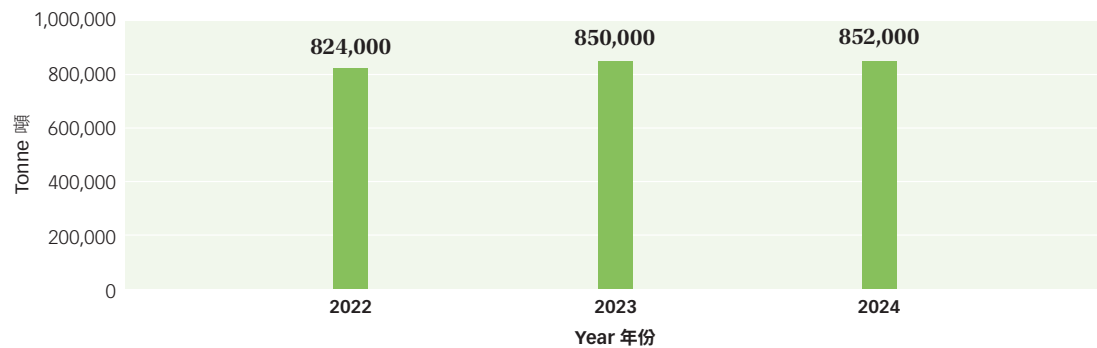
報告期內，我們採用世界自然基金會發布的水風險篩檢工具對本集團各項目的水資源壓力進行全面的評估，並為存在於高水資源壓力的項目公司制定相應的對策。

此外，通過環保水務遍佈全國的項目公司網絡，本集團積極推動建設包括市政及工業污水處理、中水回用、污水源熱泵、流域治理在內的一系列水環境綜合治理項目。這些項目顯著提升了中國水體狀況和衛生標準，還大幅減少了污水排放對環境造成的破壞，為民眾健康福祉提供保障。這一系列舉措充分彰顯了本集團在水資源管理方面的社會責任擔當。

Waste Water Treated in the Past Three Years 過往三年的污水處理量



COD Discharge Reduced in the Past Three Years 過往三年的COD減排量



Discharge Standards and Water Quality Testing

The Group's waste-to-energy projects treat leachate and municipal waste water in strict accordance with national water recycling standards. During the environmental impact assessment, we also take into consideration the receiving water bodies for each project's effluent. All of the Group's water treatment projects adopt stringent discharge standards. Based on the environmental impact assessment reports approved by local governments⁽¹⁾, we continuously upgrade and improve the effluent discharge standards, with the goal of meeting the national Grade 1A standard for waste water discharge in most projects. To ensure the highest water quality of the effluent, all waste water treatment projects are equipped with rapid, reliable, and continuous monitoring systems for effluent water quality. We also regularly commission third-party laboratories to test effluent samples, which helps effectively reduce environmental pollution and ecological burdens. Regarding odour issues from waste water treatment plants, the Group has implemented new biological deodorisation systems. These systems adjust processing parameters based on different types of gases, reducing odour release and improving the efficiency and environmental performance of the facilities.

排放標準及水質檢測

本集團的垃圾發電項目嚴格依照國家水循環標準處理滲濾液及生活污水。在進行環境影響評估時，我們亦會根據各項目出水的水體作出相應考量。本集團所有水處理項目均採用嚴格的出水標準。在符合當地政府批准的環境影響評估報告相關要求⁽¹⁾基礎上，我們致力透過持續的提標改造工程，使大多數項目的出水水質達到國家一級A標準。為最大程度地保證出水水質，本集團的所有污水處理項目均配備快速、可靠、無間斷記錄出水水質資料的監測系統，並定期委託第三方廠商化驗監測出水樣本，有效減少環境污染及生態負擔。針對污水處理廠的臭氣問題，本集團採用新型生物除臭系統，該系統可以根據不同類型的氣體調整處理參數，減少臭氣釋放，提高設施的效率和環保性能。

In addition to internal water recycling within the project companies, we also supply reclaimed and/or reused water to third parties. The remaining waste water is primarily discharged to waste water treatment plants operated by third parties or, after meeting the required standards, discharged into natural water bodies. At the same time, we strictly adhere to the local discharge standards to ensure that downstream users (such as for agricultural irrigation, public recreation, or drinking water) are not negatively impacted.

我們污水處理項目不僅將水資源於項目公司內部循環再利用，亦向第三方供應再用水及／或回用水。剩餘的污水則主要排放至第三方機構運營的污水處理廠，或經處理達標後排放至自然水體。與此同時，我們嚴格遵循排放地的出水標準，以確保水體的下游使用者（如農業灌溉、公眾休憩或飲用水源等）不會受到負面影響。

Waste-to-Energy Projects 垃圾發電項目	Reuse of Urban Recycling Water – Water Quality Standard for Industrial Uses (GB/T 19923-2005) ⁽¹⁾ 《城市污水再生利用工業用水水質》(GB/T 19923-2005) ⁽¹⁾
	Reuse of Urban Recycling Water – Water Quality Standard for Scenic Environment Use (GB/T 18921-2019) 《城市污水再生利用景觀環境用水水質》(GB/T 18921-2019)
Water Treatment Projects 水處理項目	Discharge Standard of Pollutants for Municipal Waste Water Treatment Plant (GB 18918-2002) 《城鎮污水處理廠污染物排放標準》(GB 18918-2002)

Note:

⁽¹⁾ Major effluent parameters regulated by relevant national regulations and standards include COD, biological oxygen demand, suspended solids, animal fats and vegetable oils, total nitrogen, ammoniacal nitrogen, total phosphorus, pH, colour, Escherichia coli, mercury and other heavy metals (and their chemical compounds).

附註：

⁽¹⁾ 受相關國家規例及標準規管的出水指標主要包括化學需氧量、生物需氧量、懸浮物、動植物油、總氮、氨氮、總磷、酸鹼值、色度、大腸桿菌數量、汞及其他重金屬（及其化合物）。

Leachate Treatment and Reuse

The Group’s R&D of the fourth-generation leachate treatment technology utilises an ammonia distillation process to achieve the resource utilisation of ammonia nitrogen in leachate. Based on a combination of advanced processes such as ultrafiltration, nanofiltration, softening, high-pressure reverse osmosis, and material separation membranes, this technology effectively reduces operational energy consumption, costs, land area requirements, and greatly alleviates the burden on human resources, facilitating the comprehensive treatment of leachate. The reverse osmosis effluent, meeting the standards for recycled water, is reused as makeup water in waste-to-energy projects, while the concentrate is used in other processes such as lime slurry preparation, promoting the utilisation of urban reclaimed water and full resource recovery. In 2024, around 84% of the treated leachate at the Group was reused.

滲濾液處理及回用

本集團研發的第四代滲濾液處理技術通過蒸氨工藝實現滲濾液中氨氮的資源化利用，基於組合超濾、納濾、軟化、高壓反滲透、物料分離膜等先進工藝，該技術可以有效降低運行能耗費用，減少佔地面積，極大地減輕了人力物力的負擔，並有助實現滲濾液的全量化處理。達到循環補充水水質標準的反滲透出水將回用作為垃圾發電項目循環補充水，而濃水則回用於石灰漿製備等其他工藝，可推動城市再生水利用和充分資源化。二零二四年，本集團經處理的滲濾液回用比例超過約84%。

Water Conservation

Each project company within the Group has developed specific water-saving measures for 2024, implemented a comprehensive water-saving management system, and established a unique water-saving leadership team. In regions experiencing higher water stress, these measures are enforced with greater stringency. Everbright Environment is committed to enhancing water use efficiency and safeguarding the water environment through a range of initiatives. Key actions include:

Water-saving Measures

- Periodically measure the temperature of the drains of main steam, water supply, ventilation, bypass, discharge and other systems and the drain valves of steam turbine to monitor the tightness of the drains. This allows for the timely detection of leakage defects and prevention of leaks in the drainage system.
- Maintain the control system for steam temperature and pressure running at designed parameters with automatic settings, so as to reduce the usage of cooling water.
- Condensate from the completed water treatment process is reused in the desalinated water tank, thus reducing costs of purchasing desalinated water while avoiding the waste associated with discharging treated water.
- Reuse high-temperature steaming water, domestic waste water, in-plant floor-rinsing water, and rainwater in the quench tower of the incineration line.
- After retrofitting, the slag conveyor now uses self-backwashing water from integrated units, further reducing water consumption.

In 2024, the Group mainly withdrew freshwater from municipal water supplies or other water facilities, supplemented by sources such as rivers, lakes, and groundwater.

節約用水

本集團各項目公司推行了針對二零二四年的節水策略，建立了節水管理體系，甚至創建了獨具特色的節水領導小組。我們的節水策略在水資源壓力更高的地區亦更加嚴格。光大環境致力於通過各種措施提高用水效率，最大限度地利用有限的水資源、保護水環境。主要行動詳列如下：

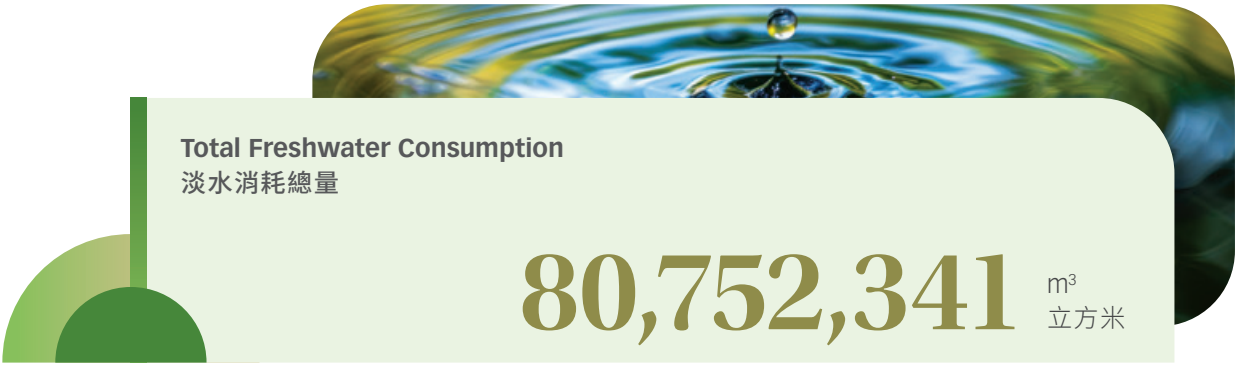
節水措施

- 對主汽、給水、抽汽、旁通管路、排污等系統的疏水和汽輪機缸體的疏水閥門定期測溫，以監視疏水閥的嚴密性，便於及時發現疏水系統的洩漏缺陷及避免洩漏情況。
- 控制汽溫汽壓的調節保持壓紅線運行，盡可能自動設置在設計值，從而減少冷卻水用量。
- 將完成水處理冷凝水回用至除鹽水箱，節約了外購除鹽水的費用，同時避免水處理冷凝水外排造成浪費的現象。
- 將高溫蒸煮廢水、生活污水、廠區地面沖洗水以及初期雨水回用至焚燒線的急冷塔。
- 經技術改造後撈渣機用水採用一體化自反洗出水以節約用水。

二零二四年，本集團取用的淡水主要源自市政供水或其他水務設施，其次為河流及湖泊和地下水。

Freshwater Consumption by Source in 2024⁽¹⁾
二零二四年按來源劃分的淡水消耗量⁽¹⁾

Operation Unit 運營單位	Rivers and Lakes 河流及湖泊	Groundwater 地下水	Municipal Water Supplies or Other Water Facilities 市政供水或其他水務設施
Environmental energy 環保能源	38,300,726	194,181	21,866,143
Environmental water 環保水務	15,927,899	460,872	2,626,484
Greentech 綠色環保	3,650	52,972	1,207,254
Others ⁽²⁾ 其他 ⁽²⁾	—	—	112,159
Total 總計	54,232,276	708,025	25,812,040



Notes:

- ⁽¹⁾ Environmental water’s river-basin ecological restoration projects, raw water protection project, water supply projects and reusable water projects were excluded from the calculation of freshwater consumption. This is with due consideration that those projects’ key objectives are to purify water for use by the public/clients, therefore the freshwater processed were not considered as consumed.
- ⁽²⁾ Other operation units include envirotech, equipment manufacturing, headquarters, representative offices and offices.

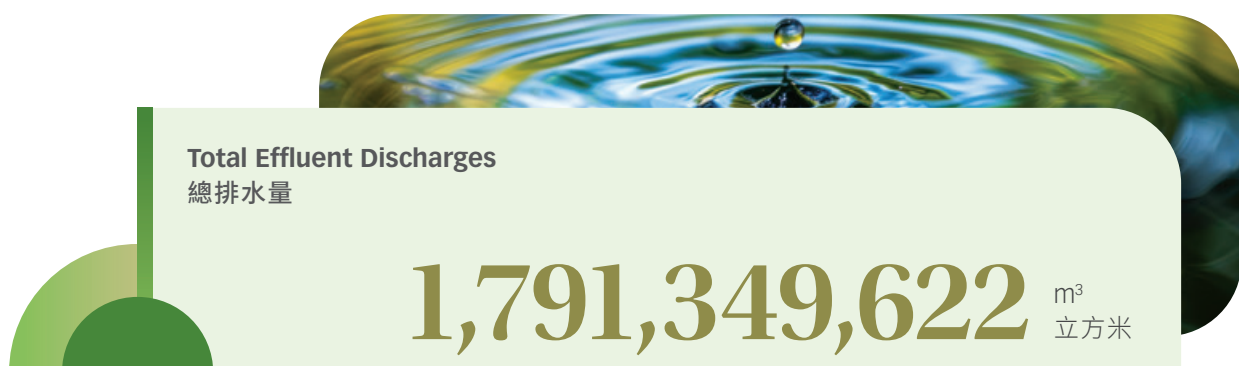
附註：

- ⁽¹⁾ 淡水消耗的計算並不包括環保水務旗下的流域治理項目、原水保護項目、供水項目及中水回用項目。這是考慮到這些項目的主要目標是淨化水資源供公眾／客戶使用，因此，涉及的淡水處理並不視為被消耗。
- ⁽²⁾ 其他運營單位包括了環境研究院、裝備製造、總部、代表處及辦事處。

Effluent Discharge by Destination in 2024
二零二四年按目的地劃分的排水量

Unit: m³ 單位：立方米

Operation Unit 運營單位	Surface Water 地表水	Groundwater 地下水	Sea 大海	Waste Water Treatment Plants Operated by Third Parties 第三方機構 運營的污水 處理廠	Water Supplied to Third Parties for Use as Reclaimed Water and/ or Reusable Water 作回用水供應 至第三方使用
Environmental energy 環保能源	922,876	–	–	8,661,038	–
Environmental water 環保水務	1,333,637,694	–	136,137,833	134,773,768	172,626,223
Greentech 綠色環保	1,523,043	–	–	2,954,987	–
Others ⁽¹⁾ 其他 ⁽¹⁾	–	–	–	112,159	–
Total 總計	1,336,083,614	–	136,137,833	146,501,953	172,626,223



Note:

附註：

⁽¹⁾ Other operation units include envirotech, equipment manufacturing, headquarters, representative offices and offices.

⁽¹⁾ 其他運營單位包括環境研究院、裝備製造、總部、代表處及辦事處。

Water Environment Treatment Project: Everbright water's Zhenjiang Project Awarded the Jiangsu Province Sponge City Demonstration Project

水環境治理項目範例：光大水務鎮江項目榮獲江蘇省海綿城市示範項目獎

The Zhenjiang Yan Jinshan Lake CSO Overflow Pollution Comprehensive Treatment Project ("Zhenjiang Project") by Everbright Water was awarded the 2024 Jiangsu Province Sponge City Demonstration Project title, the highest honour in the province's sponge city construction. This project adopted the innovative technology of "Deep Interception Main Trunk Pipe + End-stage Storage and Ecological Treatment", successfully addressing drainage, flood prevention, and water environmental issues in multiple districts of Zhenjiang City. As the first of its kind in China, the Zhenjiang Project drew on international water environment governance experiences from countries such as the United States (Chicago), Australia, Singapore, and Germany, providing systematic water pollution treatment and drainage solutions for old urban areas in small and medium-sized cities in China.

Zhenjiang Project has been included in both the NDRC typical case studies for PPP projects and the Ministry of Finance's PPP demonstration projects, and was showcased at the United Nations Economic Commission for Europe ("UNECE") International PPP Forum, highlighting Everbright Water's leading position in the water industry.

The Jiangsu Province Sponge City Alliance has highly praised Everbright Water's Zhenjiang Project, noting that it provides valuable experience for comprehensive water environment treatment in old urban areas and will play a positive role in promoting the development of sponge cities in Jiangsu Province. The Zhenjiang Project will continue to drive the standardised development of sponge city construction in Jiangsu Province through ongoing academic exchanges and technical cooperation.

光大水務鎮江沿金山湖CSO溢流污染綜合治理項目（「鎮江項目」）榮獲二零二四年度江蘇省海綿城市示範項目稱號，為該省海綿城市建設的最高榮譽。該項目採用了「深層截流主幹管+末端調蓄及生態處理」的創新技術，成功解決了鎮江市多個區域的排水防澇和水環境問題。作為國內首創，鎮江項目借鑒了美國芝加哥、澳大利亞、新加坡和德國等國外水環境治理經驗，為我國中小城市的老城區提供了系統性水污染治理與排水解決方案。

鎮江項目先後入選國家發改委PPP項目典型案例及財政部PPP示範項目，並在聯合國歐經會國際PPP論壇上進行案例展示，充分展示了光大水務在水務行業的領先地位。

江蘇省海綿城市聯盟對光大水務鎮江項目給予高度評價，表示該項目為老城區的水環境綜合治理提供了寶貴的經驗，將對推動江蘇省的海綿城市建設起到積極的示範作用。鎮江項目將透過持續的學術交流和技術合作，致力於繼續推動江蘇省海綿城市建設的規範化和標準化發展。

Waste Management

The concept of “Zero-waste Cities” originated from the *Plan for Pilot Development of “Zero-waste Cities”* issued by the General Office of the State Council of the PRC in 2019. This initiative introduces a sustainable urban management model, offering effective guidance for urban waste treatment and resource recycling. As an environmental protection company, Everbright Environment prioritises resource conservation and waste reduction as key corporate values. The Group is committed to implementing environmentally responsible management across the entire life cycle of all wastes. Through comprehensive recycling and resource utilisation programmes, it aims to minimise waste emissions into air, water, and soil. We monitor various waste streams using in-plant weighbridges that are regularly calibrated. Waste data is meticulously recorded in monthly production and environmental reports. To ensure all waste is handled legally and responsibly, the Group only employs certified downstream contractors or recyclers and conducts regular inspections of their trip tickets.

Everbright Environment’s ecological resources and environmental planning form a vital component of its environmental energy sector. This includes waste sorting and the development of zero-waste cities, integrated urban and rural sanitation services, and renewable resource recycling. Together, these efforts establish a comprehensive solid waste management system that spans from source collection to terminal disposal. Aiming to create a “Zero-waste City” characterised by zero waste, zero landfill, and zero incineration, Everbright Environment is dedicated to developing a distinctive technical roadmap and business model. These focus on source reduction, waste sorting, recycling, and harmless end-of-line disposal, so as to achieve synergistic improvements in resource conservation, pollution control, and carbon emission reductions.

廢棄物管理

「無廢城市」的概念源自國務院辦公廳在二零一九年印發的《「無廢城市」建設試點工作方案》，這一理念為城市可持續發展提供了新的管理模式，對城市廢物處理及資源循環利用提供了積極有效的指導。作為一家環保企業，光大環境始終將節約資源與減少廢棄物視作企業的重要核心。本集團致力於實現對所有廢棄物全生命週期的綠色管理，透過全面的回收及資源化利用計劃，減少對空氣、水和土壤的廢棄物排放。我們透過廠內定期校準的磅橋監測各類廢棄物數據，並在月度生產或環保報告中進行詳細紀錄。在供應鏈管理方面，我們僅僱用合資格的下游承辦商或回收商，並定期檢查他們的運載紀錄，確保全部廢棄物得到合法且妥善的處理。

光大環境的生態資源及環境規劃是環保能源板塊的重要組成部分，涵蓋垃圾分類與無廢城市、城鄉綜合環衛服務、以及再生資源回收利用等業務，形成了從源頭收集至末端處置的固廢全產業鏈體系。光大環境以零丟棄、零填埋、零焚燒的「無廢城市」為目標，致力於打造獨特的技術路線和商業模式，創建源頭減量、垃圾分類、循環利用及末端無害化處置，從而實現源頭減量、減污降碳的協同效應。

Resource Utilisation and Recycling

The Group is dedicated to minimising waste generation while actively promoting efficient resource utilisation and recycling. When managing waste produced by its projects, the Group places a strong emphasis on reusing by-products from its various operations, thereby contributing to sustainable construction and urban greening initiatives. For instance, bottom ash from waste-to-energy projects is recycled into bricks, supporting eco-friendly construction efforts. Similarly, furnace ash from biomass combustion is converted into fertilisers, and sludge from municipal waste water treatment is repurposed into compost for horticultural greening and landscaping projects.

資源利用及回收

本集團致力減少廢物產生，並積極推動各類資源的有效利用和回收。在處理項目生產的廢棄物時，我們特別重視各行業活動所產生之副產品的循環使用，從而為綠色建築和城市綠化作出積極貢獻。例如，我們的垃圾發電項目將回收的爐渣用於製磚，推進了城市綠化建設；此外，我們還將生物質燃燒產生的灰燼製成肥料，或將生活污水處理後產生的污泥用於堆肥製作，並應用於園景綠化建設。



Bottom ash generated from waste-to-energy projects can be used for making bricks

垃圾發電項目產生的爐渣可用於製磚



Furnace ash produced from biomass combustion can be used for producing fertilisers

生物質燃燒產生的爐灰可用於製作肥料



Sludge generated from municipal waste water treatment can be used for producing compost (for horticultural use)

生活污水處理產生的污泥可用於製作堆肥
(作園藝用途)

Fly Ash⁽¹⁾, Furnace Ash and Bottom Ash Generated and Processed in 2024

二零二四年飛灰⁽¹⁾、爐灰及爐渣產生量及處置方式

Unit: tonne 單位：噸

Operation Unit 運營單位	Source 來源	Safe Landfill Disposal after Solidification 固化後 安全填埋	Integrated Utilisation by Qualified Third Parties 由合資格 第三方 綜合利用	In-plant Temporary Storage 廠內暫存	Others 其他
Fly Ash (Hazardous Waste) 飛灰 (有害廢棄物)					
Environmental energy 環保能源	Waste-to-energy Projects 垃圾發電項目	1,303,350	113,421	68,327	106,453
Greentech 綠色環保	Integrated Biomass Utilisation Projects (Waste-to-energy), Hazardous and Solid Waste Treatment Projects, General Industrial Solid Waste Projects 生物質綜合利用項目 (垃圾發電)、 危固廢處置項目、一般工業固廢項目	19,088	157,662	54,001	–
Furnace Ash (Non-Hazardous Waste) 爐灰 (無害廢棄物)					
Greentech 綠色環保	Integrated Biomass Utilisation Projects (Biomass) 生物質綜合利用項目 (生物質發電)	710,422	37,475	10,500	–
Bottom Ash (Hazardous Waste) 爐渣 (有害廢棄物)					
Greentech 綠色環保	Hazardous and Solid Waste Treatment Projects 危固廢處置項目	20,448	31,940	1,407	–
Bottom Ash (Non-Hazardous Waste) 爐渣 (無害廢棄物)					
Environmental energy 環保能源	Waste-to-energy Projects 垃圾發電項目	8,540,290	2,000	3,521	3,465,035
Greentech 綠色環保	Integrated Biomass Utilisation Projects, General Industrial Solid Waste Projects 生物質綜合利用項目、一般工業固廢 項目	2,397,030	115,062	74,617	–
Total 總計		12,990,628	457,560	212,374	3,571,487

Note:

附註：

⁽¹⁾ Refers to the amount of fly ash after solidification.

⁽¹⁾ 指固化後的飛灰量。



In the fields of sludge treatment and disposal, the Group continues to advance technological research and development while ensuring the proper management of the sludge it generates. Most sludge treatment technologies incorporate recycling measures to enable energy recovery. The Group's municipal waste water treatment projects strictly adhere to national standards, such as the *Discharge Standard of Pollutants for Municipal Waste Water Treatment Plant* (GB 18918-2002). Furthermore, to minimise the environmental impact of its environmental water operations, the Group also integrates international standards, including the World Bank Group's *General Environmental, Health, and Safety Guidelines* and *Environmental, Health and Safety Guidelines for Water and Sanitation*. Most treated sludge that passes inspection is sent to qualified third parties for further treatment, reuse and/or integrated utilisation, such as compost production or use as construction materials. For the minority of sludge that cannot be recycled, dewatering processes are conducted to reduce its water content and volume before sending it to designated landfills for disposal. To extend the principles of sustainable waste management throughout its value chain, the Group exclusively collaborates with qualified third-party organisations for the further treatment of sludge produced by its project companies. This ensures that the processes of sludge treatment and disposal comply with national environmental laws and regulations.

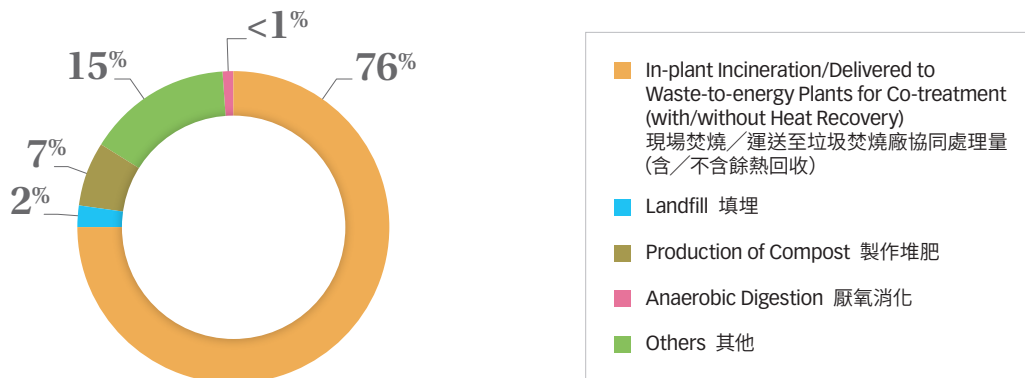
在污泥處理處置等領域，本集團持續推進技術研發並保證其生產的污泥得到妥善處理。多數污泥處理技術更進一步採用循環措施，以實現能源回收及物料再生利用，推動可持續廢棄物管理。本集團的市政污水處理項目嚴格遵從國家標準，如《城鎮污水處理廠污染物排放標準》(GB18918-2002)等。此外，為減少環保水務的運營項目對環境的影響，我們還將相關國際標準如世界銀行集團的《通用環境、健康和安全管理指南》及《水與衛生環境、健康與安全指南》等納入考慮。經處理並通過檢測的大部分污泥會被送到合資格第三方作進一步處理、循環再用或綜合利用，如製作堆肥、建材利用等；對於少數無法循環再用的污泥，我們會進行脫水工序以減低含水量及體積，然後送到指定填埋場作填埋處理。為使價值鏈下游同樣符合可持續廢棄物管理理念，本集團僅僱用合資格的第三方進一步處理項目公司所產生的污泥，確保污泥處理及處置流程遵循國家環保法律及規例。

Amount and Methods of Disposal of Sludge Generated in 2024
二零二四年污泥產生量及處置方式

Unit: tonne 單位：噸

Operation Unit 運營單位	Source 來源	In-plant Incineration/ Delivered to Waste-to-energy Plants for Co-treatment (with Heat Recovery) 現場焚燒／運送至垃圾焚燒廠協同處理量 (餘熱回收)	Delivered to Waste-to-energy Plants for Co-treatment (without Heat Recovery) 運送至垃圾焚燒廠協同處理量 (不含餘熱回收)	Anaerobic Digestion 厭氧消化	Landfill 填埋	Production of Compost 製作堆肥	Others 其他
Environmental energy 環保能源	Waste-to-energy Projects 垃圾發電項目	535,461	0	-	-	-	-
Environmental water 環保水務	Waste Water Treatment Projects 污水處理項目	382,302	269,164	8,652	34,905	103,708	235,191
Greentech 綠色環保	Integrated Biomass Utilisation Projects, Hazardous and Solid Waste Treatment Projects, General Industrial Waste Projects 生物質綜合利用項目、危固廢處置項目、一般工業固廢項目	31,015	0	-	-	24	751
Total 總計		948,778	269,164	8,652	34,905	103,732	235,942

Ultimate Treatment/Disposal Methods of Sludge Generated in 2024
二零二四年所產生的污泥最終處理／處置的方式



Total Sludge Generated
污泥產生總量

1,601,173 tonnes
噸

Everbright Environment extends its waste management policy to daily workplace operations, fostering a culture of resource recovery among employees. The Group encourages staff to actively participate in recycling activities and has implemented comprehensive waste recovery and recycling measures across production sites, offices, and dormitories. Employees are encouraged to consciously recycle materials such as paper, metal, plastic, and food waste. To ensure proper waste handling and to prevent illegal disposal, all general waste is managed by professional external waste collection and recycling entities.

光大環境的廢棄物管理政策同樣適用於日常辦公場所，我們鼓勵員工積極參與資源回收活動，並在生產場所、辦公室及宿舍等全面推行廢物回收和循環再利用措施。員工應有意識地回收紙張、金屬、塑料和廚餘等可回收廢棄物。為避免非法處理垃圾，所有一般廢物均交由外部專業的廢物收集和回收方進行管理。

Consumption and Recycling of Office Materials, Plant Area Materials, and Packaging Materials in 2024

二零二四年辦公室物料、廠區物料、包裝材料使用量和回收量統計

Unit: Kg 單位：公斤

Category 類別	Material Consumption 物料使用	Material Recycling 物料回收
Paper Products ⁽¹⁾ 紙製品 ⁽¹⁾	243,495	13,194
Plastics ⁽²⁾ 塑料 ⁽²⁾	1,305	1,536
Metal ⁽³⁾ 金屬 ⁽³⁾	50	1,507,150
Packaging materials paper products, plastics, foam and wood board ⁽⁴⁾ 包裝材料 (包括紙製品、塑料、泡沫及木板) ⁽⁴⁾	900	—

Notes:

⁽¹⁾⁽²⁾ Only applicable to office areas.

⁽³⁾ Only applicable to plant areas.

⁽⁴⁾ Only applicable to the equipment manufacturing sector.

附註：

⁽¹⁾⁽²⁾ 僅適用於辦公區域。

⁽³⁾ 僅適用於廠區。

⁽⁴⁾ 僅適用於裝備製造板塊。

Hazardous and Solid Waste Treatment

The Group's hazardous and solid waste treatment projects employ various methods, including incineration, landfill, physico-chemical treatment, and integrated utilisation, to safely manage over 90% of the hazardous waste types listed in the *National Catalogue of Hazardous Wastes*. These measures ensure that hazardous chemicals are properly detoxified and handled following their generation. All hazardous and solid waste treatment projects strictly adhere to the requirements set out in environmental impact assessments approved by government authorities and comply with relevant national standards, such as the *Standard for Pollution Control on the Security Landfill Site for Hazardous Wastes* (GB 18598-2019) and the *Pollution Control Standard for Hazardous Wastes Incineration* (GB 18484-2020)⁽¹⁾. The Group did not import or export any hazardous waste from/to foreign countries during the Reporting Period.

Note:

⁽¹⁾ Key air pollutants regulated by relevant national laws and regulations include smoke blackness, particulate matter, carbon monoxide, sulphur dioxide, hydrogen fluoride, hydrogen chloride, nitrogen oxides, mercury and other heavy metals (and their compounds), and dioxins.

危廢及固廢處置

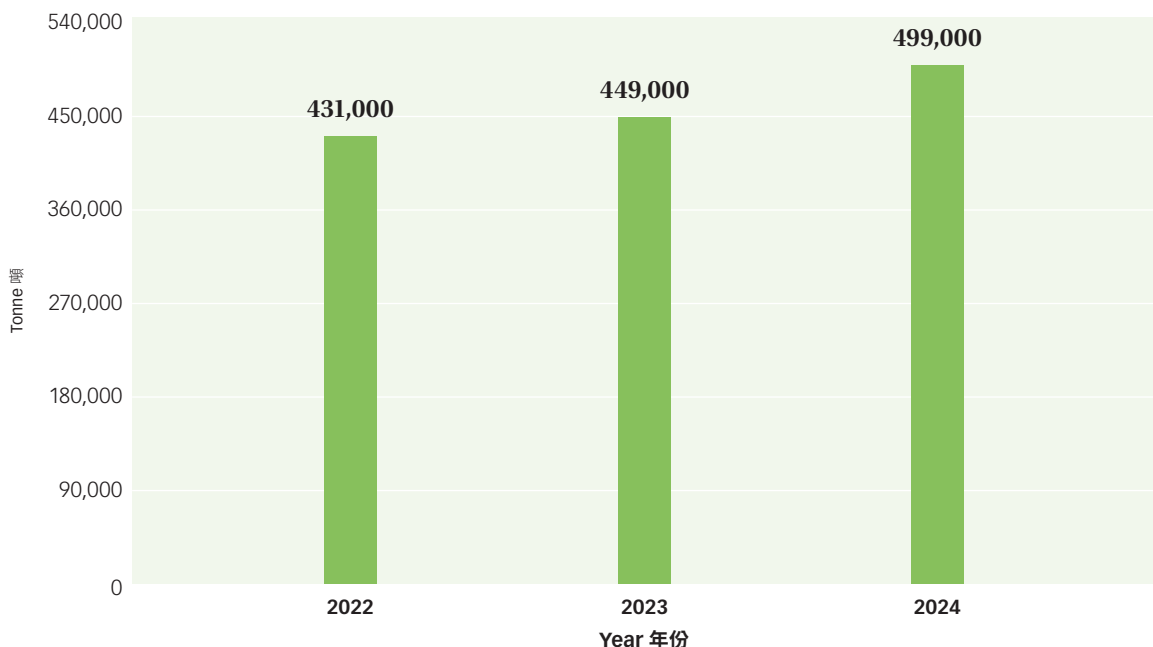
通過採用焚燒、填埋、物化處理及綜合利用等方式，本集團的危固廢處置項目安全妥善地處置《國家危險廢物目錄》中超過九成種類的危廢，以確保危險化學物質在產生後可得到妥當處置。本集團所有危廢及固廢處置項目均嚴格遵照政府部門批准的環境影響評價的相關規定，並符合《危險廢物填埋污染控制標準》(GB18598-2019)及《危險廢物焚燒污染控制標準》(GB18484-2020)⁽¹⁾等國家標準的相關要求。報告期內，本集團沒有從國外輸入或向其輸出任何危險廢物。

附註：

⁽¹⁾ 受相關國家法律及條例規管的大氣污染物主要包括煙氣黑度、懸浮物、一氧化碳、二氧化硫、氟化氫、氯化氫、氮氧化物、汞和其他重金屬（及其化合物）及二噁英。

Hazardous and Solid Waste Processed in the Past Three Years

過去三年危廢及固廢處置統計



Huangshi Waste Tyre Comprehensive Utilisation Project: An Industry Benchmark under ISCC Dual Certification 黃石廢舊輪胎綜合利用項目：ISCC 雙重認證下的行業標杆

In the surging wave of the vigorous development of global environmental protection initiatives, the proper disposal and resource recycling of waste tyres pose a worldwide challenge. Waste tyres are difficult to degrade and are one of the sources of “black pollution”. The Group’s Huangshi Waste Tyre Recycling Project in Hubei Province (“Huangshi Project”) provides an excellent solution for the treatment of waste tyres. The project has successfully obtained the dual certification of ISCC (International Sustainability and Carbon Certification), demonstrating its remarkable achievements in the fields of sustainable development and green production.

The International Sustainability and Carbon Certification is a widely recognised sustainable development certification system globally, encompassing strict standards in various aspects such as sustainable raw materials, green management of the production process, and carbon footprint accounting. The Huangshi Project has successfully obtained the dual certification of ISCC PLUS and ISCC EU, which means that the project strictly adheres to international top-level sustainable development criteria throughout the entire production chain. The Huangshi Project adheres to the principles of “waste reduction, resource utilisation, and harmlessness”, which highly conforms to the national “Five-in-One” overall layout and the development strategy of “cutting carbon emissions, reducing pollution, expanding green development, and pursuing economic growth”.

The production process is the core highlights of this project. The Huangshi Project adopts advanced technologies to efficiently convert waste tyres into recycled resources such as pyrolysis oil and carbon black. After obtaining the dual ISCC certification, the recycled products produced by the Huangshi Project will gain higher recognition in the market. Products such as pyrolysis oil and carbon black, with their green and sustainable characteristics, will be favoured by many downstream enterprises, expanding the sales channels and increasing the added value of the products.

在全球環保事業蓬勃發展的浪潮中，廢舊輪胎的妥善處理及資源再生利用是世界性難題。廢舊輪胎難以降解，是「黑色污染」源之一。本集團湖北黃石廢舊輪胎回收項目「黃石項目」為廢舊輪胎的處理提供了一個優秀解決方案。該項目成功獲得 ISCC（國際可持續發展與碳認證）雙重認證，彰顯了其在可持續發展與綠色生產領域的卓越成就。

國際可持續發展與碳認證是全球具有廣泛認受性的可持續發展認證體系，涵蓋可持續原料、生產過程的綠色管理以及碳足跡核算等多方面的嚴格標準。黃石項目成功獲得 ISCC PLUS 和 ISCC EU 雙重認證，這意味著該項目在整個生產鏈條上都嚴格遵循國際頂尖的可持續發展準則。黃石項目秉持「減量化、資源化、無害化」的原則，高度契合國家「五位一體」總體佈局，以及「降碳、減污、擴綠、增長」的發展戰略。

生產環節是該項目的核心亮點。黃石項目採用先進技術，將廢舊輪胎高效轉化為裂解油、炭黑等再生資源。獲得 ISCC 雙重認證後，黃石項目所生產的再生產品在市場上將獲得更高的認可度。裂解油、炭黑等產品憑藉其綠色、可持續的特性，將會受到眾多下游企業的青睞，拓寬了銷售渠道，提升了產品附加值。

Huangshi Waste Tyre Comprehensive Utilisation Project: An Industry Benchmark under ISCC Dual Certification (Continued) 黃石廢舊輪胎綜合利用項目：ISCC 雙重認證下的行業標杆 (續)

Relying on the dual ISCC certification, the Huangshi Project has set a benchmark for green development in the industry. In the future, the project will rely on this advantage, continue to innovate, deepen sustainable development practices, and contribute more significantly to promoting the green transformation of the global waste tyre treatment industry.

黃石項目憑藉 ISCC 雙重認證，為行業樹立了綠色發展的標杆。未來，項目將依託這一優勢，持續創新，深化可持續發展實踐，為推動全球廢舊輪胎處理行業的綠色轉型貢獻更大的力量。



Committing to “No Net Loss” of Biodiversity

Biodiversity, as one of the nine planetary boundaries impacted by human activities, is a critical factor that cannot be overlooked in business operations. Everbright Environment conducts biodiversity risk assessments on new projects as needed to ensure that the Group’s operations do not lead to deforestation or destruction of biodiversity. We further commit that when projects are located near critical habitats, appropriate mitigation measures (including avoidance, minimisation, restoration, and offsetting) will be implemented to protect the local ecosystem.

Many of our projects have already incorporated the concept of “no net loss” into their operational models:

- Our waste-to-energy projects have successfully diverted waste from landfills, preventing the random dumping of household waste and effectively avoiding pollution of land and ecosystems in rural areas;
- Our municipal waste water treatment plants effectively treat urban sewage and return the treated water to natural bodies of water with equal or better quality, so as to protect freshwater ecosystems;
- Our river basin management projects aim to establish a beautiful, healthy, and stable river ecosystem through ecological restoration activities such as water quality improvement and river dredging.

All of our projects are regularly reviewed under the guidance of our Environmental and Social Management System to ensure full compliance with biodiversity and forest-related regulations and mandatory standards. In addition, we strengthen our cooperation with suppliers and business partners to actively monitor and reduce biodiversity and deforestation risks, extending our biodiversity protection efforts across the entire supply chain.

致力達至生物多樣性「無淨損失」

生物多樣性是受人類活動影響的九大地球邊界之一，保護生物多樣性是企業業務運營中不可忽視的重要因素。光大環境按實際需要對新項目進行生物多樣性風險評估，確保集團的業務不會導致森林淨砍伐或生物多樣性的破壞。我們進一步承諾，當項目作業鄰近關鍵棲息地時，工作人員應當採取適當的緩解措施（包括避免、最小化、恢復和抵銷），以保護當地的生態環境。

我們的許多項目已經在其運營模式中嵌入了「無淨損失」的概念：

- 我們的垃圾發電項目成功將垃圾從填埋場分流，防止將生活垃圾隨意傾倒，有效避免對鄉村地區土地和生態系統的污染；
- 我們的市政污水處理廠可有效處理城市污水，並將處理過的污水以同等或更高的水質輸回自然水體，以保護淡水生態系統；
- 我們的流域治理項目旨在透過河道水質改善、河流疏浚等生態修復活動，建立美觀、健康、穩定的河流生態系統。

我們所有的項目均在環境和社會管理體系的指導下定期接受審查，以確保其完全遵守生物多樣性、森林有關法則和強制性規範。另外，我們加強與供應商和其他業務夥伴的合作，積極監控和降低生物多樣性和森林砍伐的風險，將我們保護生物多樣性的努力擴大至整個供應鏈。

Biodiversity Risk

The “Kunming-Montreal Global Biodiversity Framework”, adopted at the 15th Conference of the Parties to the *United Nations Convention on Biological Diversity* (“COP15”) in December 2022, aims to address key issues such as biodiversity loss, ecosystem restoration, and the protection of indigenous rights. The “3030 Targets” set within the framework are designed to facilitate the practical implementation of actions aimed at biodiversity protection and combating climate change. In line with this, the Ministry of Ecology and Environment (of the PRC) released the *China National Biodiversity Conservation Strategy and Action Plan (2023-2030)* in January 2024, providing scientific guidance for enhancing biodiversity governance. The PRC’s “14th Five-Year Plan” focuses on green development, prioritising ecological and environmental protection while balancing high-quality economic growth with advanced environmental stewardship. These actions not only reflect the international community’s increasing emphasis on protecting the planet’s ecosystems but also demonstrate the PRC’s commitment to biodiversity conservation, offering clear direction for the Group’s future business growth.

Everbright Environment is committed to practicing ecological and environmental protection throughout the entire lifecycle of its projects. Prior to the commencement of new projects, we conduct comprehensive assessments of the local ecological environment and biodiversity, aiming to avoid constructing facilities near natural habitats and ecologically sensitive areas. To minimise the impact on the local biological environment, we also establish ecological buffer zones based on specific circumstances. Additionally, the Group uses the Integrated Biodiversity Assessment Tool (IBAT) to assess the potential impacts of our economic activities on biodiversity, in accordance with the IUCN Red List of Endangered Species, the World Protected Areas Database, and the Key Biodiversity Areas Database. These efforts enable us to develop effective investment and operational strategies that reduce the adverse effects of our operations on biodiversity.

生物多樣性風險

《聯合國生物多樣性公約》第十五次締約方大會（「COP15」）於二零二二年十二月舉行並通過了「昆明－蒙特利爾全球生物多樣性框架」，旨在解決生物多樣性喪失、生態系統修復、原住民權利保護等議題。該框架所制訂的「3030目標」有助於推進生物多樣性保護和應對氣候變化行動的具體落實。隨後，中國生態環境部亦於二零二四年一月發布《中國生物多樣性保護戰略與行動計劃（2023-2030年）》，為全面提升生物多樣性治理水平提供科學指引。國家「十四五」規劃以推動綠色發展為主調，強調生態環境保護，協同推進經濟高品質發展與生態環境高水平保護。這些舉措不僅充分反映出國際社會對保護地球生態系統的重視，更展現中國落實生物多樣性保護的決心，為本集團的業務發展指明了方向。

光大環境堅持在項目的整個生命週期都積極踐行生態環境保護。在新項目開工前，我們會全方面評估當地生態環境和生物多樣性，盡量避免在靠近自然棲息地和生態極度敏感區域建設項目設施；為減少對當地生物環境的影響，我們亦根據實際情況建立生態緩衝區。同時，本集團使用綜合生物多樣性評估工具（「IBAT」），遵守世界自然保育聯盟瀕危物種紅皮書、世界保護區資料庫及生物多樣性關鍵區域資料庫，評估本集團的經濟活動對生物多樣性的潛在影響。基於這一系列活動，我們得以制定有效的投資及運營策略，盡可能地降低本集團業務對生物多樣性的損害。

Findings of IBAT Assessment

Protected areas are regions designated and managed through legal or other effective means to ensure the long-term conservation of nature, including ecosystem services and cultural values. From the Group’s analysis, about 78% of the Group’s projects are not located in or adjacent to any protected area; around 10% and 7% of the Group’s projects are recognised to be located within 50 km to one and two protected areas, respectively. Only around 5% of our projects are located in proximity to three or more protected areas.

Number of Protected Areas within 50 km of Projects, by % of Number of Projects

Number of Protected Areas within 50 km of Projects 項目50公里範圍內的保護區數目	% of Number of Projects 項目數目百分比
0	78%
1	10%
2	7%
3	0%
4	1%
≥5	4%

Key biodiversity areas are regions that play a crucial role in maintaining global biodiversity, including terrestrial, freshwater, and marine ecosystems. About 42% of the Group’s projects are not located in or adjacent to any key biodiversity area; around 27% and 12% of the Group’s projects are recognised to be located within 50 km to one and two key biodiversity areas, respectively. Around 18% of our projects are located in proximity to three or more key biodiversity areas.

Number of Key Biodiversity Area within 50km of Projects, by % of Projects

Number of Key Biodiversity Area within 50km of Projects 項目50公里範圍內的生物多樣性關鍵區域數目	% of Number of Projects 項目數目百分比
0	42%
1	27%
2	12%
3	8%
4	3%
≥5	7%

IBAT評估調查結果

保護區是通過法律或其他有效手段劃分和管理的地區，用作實現具有相關生態系統服務和文化價值的長期自然保育。根據本集團的分析，約78%旗下的項目並不位於或鄰近保護區；約10%及7%項目的50公里範圍內有一至兩個保護區。我們只有約5%的項目鄰近於三個或以上的保護區。

項目50公里範圍內的保護區數目，按項目數目百分比

生物多樣性關鍵區是對維持全球生物多樣性具有重要意義的地區，當中包括陸地、淡水及海洋生態系統。約42%本集團旗下的項目並不位於或鄰近任何生物多樣性關鍵區；約27%及12%項目的50公里範圍內有一至兩個生物多樣性關鍵區域。我們的項目當中有約18%鄰近於三個或以上的生物多樣性關鍵區域。

項目50公里範圍內的生物多樣性關鍵區數目，按項目數目百分比

The Group's projects strictly adhere to national and international environmental standards to ensure that no negative impacts are caused to the nearby ecosystems and wildlife. During the Reporting Period, no significant effects on biodiversity or species listed in the IUCN Red List of Threatened Species were identified. The Group will continue to monitor the potential impacts of our projects on biodiversity moving forward.

本集團的項目嚴格遵循國家及國際環境標準，以確保對項目所在地鄰近的生態系統及野生生物不會受到負面影響。於報告期間，本集團並沒有發現對生物多樣性及瀕危物種紅皮書上的物種造成顯著影響。本集團將於未來繼續監察我們的項目對生物多樣性的潛在影響。

Case studies
—
個案分享

Tongxiang Drinking Water Sources Protection Project 桐鄉飲用水源保護項目

The Everbright Water Tongxiang Drinking Water Sources Protection Project ("Tongxiang Project") of the Group, located in Tongxiang City, Zhejiang Province, is not only a major local livelihood project but has also achieved remarkable success in ecological environment improvement and biodiversity enhancement, setting an exemplary model of sustainable development.

Since its initiation in 2019, the Tongxiang Project has created a natural "water quality purifier" by constructing an ecological wetland with a total area of 5,385.66 mu, effectively enhancing the local water environment. This wetland is capable of treating 600,000 tonnes of raw water daily. Through innovative measures developed by the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, it ensures that the water quality stably meets the national standards. The improvement in water quality provides a solid foundation for the rejuvenation of the ecological environment, facilitating the return of aquatic plants and animals and thereby enhancing local biodiversity.

本集團位於浙江省桐鄉市的光大水務桐鄉飲用水源保護項目（「桐鄉項目」）不僅是當地重大民生工程，更在生態環境改善與生物多樣性提升方面取得了卓越成就，成為可持續發展的典範。

桐鄉項目自二零一九年啟動以來，通過建設總面積達5,385.66畝的生態濕地，形成了一個天然的「水質淨化器」，有效改善當地水環境。該濕地每日可處理原水60萬噸，並通過中科院生態環境研究中心的研發的創新手段，確保水質穩定達到國家標準。水質的改善為生態環境復甦提供了堅實的基礎，有助於吸引水生動植物回歸，從而提升當地的生物多樣性。

Tongxiang Drinking Water Sources Protection Project (Continued) 桐鄉飲用水源保護項目 (續)

To safeguard the long-term and stable operation of the wetland, the Tongxiang Project has implemented a range of intelligent monitoring technologies. These include unmanned inspection vessels, inspection drones, and thermal imaging technology. By relying on Everbright Water's intelligent water source operation and management system, remote monitoring has been achieved, thereby ensuring the safety and ecological stability of the water source. As the water quality improves and the ecological environment enhances, the Tongxiang Project has not only successfully rehabilitated the local wetland ecosystem but has also furnished an excellent habitat for a vast number of wild animals and plants. After years of endeavours, the project has successfully been recognised as a provincial-level wetland park and lured the return of certain rare wild animals, leading to a substantial increase in biodiversity. At present, the project encompasses over 80 plant species, more than 30 bird species, and upwards of 10 fish species. The newly discovered bird species include the pheasant-tailed jacana, great crested grebe, Eurasian coot, little egret, grey heron, Eurasian hoopoe, Eastern spot-billed duck, northern pintail, black swan, and so on. The Asian barred owlet and greater white-fronted goose, which are second-class protected wild animals in China, have even inhabited this place. The arrival of these "water sprites" undoubtedly stands as the best testament to the ecological governance achievements of the Tongxiang Project.

為保障濕地的長期穩定運行，桐鄉項目採用了多項智慧化監測技術，如無人巡檢船、巡檢無人機、熱成像技術等，並依託光大水務智慧水源地運營管理系統，實現遠程監控，確保水源地的安全與生態穩定。隨著水質的提升和生態環境的改善，桐鄉項目不僅成功修復了當地的濕地生態系統，還為眾多野生動植物提供了良好的棲息環境。經過多年的努力，該項目已成功創建省級濕地公園，並吸引了一部分珍稀野生動物的回歸，生物多樣性大幅提升。項目目前擁有各類植物80餘種，鳥類30餘種，魚類10餘種。其中，新增的鳥類包括水雉、鳳頭鸕鶿、白骨頂雞、白鷺、蒼鷺、戴勝、斑嘴鴨、針尾鴨、黑天鵝等，國家二級重點保護野生動物斑頭鵠與白額雁更已在此安家落戶。這些「水中精靈」的到來，無疑是對桐鄉項目生態治理成效的最佳印證。



Tongxiang Drinking Water Sources Protection Project *(Continued)* 桐鄉飲用水源保護項目 (續)



To maintain and boost the biodiversity of the wetland, we are actively curbing the excessive proliferation of algae, maintaining the equilibrium of the wetland food chain, and routinely removing invasive species to mitigate their harm to the wetland biodiversity. Moreover, we are conducting a detailed investigation into wetland aquatic animals and collaborating with institutions such as the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences and the Yangtze Delta Region Institute of Tsinghua University to jointly conduct research on biodiversity protection.

The successful implementation of the Tongxiang Project not only supplies high-quality drinking water sources to the local area but also constructs a green barrier with both water quality purification and ecological restoration functions, offering valuable experience for other water source protection projects nationwide.

為維護並提升濕地的生物多樣性，我們積極控制藻類的過量繁殖，維持濕地的食物鏈平衡，定期清除入侵物種，以降低其對濕地生物多樣性的傷害。此外，我們正在進行詳細的濕地水生動物調研，並與中科院生態研究中心、長三角清華院等機構合作，聯合開展生物多樣性保護研究。

桐鄉項目的成功實施不僅為當地提供了高品質的飲用水源，還構建了一個兼具水質淨化與生態修復功能的綠色屏障，為全國其他水源地保護項目提供了寶貴的經驗。

Valuing Technology R&D and Applying Innovative Technologies

Adhering to technological innovation and enhancing endogenous driving force and core competitiveness are the steadfast development principles of Everbright Environment. The company has continuously strengthened its technological empowerment, advanced research management capabilities, enhanced research platform development, and improved digital management. Everbright Environment has further optimised its R&D structure, emphasising the key role of technology and R&D in leading and driving the Group's development. In collaboration with Qingdao University of Technology, Everbright Environment established the Everbright Qingdao Institute of Technology Environmental Technology, the first engineering research centre in Shandong Province focused on dioxin detection and control. This institute has received the "Laboratory of Excellence" certification from the Environmental Resources Association ("ERA") of the United States and China National Accreditation Service for Conformity Assessment ("CNAS"). Additionally, Everbright Environment promotes resource conservation and environmental protection through public outreach and awareness campaigns. Several of its environmental projects have been recognised with honours such as Public Open Units and Environmental Science Popularisation Hub at provincial, municipal, and county levels.

In the future, the Group will take the technological R&D system of envirotech as the core, with technological R&D as the continuous focus and major breakthrough point. The Group will promote the R&D efforts at its research institutes. To further advance corporate development and environmental protection, we are committed to establishing a world-class green technology innovation and technology transformation centre.

重視科技研發應用創新技術

秉持科技創新，提升內生驅動力和核心競爭力是光大環境不變的發展方針。光大環境不斷強化科技賦能，推進科研管理能力，加強科研平台建設，提升數字化管理水平。光大環境進一步優化自身技術研發結構，並明確技術研發在引領和推動集團發展中的重要作用。光大環境與青島理工大學合作成立光大青島理工環境技術研究院，該研究院是山東省首個專注於二噁英檢測與控制的工程研究中心，已獲得美國環境資源協會「卓越實驗室」榮譽認證以及中國合格評定國家認可委員會(CNAS)認證。光大環境還通過項目的公眾開放和環保宣傳活動，引導市民節約資源、保護環境，使旗下多個環保項目榮獲省、市、縣級的公眾開放單位和環保科普基地等榮譽稱號。

未來，本集團將以環境研究院的技術研發體系為核心，以技術研發為持續關注點和主要突破口，推進研究所的技術研發工作。為進一步推動企業發展和環境保護，我們致力於打造世界級的綠色技術創新與技術轉化中心。

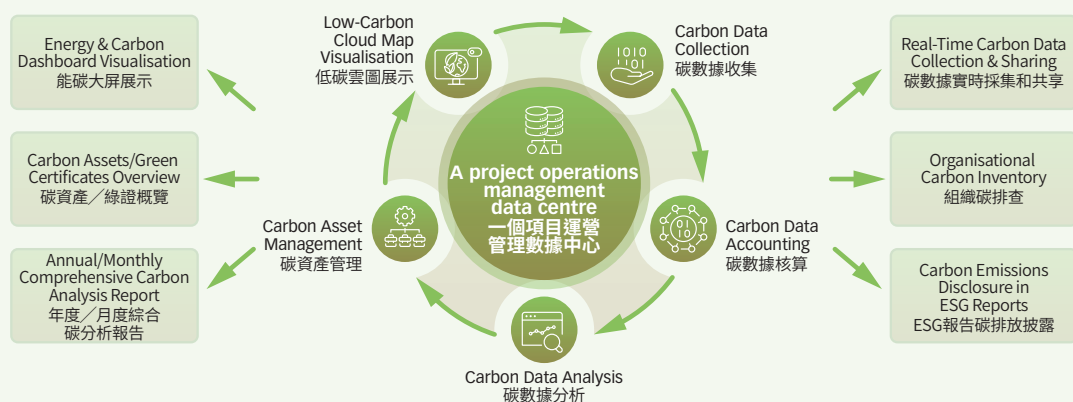
Carbon Emissions and Carbon Asset Management System: Driving Cross-Industry Sustainability & Compliance Practices 碳排放與碳資產管理系統：推動跨業態可持續發展與合規實踐

The “Carbon Emissions and Carbon Asset Management System” independently developed by envirotech, integrating years of practical experience across multi-industry sectors, was officially rolled out across over 380 internal projects of the Group in 2024. The system supports internal carbon inventory and carbon asset management for projects, underpins the disclosure of carbon and environmental data in the Group’s ESG reports, and facilitates carbon asset development and trading, thereby driving corporate industrial upgrading.

Adhering strictly to the ISO 14064 standard, the system employs a “1+N” model to construct a digital carbon management framework. Its core architecture is built upon a project operations management data centre, which supports five key modules: “Carbon Data Collection”, “Carbon Data Accounting”, “Carbon Data Analysis”, “Carbon Asset Management”, and “Low-Carbon Cloud Map Visualisation”. This design ensures precise adaptability to diverse industry sectors. Notably, the internal carbon accounting function features a high-standard carbon emission factor database embedded with internationally recognised greenhouse gas accounting methodologies, including CDM, IPCC, and ISO 14064. It adheres to the latest climate disclosure requirements of the HKEX and meets the needs of multiple scenarios, such as organisational carbon inventory, carbon emissions disclosure in ESG reports, and corporate carbon market accounting. This approach effectively mitigates external risks while ensuring the accuracy and compliance of data accounting.

光大環境研究院自主研發的「碳排放與碳資產管理系統」匯聚多業態多年實踐經驗，已於二零二四年在集團內部超過380個項目正式投入使用。該系統專為項目內部碳盤查及碳資產管理提供服務，同時支援本集團ESG報告的碳數據及環境數據披露，並協助碳資產開發與交易，助力企業產業升級。

系統嚴格遵循ISO 14064標準，採用「1+N」模式構建數字化碳管理體系。核心架構基於一套項目運營管理數據中心，衍生出「碳數據收集」、「碳數據核算」、「碳數據分析」、「碳資產管理」及「低碳雲圖展示」五大核心模塊，實現對各類業態的精準適配。其中，內部碳核算功能尤為突出：系統配備高標準碳排放因子數據庫，並內置CDM、IPCC、ISO 14064等多套國際權威溫室氣體核算方法學，既符合聯交所最新氣候信息披露規定，亦能滿足機構碳盤查、ESG報告碳排放披露及企業碳市場核算等多場景需求，有效規避外部風險，確保核算數據準確合規。



Talent Development 人才發展

●
●
●
Caring our people & creating
the path to success
關懷員工・共創成功之路

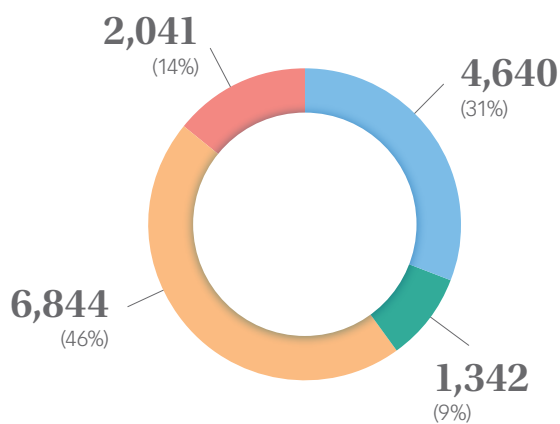


Everbright Environment adheres to the “People-oriented” management principle and is committed to creating a fair, harmonious, and healthy working environment. We believe that the success of our employees is closely linked to the development of the Group. Therefore, we actively provide employees with professional development opportunities and diverse training resources, aiming to offer them a platform to fully unleash their potential. This approach promotes both individual and team growth, leading to mutual prosperity for both the company and its employees.

Our Professional Team

The Group’s continuous business growth is attributed to our professional team that strives for excellence. As of 31 December 2024, the Group had a total of 14,867⁽¹⁾ employees, who contribute their expertise across various areas.

By Employment Contract and Gender 按合約類型及性別劃分



Note:

⁽¹⁾ All employees were full-time employees.

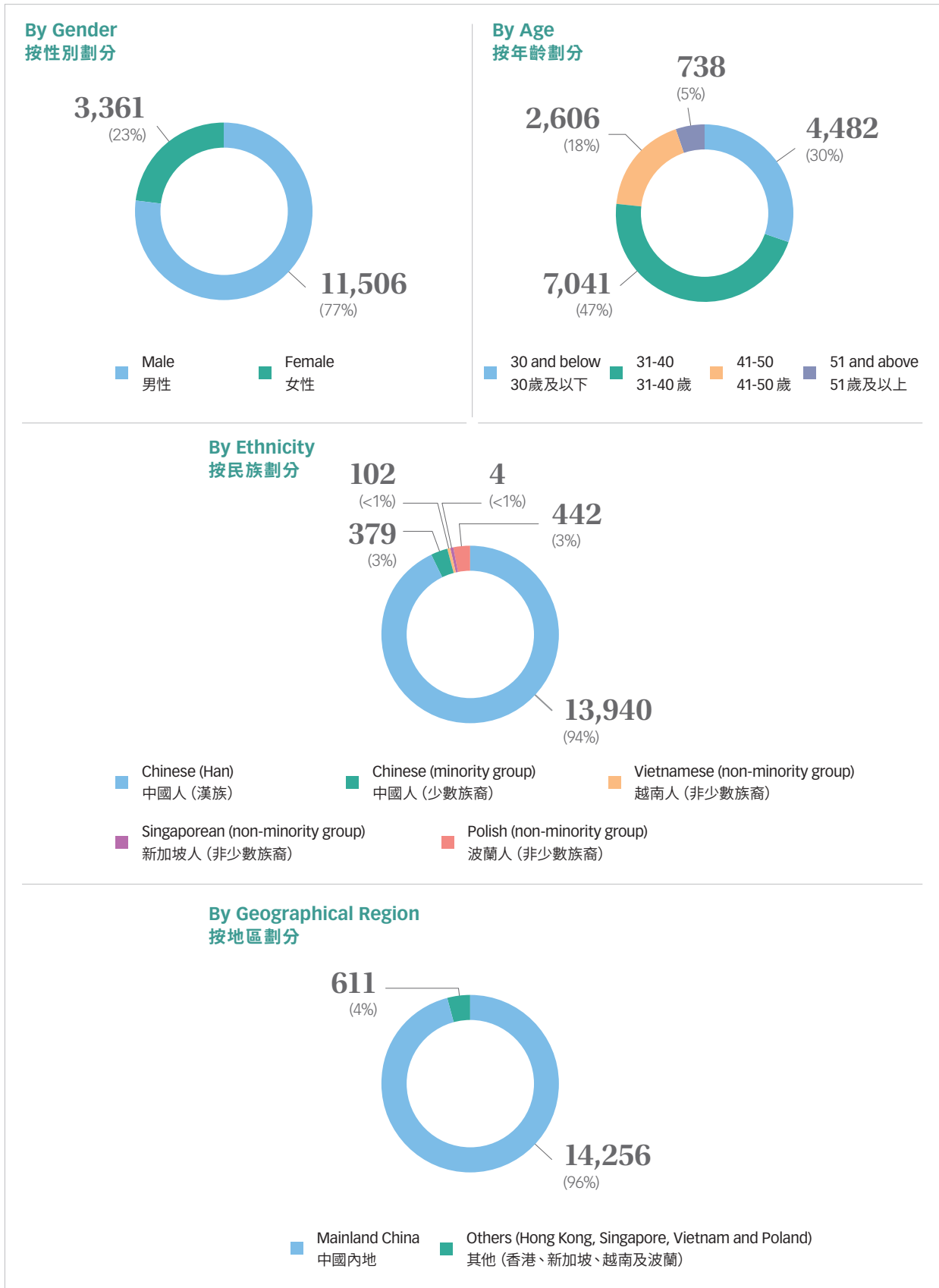
光大環境秉持「以人為本」的核心管理理念，致力於創造一個公正、和諧且有益於健康的工作環境。我們相信，員工的成功與集團的發展息息相關，因此我們積極為員工提供職業發展機會並提供多樣化的培訓資源，旨在賦予他們充分發揮潛能的平台，促進個人及團隊的全面成長，從而實現企業與員工的共同繁榮。

我們的專業團隊

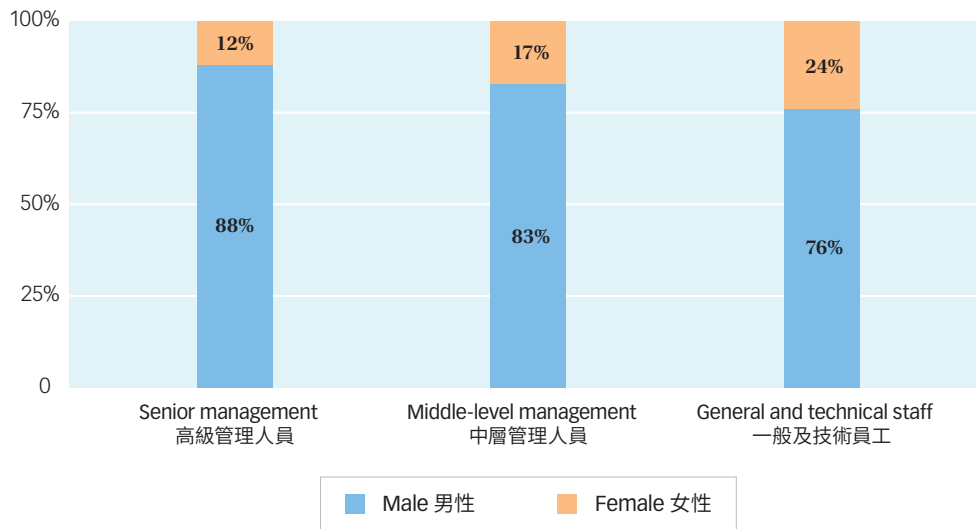
本集團業務的穩健發展有賴於我們精益求精的專業團隊。截至二零二四年十二月三十一日，本集團共有14,867⁽¹⁾名員工在不同領域群策群力，各展所長。

附註：

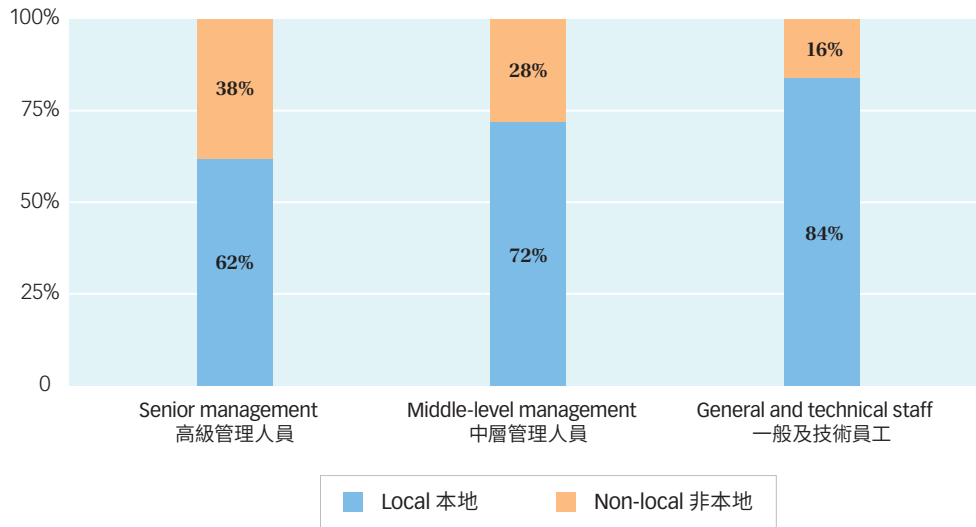
⁽¹⁾ 所有員工均為全職員工。



Male to Female Ratios by Employee Ranking 各員工職級的男女比例



Employees Hired by Geographical Region⁽¹⁾ 按地區劃分的受僱員工⁽¹⁾



Note:

⁽¹⁾ Employees hired from the same province in mainland China are regarded as local employees, whereas the employees hired from other provinces in mainland China are regarded as non-local employees.

附註：

⁽¹⁾ 在中國內地同省受聘的員工被視為本地員工，而在中國內地外省受聘的員工則被視為非本地員工。

Highlights of 2024

Everbright Environmental Technial Equipment (Changzhou) Limited Recognised as "Jiangsu Provincial Academician Expert (Enterprise) Innovation Center"

In September 2024, Everbright Environmental Technial Equipment (Changzhou) Limited was recognised as the "Jiangsu Provincial Academician Expert (Enterprise) Innovation Center" by the Jiangsu Provincial Association for Science and Technology. The company focuses on the resource utilisation of municipal solid waste fly ash, working to tackle key technical challenges in low-temperature pyrolysis, efficient water washing, organic waste salt treatment, and building material recycling. It also covers technology research, development, and commercialisation in smart environmental protection, carbon reduction and energy conservation, and high-end equipment. The Group fully leverages the advantages of academicians, experts, and their teams in technological innovation, results application, and talent cultivation, conducting in-depth scientific research and academic exchanges, actively fostering innovative technical talent, and helping to enhance the company's technological innovation and comprehensive capabilities. The company will continue to maintain close cooperation with industry academicians and experts, persisting in research and development investment and technological breakthroughs. Guided by enterprise innovation needs and linked through research projects, the company strives to solve key industry challenges, continuously overcome core technologies in environmental protection equipment, enhance enterprise independent innovation capabilities and market competitiveness, thereby driving the improvement of overall industry technical standards.

二零二四年亮點

光大環保技術裝備(常州)有限公司獲認定為「江蘇省院士專家(企業)創新中心」

光大環保技術裝備(常州)有限公司於二零二四年九月被江蘇省科學技術協會評為「江蘇省院士專家(企業)創新中心」。該公司聚焦於生活垃圾飛灰的資源化利用，致力於攻克低溫熱解、高效水洗、有機廢鹽處理，以及建材資源化等關鍵技術問題，同時涵蓋智慧環保、雙碳節能及高端裝備的技術研發與成果轉化。本集團充分發揮院士專家及其團隊在技術創新、成果應用和人才培養等方面的優勢，深入開展科研攻關和學術交流，積極培養創新型科技人才，助力公司技術創新和綜合實力提升。該公司將繼續與行業內院士專家保持緊密合作，堅持在研發投入和技術攻關上持續發力，以企業創新需求為導向，並以課題研究為紐帶，著力解決行業關鍵難題，不斷攻克環保裝備領域的核心技術，提升企業的自主創新能力和市場競爭力，進而帶動行業整體技術水平提升。

Human Rights and Ethics

The Group has formulated the *Human Rights Policy* to support all international human rights standards and regulations, including the “UN Universal Declaration of Human Rights”, the “Guiding Principles on Business and Human Rights”, and related provisions of the “UN Global Compact” and the International Labour Organization. This policy explicitly affirms respect for human rights and covers several core areas, such as diversity and inclusion, equal opportunities, reasonable working hours, gender pay equality, workplace health and safety, freedom of association, and the collective bargaining mechanism between employees and employers. The *Human Rights Policy* applies to all employees of the Group, including but not limited to women and migrant workers. Additionally, the Group is committed to regularly reviewing and updating this policy to adapt to the evolving social and legal environment. We will also ensure that all employees fully understand their rights and the policies through training and awareness campaigns, encouraging them to actively uphold and advocate for human rights in the workplace.

At the same time, the Group maintains a zero-tolerance policy towards child labour, forced labour, and human trafficking, and strictly adheres to key human rights declarations and labour regulations. The Group does not engage in the use of any child labour or forced labour. In terms of compensation, we are committed to offering fair and competitive salaries, with all employees receiving wages that exceed the local minimum wage standards. Looking ahead, the Group plans to commit to a living wage policy to ensure the financial security of its employees.

Additionally, we fully understand the impact of medical expenses on the quality of life of our employees. To address this, we provide supplementary medical insurance, annual physical check-ups, accident insurance, and other benefits aimed at enhancing employees’ health coverage. We have also established an Employee Health Fund, which provides additional financial assistance to employees who suffer from accidents or serious illnesses, helping them manage high medical costs and alleviating financial pressure.

During the Reporting Period, the Group did not encounter any violations of human rights, use of child labour, or forced labour, nor did any young workers engage in hazardous work. We conduct an annual human rights performance review to ensure that the aforementioned human rights issues do not arise and to continuously improve relevant measures, safeguarding the basic rights of our employees.

人權與道德

本集團制定了《人權政策》，以支持所有國際人權標準和規範，例如「聯合國世界人權宣言」、「工商業與人權指導原則」以及「聯合國全球契約」和國際勞工組織的相關條款。該政策明確規定尊重人權，並涵蓋多個核心領域，如多樣性和包容性、平等機會、合理工作時數、性別薪酬平等、工作場所健康和 safety、結社自由，以及僱員與僱主的集體協商機制等。我們的《人權政策》適用於本集團的所有員工，包括但不限於女性和外地勞工等群體。此外，本集團承諾定期檢討和更新該政策，以適應不斷變化的社會和法律環境。我們還將通過培訓和宣傳，確保所有員工充分了解這些權利和政策，並鼓勵他們在工作中積極維護和倡導人權。

同時，本集團對童工、強迫勞動和人口販賣採取零容忍政策，嚴格遵守關鍵人權宣言和勞動法規，絕不使用任何童工或強制勞工。在薪酬方面，我們致力於提供公平且具有競爭力的薪酬，本集團所有員工的薪資標準均高於所在地區的最低工資水平。展望未來，我們計劃承諾生活工資政策，以確保其員工的生活保障。

此外，我們充分理解醫療支出對員工的生活質量的影響，為此，我們提供補充醫療保險、年度體檢和意外保險等保障措施，旨在提升員工的健康保障水平。我們還設立了員工健康基金，專門為遭遇意外或重大疾病的員工提供額外的經濟援助，幫助他們支付高昂的醫療費用，減輕財務壓力。

於報告期內，本集團沒有發生任何侵犯人權或存在使用童工或強迫／強制勞動之事件，亦沒有年少工作者從事危險工作。我們每年進行人權表現回顧，以確保不會出現上述人權問題，並持續改進相關措施，維護員工的基本權益。

The Group places great emphasis on the ethical, personal, and professional conduct of its employees, requiring everyone to comply with our established *Employee Code of Conduct*. This code addresses various important topics, including avoiding conflicts of interest, discrimination, both sexual and non-sexual harassment, bribery (including any form of facilitation payments), extortion, fraud, and money laundering. To ensure that the Group's operations align with social and corporate ethical standards, we also consider employees' ethical performance in their annual appraisals.

In addition, the Group adheres to a zero-tolerance policy and will strictly address any violations related to discrimination, harassment, breach of confidentiality, bribery, and other illegal activities in accordance with the law. To raise awareness among all employees, the Group provides regular training on anti-discrimination, anti-harassment, confidentiality duties, and anti-corruption. These trainings not only outline the expected standards of conduct but also include procedures for reporting and escalating incidents, helping employees understand how to correctly handle and report misconduct. We are committed to ensuring that employees fully understand and value these critical issues, fostering a safer and more respectful work environment.

Equal Opportunities and Integration

The Group's *Staff Handbook* covers topics such as compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, preventing child and forced labour, and other benefits and welfare. It aims to provide a fair, open, and respectful work environment for all job seekers and employees, free from discrimination based on gender, age, ethnicity, nationality, marital status, religion, and other factors. We are committed to promoting diversity and inclusion and ensuring that every employee can reach their potential on equal footing.

本集團高度重視員工的道德、個人及專業行為，並要求每個人遵守我們制定的《員工守則》。該守則涵蓋多個重要議題，包括避免利益衝突、歧視、性及非性騷擾、賄賂（包括任何形式的疏通費）、勒索、欺詐和洗黑錢等違法行為。為確保本集團的工作符合社會及企業道德標準，我們在績效評估中亦會考量員工的道德表現。

此外，本集團遵守法律，對歧視、騷擾、洩露機密和貪污受賄等違法行為採取零容忍態度，並嚴肅處理。為提高全體員工的意識，我們定期提供反歧視、反騷擾、保密義務和反腐敗培訓。這些培訓不僅講解正當行為的標準，還包括事件上報程序及升級程序，幫助員工了解如何正確處理和報告不當行為。我們致力於確保員工充分理解並重視這些關鍵議題，進而形成一個更加安全和尊重的工作環境。

平等機會及共融

本集團的《員工手冊》涵蓋薪酬和解僱、僱傭和晉升、工作時間、假期、平等機會、禁止童工和強迫勞動、其他待遇和福利等多項議題。該手冊旨在避免因性別、年齡、種族、國籍、婚姻狀況或宗教等因素引起的歧視，為所有求職者和員工提供公正、開放且受到尊重的工作環境。我們致力於促進多樣性和包容性，確保每位員工都能在平等的條件下發揮潛能。

The Group implements a fair and competitive remuneration and welfare system. Compensation is determined based on employees' qualifications, experience, job nature, individual performance, and market conditions, ensuring equal employment opportunities. We regularly review changes in market remuneration to ensure the fairness and competitiveness of the existing remuneration structure. At the same time, we will make appropriate salary adjustments based on the results of employees' annual performance evaluations to motivate employees' performance and attract outstanding talents. We pay special attention to gender equality and pay issues, and strive to reduce the impact of gender factors on pay levels and structures in order to address the male bias in energy and engineering-related industries. The Group is also committed to protecting the rights of vulnerable employees, offering adequate maternity leave for pregnant employees and paternity leave for male employees. To encourage employees on maternity or paternity leave to return to work, we will retain their original positions and ensure that their career development and pay are not affected.

本集團實行公平且有競爭力的薪酬福利制度，根據員工的資歷、經驗、工作性質、個人績效表現和市場狀況為基礎釐定薪酬，促進平等的就業機會。我們會定期檢視市場薪酬的變化，以確保現有薪酬架構的公平性和競爭力。同時，我們會根據員工每年的績效評價結果進行適當的薪酬調整，以激勵員工的表現並吸引優秀人才。我們特別關注性別平等和薪酬問題，努力減少性別因素對薪酬水平和結構的影響，以應對能源和工程相關行業對男性的偏重。另外，本集團致力於保護弱勢員工的權益，例如為懷孕員工及男性員工分別提供充足的產假和侍產假。為鼓勵休產假或陪產假的員工重返工作，我們將保留他們原有的職位，並確保他們的職業發展和薪酬不受影響。

Employee Maternity/Paternity Leave Statistics in 2024

二零二四年產假／侍產假數據

		 Female 女	 Male 男
Number of female and male employees who took maternity/paternity leave in 2024	二零二四年放產假／侍產假的男女員工數目	226	499
Number of employees who returned to work after maternity/paternity leave in 2024	二零二四年產假／侍產假結束後重返工作崗位的員工數目	140	475
Number of employees who returned to work after maternity/paternity leave ended in 2023 and still employed by the end of 2024	二零二三年產假／侍產假結束後重返工作崗位並於二零二四年底仍在職的員工總數	161	370
Percentage of employees who returned to work after maternity/paternity leave ended in 2024	二零二四年產假／侍產假結束後重返崗位的員工比例	98%	98%
Percentage of employees who returned to work after maternity/paternity leave ended in 2023 and still employed by the end of 2024	二零二三年產假／侍產假結束後並於二零二四年底仍在職的員工比例	88%	92%

Two-way Communication

The Group actively communicates with employees to create an ideal working environment where they can thrive. Employees have various channels to express their thoughts, including regular staff meetings and employee satisfaction surveys. The Group also encourages employees to directly communicate with the CEO and/or the chairman of the audit committee via email for matters that need to be reported, ensuring they can voice their opinions in a comfortable and confidential environment. The Group has established a grievance mechanism specifically designed to address issues such as workplace harassment, discrimination, labour relations, and human rights. This platform also allows employees to voice concerns, opinions, and questions about corporate governance. These measures aim to promote transparency and trust, ensuring that employees' voices are heard and valued.

2024 Collection of Employees' Opinion

In October 2024, the Group launched the "Listening to Grassroots Voices" initiative, aimed at gathering opinions and suggestions from all employees regarding strategic planning, business innovation, refined management, safety production, talent development, and digitalisation. We encourage all sectors and departments to actively submit proposals, which not only demonstrate the value placed on the voices of grassroots employees but also serve as a vital means of driving continuous improvement and high-quality development within the company.

The core of this initiative is to foster communication and interaction between all levels of the organisation, providing every employee with the opportunity to contribute their insights toward the Group's future development. By collecting and analysing these opinions, we aim to better understand employees' needs and expectations, which will help in crafting development strategies that align more closely with the actual situation.

雙向溝通

本集團積極主動地與員工溝通，致力於創造理想的工作場所。我們定期舉行員工會議及滿意度調查，為員工提供表達意見的渠道。在需要舉報的情況下，本集團鼓勵員工直接向總裁和／或審核委員會主席發送電子郵件，讓他們可以在安全和保密的環境中發表意見。本集團已設置申訴程序，專門處理工作場所的騷擾、歧視、勞資關係和人權等問題，並為員工提供了一個表達對公司治理的不滿、意見和疑問的平台。這些措施旨在促進透明度和信任，確保員工的聲音能夠被聽見並得到重視。

二零二四年員工意見徵集

二零二四年十月，本集團啟動了「傾聽基層聲音」活動，旨在廣泛徵集公司全體員工對戰略規劃、業務創新、精細化管理、安全生產、人才隊伍建設及數字化智能化發展等方面的意見和建議。我們鼓勵各板塊及部門積極提交意見建議書，這不僅是對基層員工心聲的重視，也是推動企業持續改進和高質量發展的重要途徑。

此活動的核心在於促進上下之間的交流與互動，讓每位員工都有機會為本集團的未來發展貢獻智慧。通過收集和分析這些意見，我們希望能夠更好地了解員工的需求和期望，並在此基礎上制定出更加符合實際情況的發展策略。

Talent Recruitment And Retention

Everbright Environment boasts a top-tier talent team, with its project management members possessing extensive experience across project planning, procurement, construction, operations, and R&D. The Group continuously strengthens its talent pool through diverse channels, including local, overseas, and campus recruitment, as well as internal training initiatives, to attract and nurture professional and international talent. To broaden recruitment channels, the Group has implemented the *Management Measures and Awards for Talent Referral by Internal Staff* in addition to the *Open Recruitment Management System*, encouraging employees to recommend suitable candidate(s) who can excel within the Group. Aligned with the “Leading Technological Innovation” strategy, the Group has actively introduced R&D management and technical specialists in recent years through industry-academia collaborations and the acquisition of technology companies. These efforts highlight the Group’s commitment to talent development while enhancing its competitiveness and capacity for innovation. In 2024, the average hiring cost per full-time new hire was HK\$579.

The Group is dedicated to offering open and equal employment opportunities and platforms, ensuring that candidates’ skills and qualifications are the primary considerations during the recruitment process. Employment opportunities are never influenced by factors such as gender, age, or ethnicity. Furthermore, the Group actively supports local economic development and job creation by hiring local talent for its projects in remote areas. In 2024, 14% of open positions were filled by internal candidates.

The Group has always provided various types of appropriate support to its employees. In addition to regular annual leave, the Group offers additional paid personal leave to handle various emergencies. The Group also takes the initiative to address employees’ needs and provide timely assistance. Regarding hygiene, the Group not only maintains cleanliness and disinfection in the workplace but also regularly shares tips for improving hygiene to remind employees to pay attention to personal hygiene in all environments.

人才招募及挽留

光大環境擁有一支頂尖的人才隊伍，項目管理團隊均由在項目規劃、採購、施工、運營及研發等多方面具有廣泛經驗的資深成員組成。為吸納及培養專業人才，本集團一直通過社會招聘、海外招聘、校園招聘及內部培養等方式不斷加強人才隊伍建設。本集團在落實《公開招聘管理制度》的基礎上，還制定了《內部員工推薦外部人才管理及獎勵辦法》，鼓勵員工引薦合適人選加入本集團發揮所長，拓寬招賢納士的途徑。為配合實施「科技引領發展」的策略，本集團近年更通過產學合作及收購技術公司等方式，積極引進研發管理及技術專才。這些措施體現了我們對人才發展的重視，並致力於提升公司的競爭力及創新能力。二零二四年，每名新全職員工的招聘成本為港幣579元。

本集團致力於提供開放、平等的就業機會和平台，將候選人的技能和資質作為招聘過程中最重要的考慮因素，以確保就業機會不受性別、年齡、種族等因素影響。我們還積極在偏遠地區的項目中聘用當地人才，以支持當地經濟增長和就業機會。二零二四年，內部候選人填補了14%的空缺職位。

本集團一直以來為員工提供各類適當的支援。除定期年假外，本集團亦為員工提供額外的含薪個人休假，以應對各種緊急事件，並主動照顧員工需要，及時提供支持。在清潔衛生方面，除維持工作場所的清潔與消毒外，本集團還不時分享改善衛生的小知識，以提醒員工在各種場所都要注重個人衛生。



Note:

⁽¹⁾ Employees employed in the same province in Mainland China are regarded as local employees, while employees employed in other provinces in Mainland China are regarded as non-local employees.

附註：

⁽¹⁾ 在中國內地同省受聘的員工被視為本地員工，而在中國內地外省受聘的員工則被視為外地員工。

**Total Number of Employee Turnover
(Resignation/Retirement) in 2024⁽¹⁾:**
二零二四年流失員工(離職/退休)總人數⁽¹⁾:

1,751

Unit: people 單位: 人

By Type
按類型劃分

Resigned
離職

1,702

Retired
退休

49

By Gender
按性別劃分



Female
女

364



Male
男

1,387

By Age
按年齡劃分

30 and below
30歲及以下

692

31-40
31-40歲

700

41-50
41-50歲

257

51 and above
51歲及以上

102

By Geographical Region
按地區劃分

Mainland China
中國內地

1,602

Others (Hong Kong, Singapore,
Vietnam and Poland)
其他(香港、新加坡、越南及波蘭)

149

The Group recognises that talent development requires time. Therefore, we annually track the number of employees approaching retirement eligibility to adjust our workforce management strategies. We provide employees with well-structured career development plans and retirement arrangements, ensuring a smooth transition and the necessary support at various stages of their careers.

Note:

⁽¹⁾ The total turnover rate (resignation/retirement) in 2024 was 12%, while the voluntary turnover rate was 5%.

本集團深知人才培養需要時間，因此每年均會統計即將合資格退休的員工人數，以便調整人員管理安排。我們為員工提供妥善的職業生涯管理計劃和退休安排，確保他們能平穩過渡，並在職業生涯的不同階段獲得所需的支持。

附註：

⁽¹⁾ 二零二四年的總流失率(離職/退休)為12%，而自願流失率為5%。

Percentage of Employees Eligible for Retirement in Five and Ten Years 五年及十年內合資格退休的員工百分比

Employee Ranking	員工職級	In Five years 五年內	In Ten years 十年內
Senior management	高級管理人員	11%	33%
Middle-level management	中層管理人員	4%	11%
General and technical staff	一般及技術員工	2%	5%

Training and Development

Talent is the key to corporate development. The Group places great importance on human resources management, incorporating employee training into regular management practices, establishing training records, and continuously strengthening the talent pool. In response to the Group’s business development needs, appropriate training is arranged in a unified manner. Various training sessions are organised to provide both management and employees with opportunities for continued education, enhancing their professional and overall capabilities. During the Reporting Period, the Group continued to improve its training management system and issued the *Training Instructors and Course Management Regulations*. Additionally, each project team regularly provides training tailored to their specific needs, enabling employees to leverage their strengths and contribute to the creation of an excellent professional talent team for the Group. In 2024, the average training resources allocated to each full-time employee was HK\$283.

During the Reporting Period, the Group continued to implement a blended training model combining online and offline approaches. Various training sessions were organised, including environmental safety management training, information network security training, procurement specialised training, engineering cost training, and integrity seminars, all aimed at promoting continuous learning among management and employees to meet new opportunities and challenges. The Group fully leverages its diverse business advantages to provide employees with broad development platforms, such as cross-departmental and cross-regional rotation exchanges, as well as the establishment of a reserve management talent pool and an international talent pool, laying a solid foundation for the Group’s long-term success.

培訓及發展

我們明白企業發展的關鍵在於人才。本集團高度重視人力資源管理，把員工培訓納入常態管理，建立培訓檔案，不斷加強人才隊伍建設，並根據本集團業務發展需要統一安排合適的培訓。我們舉辦各類培訓班，給予管理層及員工持續進修的機會，提升其專業和綜合能力。本集團已發佈《培訓講師及課程管理暫行規定》，進一步提升培訓講師能力及培訓課程質量。同時，各項目也會根據自身需要定期為員工提供適合的培訓，讓員工發揮所長，為企業打造優秀的專業人才隊伍。二零二四年，投放至每名全職員工的平均培訓資源為港幣283元。

於報告期內，本集團繼續實行線上與線下結合的培訓模式，先後舉辦安環管理培訓、信息網絡安全培訓、採購專題培訓、工程造價培訓及廉政講座等，促進管理層及員工持續學習，迎接新的機遇與挑戰。本集團充分利用多元的業務優勢，為員工提供廣闊的發展平台，例如跨板塊、跨區域輪崗交流，以及建立後備管理人才庫及國際人才庫，為本集團的長期成功奠定堅實基礎。

On 19 September, 2024, Everbright Environment held an ESG and sustainability-themed training session simultaneously at its headquarters in Shenzhen and online, attracting 308 employees. External instructors combined the current global climate change situation with the actual circumstances of Everbright Environment to provide an in-depth explanation of the key focuses across the three dimensions of ESG, the requirements and responses to the new climate disclosure regulations by the Stock Exchange, the Group's sustainability performance, and future improvement directions. Participants actively engaged in discussions, asking questions about topics such as climate information disclosure, operational management, financial preparation, carbon emission calculation methodology, and carbon asset management system improvements. The training session deepened participants' understanding of ESG, introduced the new climate disclosure regulations of the Stock Exchange, and clarified their roles and responsibilities in sustainability information disclosure.

The Group has established a comprehensive and assessable staff appraisal system to improve employees' work quality, competitiveness, and motivation. The appraisal process evaluates personal performance in five key areas: adherence to company rules and regulations, professional competence and organisational coordination skills, dedication and responsibility, achievement of annual work goals, and integrity in the workplace. The results of the performance appraisals serve as the primary basis for determining year-end bonuses and future job adjustments. Employees with excellent performance will receive performance bonuses and more promotion opportunities, while underperforming employees may face bonus reductions, demotion, or even termination. This ensures that resources such as job promotions and compensation are allocated to those who create value and achieve outstanding results. Additionally, we have implemented the *Administrative Measures for Clawback of Performance-based remuneration* to enable employees to perform their duties prudently.

二零二四年九月十九日，光大環境在深圳總部及線上同步開展ESG與可持續發展專題培訓，吸引了308名員工參與。外部講師在此次培訓中結合全球氣候變化現狀及光大環境實際情況，深入講解了ESG三個維度的關注重點、聯交所氣候披露新規的要求及應對、光大環境的可持續發展表現以及下一步的提升方向。現場參會人員積極提問，就氣候信息披露與運營管理、財務人員如何做好準備、碳排放計算方法學、碳資產管理系統提升等問題與講師展開深入討論和交流。通過此次培訓，全體參會人員加深了對ESG的全面認知，初步了解了聯交所氣候披露新規的要求，也更加明確自身在可持續發展信息披露工作中的職責所在。

本集團設立了全面且可評估的年度員工考核制度，以提升員工的工作質素、競爭力及積極性。員工的個人綜合表現考核涵蓋德、能、勤、績、廉五個方面，具體包括對公司規章制度的遵守和執行、專業能力及組織協調能力、敬業精神及責任感、對年度工作目標的履行情況以及廉潔從業的情況等。員工績效考核結果是確定年終績效獎金及未來職務調整的主要依據，表現優異者將獲得績效獎勵及更多晉升機會，表現不稱職者將面臨獎金扣減、低聘甚至解聘等情形，真正做到將職級晉升、工資薪酬等資源向價值創造者傾斜、向業績優秀者傾斜。同時，我們亦落實《績效薪酬追索扣回管理辦法》，敦促員工謹慎履職。

Every mid-year, managers at all levels are required to conduct regular performance discussions with their subordinate employees to provide feedback and guidance on the completion of performance goals. If an employee's actual performance falls short of the expected goals, an attribution analysis will be conducted, and a corresponding performance improvement plan will be developed. At the end of each year, both the appraiser and the appraised employee will engage in two-way communication regarding the performance evaluation results. The feedback will include achievements, existing problems, and areas for improvement. Finally, both parties will fill out the *Performance Communication Form*, which will be submitted to the Human Resources Department for record-keeping. Additionally, the Group actively implements the *Talent Development Plan (2023–2025)*. This process aims to ensure the transparency and effectiveness of performance management, promote employees' professional growth, and contribute to the overall development of the team. In 2024, all employees received constructive feedback and career development suggestions from their performance appraisals, laying a solid foundation for talent reserves and the company's sustainable development.

In 2024, the total training hours for employees at Everbright Environment reached 1,132,288 hours, with an average of 76 training hours per employee. The staff training rate achieved was 100%, and the training programmes covered topics such as anti-corruption, anti-harassment, and anti-discrimination, among others.

每年年中，各級管理者需與下屬員工進行常規性的績效面談，對績效目標的完成情況進行反饋與指導。如果員工的實際績效表現未達到預期目標，則將進行歸因分析並制定相應的績效改進方案。每年年底，考核人與被考核人將針對績效評價結果進行雙向溝通，反饋內容包括取得的成就、存在的問題和不足等。最終，雙方將填寫《績效溝通表》，並提交人力資源部進行備案。同時，本集團亦積極落實《人才發展規劃(2023-2025)》。這一系列流程旨在確保績效管理的透明性和有效性，促進員工的專業成長與團隊的整體發展。二零二四年，所有員工均從各自的績效考核中獲得具建設性的回饋和職業生涯規劃建議，為人才儲備及企業持續發展奠定了堅實的基礎。

二零二四年，光大環境的員工培訓總時數達到1,132,288小時，人均培訓時數為76小時。當中，員工培訓率達100%，培訓已涵蓋反腐敗、反騷擾和反歧視等議題。



Back-up Talent Management

To ensure that the talent pool aligns with the Group's sustainable development, the Group actively implements the *Administrative Measures for Back-up Cadre*, and continues to enhance the back-up management personnel pool across our five sectors. Currently, there are 629 back-up management personnel who will play a crucial role in the future development of the Group and strengthen its competitiveness within the industry.

In addition, the Group provides internal selection opportunities for excellent management talents by posting recruitment information in the talent pool. These opportunities include voluntary applications and bottom-up recommendations, allowing capable and ambitious employees to grow and develop further. Moreover, the Group has issued a series of human resource management measures to improve overall management efficiency. These include procedures for the appointment and dismissal of staff, the management of appointed directors and supervisors in subsidiaries, and regulations for overseas travel, among others. These measures not only facilitate the reasonable movement of internal talent but also enhance transparency and standardisation in management, providing solid support for the long-term development of the company.

後備人才管理

為確保人才儲備配合本集團的持續發展，我們積極落實《後備幹部管理辦法》，持續不斷完善五大板塊的後備管理人員庫。本集團目前共有629名後備管理人員，他們將成為未來發展的主力軍和新力軍，為集團的長期成功提供堅實的人才保障，進一步提升本集團在行業中的競爭力。

為培養和選拔優秀的管理人才，本集團亦在人才庫中公佈招聘信息，並通過自願申請和由下而上的推薦提供內部選拔機會，令有能力和理想的員工獲得更大的成長和發展，進一步激發他們的工作熱情和職業動力。同時，本集團已發佈多項人力資源管理辦法，旨在提高整體管理效率。其中包括職務任免工作流程、派遣董事及監事的管理辦法以及因公出國（境）管理辦法。這些指引不僅促進了內部人才的合理流動，還增強了管理的透明度和規範性，為公司的長期發展提供了堅實的支持。

As of 31 December 2024

截至二零二四年十二月三十一日

Total number of back up management personnel
後備管理人員總數

629 人

Number of deputy general managers promoted to general managers
副總經理獲晉升為總經理的人數

41 人

Number of back-up management personnel promoted to the new project's general managers, construction supervisors or project management team leaders
後備管理人員赴任新項目的總經理、總指揮或籌備組長的人數

54 人

Internal Inheritance and Exchange

The Group highly values internal communication and knowledge transfer among its human resources. To help young employees grow, the Group actively utilises its human resources advantage through the “Apprenticeship Programme”. In this programme, experienced and skilled employees mentor new recruits, promoting a positive learning atmosphere within the company. Mentors pass on their knowledge and skills, helping apprentices adapt to the work environment, encouraging an active learning and working attitude, and ultimately ensuring the smooth transfer of knowledge and skills within the organisation.

Employee Benefits

The Group has a comprehensive benefits and welfare system, with all regular employees entitled to maternity leave, paternity leave, disability and critical illness insurance, life insurance, and medical insurance. In addition to the mandatory pension insurance required by law, the Group has established a supplementary pension system for eligible employees, providing additional retirement benefits to further enhance employees’ retirement security.

Each year, the Group provides free physical exams and occupational disease prevention checkups for employees, including health screenings, blood tests, kidney function tests, liver function tests, and other related services to safeguard their physical and mental health. Since 2019, the Group has not only provided free medical checkups for frontline employees but also offers ongoing health support to ensure their well-being, demonstrating our commitment to employee welfare. Additionally, the Group offers various other benefits to employees, including meal allowances, summer heat allowances, winter heating allowances, holiday benefits, employee care, and housing support.

The Group attaches great values to employees’ retirement security. In addition to adhering to the legally required pension plans, the Group provides further support through corporate annuities and voluntary contributions. These measures not only support employees’ retirement but also encourage their long-term commitment to the Group, thereby increasing employee loyalty and satisfaction.

內部承傳和交流

本集團高度重視人力資源的內部溝通和傳承。我們實施「師帶徒」培訓計劃，旨在鼓勵青年員工成長發展，充分利用自身人力資源優勢。該計劃促進了具有豐富經驗或綜合素質較高的員工與新員工之間的師徒關係，在公司內部建立良好的學習環境，從而進一步推進知識的傳承與技能的提升。透過「傳幫帶」的方式，師父們將自己的知識和技能傳遞給徒弟，幫助他們更好地適應工作環境，並以積極的態度對待學習和工作，最後實現薪火相傳。

員工福利

本集團擁有健全的保障及福利制度，所有正式員工均享有產假、待產假、殘疾和重大疾病保險、人壽保險和醫療保險。除依法提供強制性養老保險外，本集團還為符合條件的員工建立了補充養老制度，作為額外的退休福利，旨在進一步提升員工的退休保障。

本集團每年皆為員工提供免費體檢和職業病預防檢查服務，包括身體檢查、血液檢查、腎功能檢查、肝功能檢查等多項內容，以保障員工身心健康。自二零一九年起，本集團不僅為前線員工提供免費體檢，還提供後續的健康支持，為他們的健康保駕護航，彰顯了我們對員工福祉的承諾和關懷。我們亦為員工提供多項額外福利，包括工作餐、防暑降溫費、取暖費、節日福利、員工關懷以及員工住房等。

本集團一向重視員工的退休保障，除遵循法律規定的退休計劃外，亦為員工提供額外的保障，如企業年金和自願性供款等。以上措施不僅為員工的退休生活提供支持，還有助於鼓勵他們專心致志地為本集團長期服務，進一步提升員工的忠誠度和滿意度。

Work-Life Balance

The Group adheres to the “People-oriented” principle and places great importance on the physical and mental health of its employees. We actively organise various activities that benefit both the body and mind, which not only promote good relationships among employees but also help them establish a balance between life and work, ultimately achieving a win-win situation for both the enterprise and its employees. For example, the Group organises and co-hosts a variety of recreational and sports activities each year, including swimming competitions, fun sports days, basketball friendly matches, and birthday celebrations, all aimed at enhancing employee satisfaction and fostering team cohesion.

The Group provides employees in its project companies with comfortable and well-equipped accommodation, featuring various recreational facilities such as sports grounds, gymnasiums, swimming pools, chess and bridge rooms, and libraries. These amenities allow employees to relax and alleviate work-related stress. To further enhance employee well-being, some project companies offer free massage and hairdressing services. Additionally, certain project companies have established a dietary committee, regularly seeking feedback on employees’ dining experiences, continuously improving menu offerings, and providing employees with nutritious and delicious meals.

Take Action and Participate in Environmental Protection

As a leader in the environmental protection sector, the Group actively encourages employees to integrate environmental protection principles into both their work and daily lives, starting with small actions to foster environmental awareness. We believe that environmental protection is not only a job, but also a way of life.

In 2024, employees actively participated in environmental protection efforts outside of work, collaborating with friends, family, and local organisations to protect the environment and create a greener, better future for the next generation.

工作與生活平衡

本集團秉持「以人為本」的原則，十分關注員工的身心健康。我們積極舉辦各類有益身心的活動，不僅促進員工之間的良好關係，還幫助他們在生活與工作之間建立平衡，進而實現企業與員工的互利雙贏。例如，本集團每年組織及聯合舉辦多項文娛休閒和體育活動，包括游泳比賽、趣味運動會、籃球友誼比賽和生日慶祝活動等，旨在提升員工的滿意度和凝聚力。

本集團在各項目公司中均為員工提供舒適和設備齊全的宿舍，配備多種康樂設施，包括運動場、健身房、游泳池、棋牌室和圖書館等康樂設施，讓員工放鬆身心，減輕工作壓力。為緩解員工的疲勞並便利他們的生活，部分項目公司為員工提供免費的按摩與理髮服務。此外，部分項目公司更設立了膳食委員會，通過定期了解員工的用餐體驗，不斷改進菜餚款式，為員工提供營養豐富而且美味的飯菜。

身體力行參與環保

作為環保領域的龍頭企業，本集團積極鼓勵員工在工作和日常生活中貫徹環保理念，從身邊的小事著手，以培養環保意識。我們相信，環保不僅僅是一項工作，更是一種生活方式。

二零二四年，員工在工作以外的時間積極地參與環保行動，與朋友、家人和當地組織一起保護環境，為下一代創造更綠色、更美好的未來。

Hangzhou Waste-to-energy Project Hosts “Whimsical Wonders, A Fragrant Encounter with You” Women’s Day Themed Event 杭州垃圾發電項目開展「奇思妙想·與你『香』遇」婦女節主題活動

As spring breathes new life into the earth, Hangzhou Project specially organised a Women’s Day event themed “Whimsical Wonders · A Fragrant Encounter with You” for its female employees. Guided by a professional perfumer, participants explored perfume classifications and blending techniques during a DIY perfume workshop, crafting their own unique fragrances by hand and enjoying a relaxing moment amidst delightful scents.



獨一無二的個人香調，在芬芳中享受身心放鬆的美好時光。

To extend the creative atmosphere, the event also featured a fluid bear crafting session. Female employees freely mixed colours to create one-of-a-kind artworks, experiencing the therapeutic power of aesthetics while unwinding. The two activities complemented each other, fostering team interaction while deepening an appreciation for the beauty of life. These activities enabled participants to enjoy a warm and meaningful Women’s Day celebration.

為延續創意氛圍，活動更安排了流体熊手作環節。女員工們自由調配色彩，創作出獨一無二的藝術作品，在解壓過程中感受美學療癒力。兩項活動相輔相成，既強化了團隊互動，亦昇華了對生活美學的體悟，讓全體參與者度過了溫馨且有意義的婦女節。

春回大地之際，杭州項目特別為女員工籌辦「奇思妙想·與你『香』遇」婦女節主題活動。活動中，專業調香師帶領參與者認識香水分類與調製技巧，透過香水DIY工作坊，每位女員工親手調配

Hengnan Waste-to-energy Project Hosts “Women United, Embracing the March 8th Commitment” Themed Event 衡南垃圾發電項目舉辦「巾幗同行，共赴三八之約」主題活動

Hengnan Waste-to-energy Project held the “Women United, Embracing the March 8th Commitment” themed event on International Women’s Day. Through a symposium, the event recognised the significant contributions of female employees to the company’s development, while the “March 8th Red Flag Bearer” selection commended women who made outstanding contributions at work. The event incorporated a flower-arranging experience, showcasing the united and progressive spirit of female employees in a warm atmosphere. This occasion not only provided a platform for female employees to unwind and connect but also boosted team morale through honouring achievements. It successfully highlighted the spirit of women in the new era, harnessing their strength to support the company’s high-quality development.



溫馨的氛圍中展現女員工團結進取的精神風貌。此次活動不僅為女員工提供了抒壓與交流的平台，更透過榮譽表彰激勵團隊士氣，成功彰顯新時代女性精神，為公司高質量發展凝聚巾幗力量。

衡南垃圾發電項目於國際婦女節舉辦「巾幗同行，共赴三八之約」主題活動，透過座談會肯定女員工對公司發展的重要貢獻，並以「三八紅旗手」評選活動表彰在工作中作出突出貢獻的女員工。活動結合插花藝術體驗，在溫

2024 Family Day Hiking Event 二零二四年家庭日徒步活動

On 7 December, 2024, the Everbright Environment Union successfully organised a Family Day hiking event themed “Towards the Light, Walking with the Sun” at the Yangmeikeng Seaside Promenade in Shenzhen. A total of 175 employees and their families from various departments and sectors of the company participated, enjoying a fulfilling and enjoyable weekend together. This event not only enhanced communication and cohesion among employees but also allowed everyone to enjoy a healthy lifestyle in a beautiful natural setting.

The Yangmeikeng Seaside Promenade, known for its stunning natural scenery and tranquil coastline, is an ideal destination for hiking enthusiasts. Along the way, employees and their families admired the shimmering sea and enjoyed the gentle sea breeze, stopping occasionally to take photos and savour moments of family interaction. Children ran and played on the beach, their laughter blending with the sound of the waves, creating a beautiful springtime melody.

To make the hiking experience even more engaging, the union specially arranged fun family tug-of-war games and challenge tasks. These activities allowed participants to enjoy the natural beauty while experiencing the joys of teamwork. Not only did these activities strengthen the bonds among employees, but they also deepened the emotional connections between families, making everyone feel the warmth and harmony of family life.

二零二四年十二月七日，光大環境工會成功舉辦了主題為「逐光向陽·與光同行」的家庭日徒步活動，地點位於深圳楊梅坑海濱棧道。來自公司各個部門和板塊的175名員工及其家屬積極參與，共同度過了一個愉快而充實的週末。此次活動不僅增進了員工之間的交流與凝聚力，還讓大家在美麗的自然環境中享受了健康生活的樂趣。

楊梅坑海濱棧道以其優美的自然風光和寧靜的海岸線而聞名，是徒步愛好者的理想之地。沿途，員工與家屬們一邊欣賞碧波蕩漾的海面，一邊享受海風輕拂的愜意，時而停下腳步拍照留念，時而享受親子互動的樂趣。孩子們在沙灘上奔跑嬉戲，笑聲與海浪聲交織成一首動人的春日樂章。

為使徒步之旅更加豐富多彩，工會特別設置了趣味親子拔河遊戲和挑戰任務，讓大家在享受自然美景的同時，也能體驗到團隊合作的樂趣。這些活動不僅增強了員工之間的默契，也讓員工家屬之間的情感聯繫更加緊密，讓每個人都感受到家庭的溫暖與和諧。



Suzhou Waste-to-Energy Project Hosted Summer Parent-Child Eco Show 蘇州垃圾發電項目組織開展暑期親子環保秀活動



To enhance environmental awareness among the youth, the Suzhou Waste-to-energy Project organised a summer parent-child eco show under the theme “Together with You, Building a Green Dream”, engaging 22 employee families. During the event, children participated in guided facility tours, witnessing first-hand how waste is transformed into electricity and gaining insight into their parents’ contributions to environmental protection. This immersive experience not only sparked wonder at the science behind “waste rebirth” among the children but also deepened their appreciation for ecological conservation.

The event also featured a collaborative parent-child workshop, where families creatively repurposed discarded materials such as newspapers and paper bags into eco-friendly costumes. Children crafted imaginative designs—from cardboard dinosaur armour to bulletproof vests made of paper bags—and confidently showcased their creations on the stage. This initiative not only strengthened family bonds but also conveyed the ethos of “Turning Waste into Treasure” through playful learning, inspiring the next generation to actively embrace sustainable practices and plant the seeds for a greener future.

為增強青少年環保意識，蘇州垃圾發電項目以「與你在一起·共築綠色夢」為主題，舉辦了一場暑期親子環保秀活動，吸引了22組員工家庭參與其中。活動中，孩子們透過廠區導覽，親身見證垃圾轉化為電能的過程，並從父母的工作日常中體會他們對環保的貢獻。實地探索不僅讓孩童驚嘆「廢物重生」的科學奧妙，更深化其對生態保護的認同感。

活動亦安排親子協作環節，鼓勵家庭利用廢棄報紙、紙袋等材料，共同創作環保服飾。孩子們發揮創意，將硬紙板變身恐龍盔甲、紙袋改製防彈衣，並於舞台自信展示成果。此舉不僅促進了親子互動，更以寓教于樂的形式傳遞「變廢為寶」理念，啟發下一代在生活中主動實踐環保，為可持續的未來播下種子。

Safety Culture 安全文化



Upholding safety operation
enhancing quality of services
堅守安全運營・提升服務品質



Safety culture is of utmost importance to the Group. We place great emphasis on protecting the health and safety of both employees and the public. To this end, we ensure the implementation of a safety management system that provides a secure working environment for employees while continuously improving and optimising safety measures. Additionally, we actively promote safety education and awareness campaigns, as well as implement the *Regulations on Information Communication, Reporting, and Disclosure for Safety and Environmental Management* to foster the dissemination of safety and environmental information, so as to enhance employees' understanding of safety issues, helping them identify and prevent potential hazards. This effort is essential in minimising any negative impacts during operations and ensuring the continued stability of the business.

Full Implementation of the ESHS Management System

The Group fully implements the ESHS Management System to enhance the effectiveness of the regulatory mechanism in our operations and further improve safety management standards. The system includes management procedures on key ESHS topics such as identification, audits, incident investigation and reporting, handling of work-related injuries, and contractor ESHS management. This system effectively extends the safety culture and related policies across the entire supply chain. Each project has established standard operating procedures and on-site work checklists in line with the ESHS Management System, ensuring the safety of the working environment, protecting employees, third-party contractors, and subcontractors from occupational injuries, and safeguarding public safety.

本集團高度重視安全文化，始終關注員工及公眾的健康和安全。我們確保安全管理體系能為員工提供安全的工作環境，並持續進行改進和優化。此外，本集團積極推廣安全教育與宣傳，落實《安環管理信息溝通、報送和公開管理規定》以加強安環信息傳達，從而提高員工的安全意識，幫助他們識別和防範各類潛在的安全事故，並減少運營期間可能產生的不良影響，確保企業的持續穩定運行。

全面施行ESHS管理體系

本集團全面施行ESHS管理體系，旨在完善監管機制在運營中的有效實踐，進一步提升安全管理水平。該體系涵蓋重要ESHS議題的識別、審核、事故調查及報告、工傷處理及承包商ESHS管理方面等指導程序，能有效將安全文化和相關政策延伸到本集團的整個供應鏈中。ESHS管理體系為本集團的所有項目建立了標準操作流程和現場工作檢查表，為僱員的工作環境和公眾安全提供保障，並保護僱員、第三方承包商及分包商駐場工人免受職業性傷害。

Safety Risks Identification Process

安全風險識別流程



In order to enhance management efficiency, in terms of ESHS Management System structure, the Group has established a “four-in-one” management system. The Group has set up a Safety and Environmental Management Committee and a corresponding Operation, Safety and Environmental Management Department or Safety and Environmental Management Department at the four main levels of headquarters, business sectors, regional centres and subordinate project companies. This management model aims to strengthen coordination and communication between all levels, ensuring the effective implementation of safety and environmental management policies and standards. By establishing this comprehensive management structure, we can better monitor and evaluate ESHS-related operational activities, thereby improving overall management efficiency and ensuring the safety and health of employees and the public.

為進一步提升管理效能，本集團在ESHS管理體系的架構上構建了「四位一體」的管理體系。在總部、業務板塊、區域中心及轄屬項目公司四個主要層面，我們均設立了安全與環境管理委員會和相應的運營與安環管理部或安全與環境管理部。這一管理模式的建立旨在強化各層級之間的協調與溝通，確保安全與環境管理的政策和標準能夠有效落實。通過這種全方位的管理架構，我們能夠更好地監控和評估ESHS相關的運營活動，從而提升整體的管理效能，確保員工及公眾的安全和健康。

Headquarters 總部	- Safety and Environmental Management Committee: regulate, supervise, and review the ESHS Management System to ensure its effective execution and continuous improvement 安全與環境管理委員會：負責規範、督導、檢討ESHS管理體系，以確保其有效執行並持續改進 - Operation, Safety and Environmental Management Department: assists the Safety and Environmental Management Committee in implementing Group-wide ESHS Management System and related policies 運營與安環管理部：協助安全與環境管理委員會於本集團推行ESHS管理體系及相關政策，確保各項措施落實到位，並提供必要的支持和指導
Sectors 板塊	Safety and Environmental Management Department: analyse the consolidated ESHS audit reports from Regional Centres 安全與環境管理部：負責分析匯總區域中心所提交的ESHS審核報告，以識別潛在問題並提出改進建議
Regional Centres 區域中心	Regional Safety and Environmental Management Department: audit project companies, provide audit findings and follow-up on corrective actions 區域安全與環境管理部：對項目公司進行定期審核、提供審核結果並跟進整改情況
Project Companies 項目公司	Undergo regular and unscheduled ESHS on-site assessments and carry out consequent corrective actions 接受定期及不定期ESHS現場審核並根據審核結果進行必要的整改

The Safety and Environmental Management Committee holds decision-making authority and is responsible for regulating, overseeing, and guiding the implementation of environmental and safety practices across all sectors of the Group. The committee convenes annually to review and improve the Group's ESHS Management System, ensuring its ongoing effectiveness.

Additionally, we encourage employees at all levels to actively participate by providing suggestions for improving the ESHS Management System, as well as existing safety policies and measures. To prevent safety incidents resulting from unreported issues, the system also ensures the privacy of whistleblowers, fostering a culture of transparency and accountability.

Guided by our internal *ESHS Audit Management Standards*, the Group conducts on-site ESHS audits for the project companies across each business sector to evaluate their performance and determine whether preventive or corrective actions are necessary. All operating and under-construction projects undergo annual internal ESHS audits, with unscheduled audits conducted as needed. Solar energy and wind power projects undergo internal ESHS audits every two years. The audits cover various aspects, including environmental concerns (e.g., pollution emissions, temporary hazardous waste storage), safety (e.g., fire safety design, vehicle usage), occupational health (e.g., occupational hazards, annual health check-ups), and social responsibility (e.g., supplier screening, charitable activities). During the audits, risk factors are assessed based on their severity and potential impact, and classified into low, medium, and high-risk categories. This helps us develop targeted improvement plans to continuously enhance the ESHS management level.

In addition, the *Safety Accidents and Environmental Incident Management Regulations* establish clear response procedures and follow-up mechanisms for accidents. Accidents are categorised into four levels based on their severity and impact, with level one being the most serious. Accidents at levels one to three must be directly reported to Everbright Environment's Safety and Environmental Management Committee, which is responsible for overseeing the investigation. Accidents at level four must be reported to the Safety and Environmental Management Department of the respective sector, which will then submit investigation reports to Everbright Environment's Safety and Environmental Management Committee. The investigation report will include the cause of the accident, associated risks, preventive and corrective measures, investigation results, and lessons learned from the safety production management perspective, aiming to prevent the recurrence of similar incidents.

安全與環境管理委員會具有決策權，負責重點規範、監督及指導本集團各業務板塊環境及安全工作的實施，並每年定期召開檢討會議，以審視和提升本集團的ESHS管理體系，確保其持續有效。

同時，我們亦鼓勵各層級的員工積極參與，隨時向上級提出對ESHS管理體系和現有安全制度及措施的改善建議。另外，為避免因知情不報而引致安全事故，體系亦會保障舉報者的隱私，鼓勵員工勇於舉報潛在問題。

我們依據內部制定的《ESHS審核管理標準》，對集團各業務板塊及項目公司ESHS的實施情況進行現場審核，定期評估相關績效表現，以確定是否需要對項目公司採取預防及整改措施。本集團旗下的在建及運營項目每年均會進行一次內部ESHS現場審核，並接受不定期的現場考核；光伏發電及風電項目則每兩年進行一次內部ESHS現場審核。審核範圍涵蓋環境（例如污染排放、危險廢物暫存）、安全（例如消防設計、車輛使用）、職業健康（例如職業病危害因素、年度體檢）及社會責任（例如供應商篩選、公益活動）等方面。在審核過程中，我們將根據風險的嚴重性和影響範圍，對風險因素進行評定，分為低、中、高風險等級，從而制定相應的改進計劃，確保持續提升ESHS管理水平。

此外，我們的《關於安全事故、環境事件管理規定》確立了明確的意外事故應對流程及後續跟進機制。按照嚴重程度及其影響，各類事故被分成一至四級，其中一級為最嚴重事故。一級至三級事故必須直接上報至光大環境的安全與環境管理委員會，由委員會負責監督調查工作；四級事故則須上報至所屬業務板塊的安全與環境管理部，由該部門向光大環境安全與環境管理委員會提交調查報告。調查報告的內容包括事故發生原因、相關風險、針對性防範措施和整改計劃、調查結果以及從安全生產管理方面總結的經驗教訓等，旨在防止同類事故再次發生。

In addition, we have established a strict accountability mechanism for safety incidents to ensure that all levels of incidents are properly handled. Depending on the severity and impact of the incident, we assess the responsibility of individuals involved and implement appropriate penalties. These penalties may include salary deductions and recoveries, as well as position adjustments, promotion restrictions, or other related measures. The purpose is to strengthen employees' safety awareness and ensure that every employee takes responsibility for safety in production.

Meanwhile, the Group has been actively implementing the internationally certified OHSAS 18001/ISO 45001 Occupational Health and Safety Management System in its operating project companies. The aim is to comprehensively improve workplace safety and health standards, ensuring the physical and mental well-being of employees.

The Group insists on operating each environmental protection project with high standards, with particular emphasis on the work safety and health of employees. In addition, after the projects are put into operation, various units actively apply for certifications, such as occupational health certifications, to ensure that the projects strictly adhere to safety standards. Regarding food safety, each project company's cafeteria has strict regulations for hygiene inspection management, fire safety management, kitchen equipment and tool management, and food sampling systems, providing comprehensive protection for employees' daily health.

Implementation of Safety Policies

The Group has established *Overall Emergency Plan for Sudden Incidents* and *Regulations for Emergency Management of Environmental Incidents*. Each project company has also established customised emergency plans to manage the potential risks across different areas and management processes within the plants, ensuring the safety management of both the project companies and the neighbouring communities. Based on the results of the risk assessment, we will regularly adjust and improve the emergency plan to meet the actual needs. The Group has also formulated management systems, such as the *Regulations on the Filing and Assessment Management of Safety and Environmental Management Institutions and Personnel*, to enhance the safety management level by implementing strict preventive mechanisms and standardising production practices, thereby fully improving the safety management level of the Group's projects.

此外，針對安全事故的發生，我們已建立嚴格的責任追究機制，以確保各級事故得到妥善處理。對於不同級別的事故，我們會根據事故的嚴重性和影響範圍，對責任人進行責任評估及處罰。處罰措施不僅包括薪資扣減和追索，亦涉及職位調整、晉升限制或其他相關措施，其目的在於強化員工的安全意識，促使每位員工對安全生產負起應有的責任。

本集團亦積極於運營項目公司推行獲國際認證的OHSAS 18001/ISO 45001職業健康和安全管理體系，旨在全面提升工作場所的安全和健康標準，保障員工的身心健康與福祉。

本集團堅持以高標準運營每個環保項目，尤其重視員工之工作安全及健康。此外，各單位在項目投運後均積極申報各項認證，如職業健康認證等，確保項目嚴格符合安全標準。在飲食安全方面，各項目公司食堂均設有嚴格的衛生檢查管理條例、消防安全管理條例、廚房設備與工具管理條例及食品留樣制度，為員工的日常健康提供全面保障。

落實項目安全制度

本集團設有《突發事件總體應急預案》及《環境事件應急管理規定》。各項目公司亦設有專門的應急預案，以應對廠區各範圍和管理流程的潛在風險，確保項目公司和鄰近社區的安全管理。我們會根據風險評估結果，定期對應急方案進行調整和改進，以適應實際需要。本集團亦制定了《關於安全與環境管理機構及人員備案、考核管理的規定》等管理制度，通過嚴格的預防機制來規範生產行為，全面提升本集團項目安全管理水平。

The Group unremittingly strives to design and construct projects with the highest safety standards, while advancing and implementing legal compliance procedures to ensure that the construction process of each project adheres to legal requirements. At the same time, the Group continues to invest in improving project safety, ensuring civilised and safe construction practices. The Group has established a comprehensive system of construction rules and regulations. By conducting diverse safety and environmental inspections and assessments for projects under construction, the Group enhances the standardised management level on construction sites. Additionally, the Group strengthens the management and assessment of construction contractors and suppliers by implementing the *Safety, Health, and Environmental Management Regulations for Stakeholders* and *Regulations for Work Safety and Environmental Protection in Construction Projects*, as well as adopting scientifically based project scheduling to ensure construction efficiency and safety. The Group has also signed "Letters of Responsibility for Construction Unit Safety" with construction contractors to promote the principle of "Everyone Is a Safety Officer and Should Be Responsible for Safety", encouraging all personnel to actively participate in safety management and fostering a collaborative safety culture.

In terms of supply chain collaboration, the Group is committed to establishing a solid, mutually beneficial, and competitive partnership model. In January 2024, the Group's equipment manufacturing held its first quarterly online supplier communication meeting, themed "Fair Competition, Contractual Spirit, Sincere Cooperation, and Integrity in Practice", which attracted over 60 suppliers. The purpose of this meeting was to promote the high-quality development of the supply chain and ensure a steady improvement in service levels throughout the year. During the meeting, the Group's equipment manufacturing communicated the 2023 supplier assessment results and introduced the newly revised *Supplier Management Regulations*, aimed at strengthening the management and evaluation of suppliers. The meeting concluded with an emphasis on the construction of an integrity-based supply chain to promote transparent and trustworthy cooperation, laying a solid foundation for long-term and stable partnerships.

本集團始終以最高的安全標準設計及建設項目，推進合法合規的手續辦理，確保各項目的施工過程符合法律規定。同時，本集團不斷提升工程項目的安全管理，確保文明安全施工。本集團已建立完善的工程建設規章制度，並定期對在建工程項目開展多元化的安全與環境專項檢查和考核工作，從而提升工程現場的管理水準。我們還加強了對施工方、供應商的管理與考核，落實《相關方安全健康環保管理規定》及《建設工程安全生產與環境保護管理規定》，科學合理地編製工期計劃，以確保施工的高效與安全。此外，本集團與施工單位簽訂「施工單位安全責任書」，倡導「人人都是安全員、人人都為安全負責」的理念，促進全員參與安全管理，形成共同維護安全的良好氛圍。

在供應鏈合作方面，本集團始終致力於建立穩固、多方共贏且具競爭力的合作模式。二零二四年一月，本集團裝備製造板塊舉行了年度第一季度供應商線上交流會，主題為「公平競爭、契約精神、精誠合作、廉潔從業」，吸引了60餘家供應商參與。此次交流會的目的是推動供應鏈的高質量發展，確保全年供貨服務水平穩步提升。會上，裝備製造通報了二零二三年供應商考核結果，並介紹了新修訂的《供應商管理辦法》，旨在加強對供應商的管理和評估，最後強調了廉潔供應鏈的建設要求以促進透明和誠信的合作關係，為長期穩定合作奠定堅實基礎。

In addition, the Group's *Measures for the Administration of Confined Space Operations* and *Regulations on the Administration of Work Tickets and Operation Tickets* are designed to standardise the management of confined space operations in its subordinate units, as well as strengthen the management of operational tasks such as operation, overhaul, maintenance, and testing during production processes, ensuring the safety and health of operators and preventing production accidents. Each project company is required to strictly supervise and ensure that the safety measures and control measures outlined on the work tickets and operation tickets are effectively implemented in accordance with the regulations. The Group also regularly conducts safety training for relevant personnel to enhance their safety awareness and operational skills, further reinforcing the overall safety management system.

Establishing Safety Culture and Securing Operational Safety

The Group set a long-term goal in 2023, aiming to maintain the work injury rate at or below 0.25 per year over the next five years (2023-2027). During the Reporting Period, the Group adhered to the principle of "Securing Operational Safety and Meeting Emission Standards", strictly complied with relevant national laws and regulations, implemented the *Regulations for Occupational Health Management*, and actively carried out daily safety, environmental, and occupational health inspections. In conjunction with the "Work Safety Month" initiative, the Group focused on safety management, identified potential safety hazards, and ensured that all projects under construction and in operation strictly followed safety protocols.

The Group has fully implemented the construction execution information management system, with all relevant functional modules now operational online. Additionally, the Group conducts regular project-specific inspections and random checks to ensure comprehensive coverage of critical areas such as inspections of key processes, safety briefings, construction plan reviews, and supplier assessments. To further enhance the emergency preparedness of staff, the Group also organises regular emergency drills to improve their overall ability to handle crises effectively.

此外，本集團的《有限空間作業管理辦法》和《工作票、操作票管理規定》旨在規範轄屬單位有限空間作業的管理，以及加強生產過程中運行操作、檢修、維護、試驗等工作的管理，保障作業人員的安全與健康，杜絕作業中的生產事故。各項目公司需嚴格按照規定進行監督，確保工作票和操作票上的安全措施及控制措施得到有效落實。我們亦定期對相關人員開展安全培訓，以提升其安全意識和操作技能，進一步強化整體安全管理體系。

建立安全文化保障安全運營

本集團已於二零二三年制定長期目標，致力於在五年間（二零二三至二零二七年）每年將工傷率維持在0.25或以下。為此，於報告期內，本集團繼續秉持「安全穩定運營、達標排放」的原則，嚴格執行國家相關法律法規，落實《職業健康管理規定》，積極開展日常的安全、環境與職業健康檢查工作。結合「安全生產月」活動，本集團嚴密落實安全管理，排查安全隱患，確保各項在建及運營項目嚴格執行各項安全制度。

本集團全面推進工程信息管理系統的應用，目前相關功能模塊已全面上線並投入運行。同時，本集團定期開展工程項目專項檢查和隨機抽查，確保全面覆蓋重點部位工序檢查、安全技術交底、施工方案審查、供應商考察等各個環節。我們亦定期組織應急演練，務求全面提升員工在危機發生時的應變能力。

Key Safety Actions

安全行動重點



Projects at Different Locations Launching a Series of Activities for "Work Safety Month"

各地項目展開「安全生產月」系列活動

June 2024 marked the 23rd Chinese Work Safety Month. Everbright Environment strictly adhered to the requirements of the Office of the State Council Safety Committee, adopting the theme "Safety and Emergency Response for Everyone – Keeping Escape Routes Clear". In conjunction with the three-year action plan to address the root causes of work safety issues, the company systematically advanced five key areas of focus: enhancing safety management in high-risk work environments; strengthening control over high-risk operational processes; formulating targeted prevention and control measures for seasonal risks such as high temperatures, geological hazards, floods, and extreme weather; conducting specialised rectification efforts on gas safety, fire prevention, and escape routes maintenance under the theme of "Keeping Escape Routes Clear"; as well as reinforcing safety oversight of related parties and temporary construction units.

二零二四年六月為第23個全國安全生產月，光大環境嚴格落實國務院安委會辦公室的要求，以「人人講安全、個個會應急—暢通生命通道」為主題，結合安全生產治本攻堅三年行動方案，系統推進五大重點工作：聚焦高風險場所安全管理；強化高風險作業流程管控；針對高溫、地質災害、洪澇及極端天氣等季節性風險制定專項防控措施；圍繞「暢通生命通道」主題開展燃氣安全、火災防控和生命通道專項整治；強化對相關方及臨時施工單位的安全監管。

During the implementation of the campaign, various projects fostered a safety culture through comprehensive publicity and practical emergency drills. On one hand, traditional methods such as hanging banners and displaying messages on electronic screens were combined with new media platforms to widely disseminate emergency response and safety knowledge, successfully achieving full coverage of safety education for all employees. At the same time, all staff were organised to watch cautionary educational films, using real-life cases to sound the alarm on safety and deepen employees' understanding of the importance of work safety. On the other hand, based on project-specific characteristics and seasonal risks, 281 emergency evacuation drills were conducted for practitioners and related parties, with a total of 5,730 participants, significantly enhancing the ability to handle emergencies effectively.

活動實施過程中，各項目通過立體化宣傳與實戰化應急演練營造安全文化氛圍。一方面，藉助懸掛標語、電子屏展播等傳統手段，結合新媒體平台，廣泛開展應急科普知識傳播，成功實現全員安全教育的全面覆蓋。同時，組織全體人員觀看警示教育片，通過真實案例敲響安全警鐘，加深員工對安全生產重要性的認知。另一方面，依據項目特點和季節風險，組織從業人員及相關方開展了281場次應急疏散演練，多達5,730人次參與其中，切實有效地提升了突發情況下的應急處置能力。

Through this campaign, the Group further solidified its primary responsibility for work safety, conducting 313 specialised inspections and 260 comprehensive inspections, which led to the identification and elimination of some safety hazards. Employees' safety awareness noticeably improved, and the consciousness of ensuring escape routes became deeply ingrained, establishing a robust line of defence for work safety.

通過本次活動，本集團安全生產主體責任進一步壓實，累計開展專項檢查313次、綜合檢查260次，整改消除一批安全隱患。員工安全素養顯著提升，生命通道防護意識深入人心，為安全生產築牢防線。



Zhaoqing Waste-to-energy Project organised a competition on employee operational skills and knowledge
肇慶垃圾發電項目舉辦員工運行操作技能知識競賽



Xiayi Waste-to-energy Project held a firefighting skills competition
夏邑垃圾發電項目舉行消防比武大賽



Binzhou Waste Water Treatment Project conducted a special emergency drill for hydrogen peroxide leak
濱州污水處理項目開展過氧化氫洩露專項應急演練



Yuanjiang Waste-to-energy Project conducted an emergency drill for handling an external line tripping accident during thunderstorm weather
沅江垃圾發電項目進行雷雨天氣外線跳閘事故處理的應急演習



Feixian Waste-to-energy Project conducted a winter snow removal and ice-melting emergency drill
費縣垃圾發電項目開展冬季除雪融冰應急演練



Shenyang Waste-to-energy Project and Kitchen Waste Management Project conducted a joint fire safety inspection and fire emergency evacuation drill with Shenyang city fire brigade
瀋陽垃圾發電項目、餐廚項目聯合瀋陽市消防總隊開展消防安全檢查暨消防應急疏散演練

Safety Trainings

The Group actively builds a comprehensive safety training approach under the concept of “All Angles, Full Coverage, Normalised, Systematic,” organising diverse and content-rich training activities. With the implementation of *Regulations for Safety and Environmental Education and Training*, the Group advances training for all employees and third parties, strengthening the sense of responsibility for safety production and integrating safety development concepts into daily work. Some projects have established safety education experience areas, including fire simulation, VR experiences for operating accidents, safety knowledge quizzes, safety examination trainings, and more. These hands-on experiences deepen employees’ impressions and understanding of various common accidents.

安全培訓

本集團積極構建「全方位、全覆蓋，常態化、系統性」的大宣貫大培訓工作理念，通過組織形式多樣、內容豐富的培訓活動，同時落實《安全與環境教育培訓管理規定》及推進全員及第三方人員培訓工作，強化安全生產責任感，讓安全發展理念融入日常工作。部分項目設有安全教育體驗區，包括消防模擬、作業過程事故的VR體驗、安全知識搶答、安全考試培訓等內容。透過實際情境體驗，加深各級員工對各類常見事故的印象和理解。



To further reinforce the primary responsibility for work safety, the Group held a triennial training on safety and environmental management along with a qualification certification examination in 2024, focusing on enhancing the ability of key personnel to carry out their duties. This training specially invited five authoritative experts from ministries and the industry to deliver lectures, adopting a combination of offline and online formats, involving over 1,800 participants. During the training period, a qualification certification exam was simultaneously organised for 277 core management personnel, including regional and project general managers. The Group also convened a safety work symposium for the heads of regional centres across three major business sectors. All participants passed the examination. This series of initiatives significantly enhanced the professional competence and sense of responsibility of the safety and environmental management team, laying a solid foundation for the efficient operation of the Group’s safety and environmental management system.

為了更深入地落實安全生產的主體責任，本集團在二零二四年舉辦了每三年一次的安環管理專題培訓以及資格認證考試，著重加強關鍵人員履行職責的能力。這次培訓特別邀請了五位來自部委和行業的權威專家前來授課，採用線下與線上相結合的形式，覆蓋人數超過1,800人次。在培訓進行期間，同步組織了區域及項目總經理等277名核心管理人員參加資格認證考試。本集團同時召開了三大業務板塊區域中心負責人的安全工作座談會。所有參加考試的人員均通過考核。這一系列舉措使安環管理隊伍的專業素養和責任意識得到顯著提升，為本集團安全環保管理體系的高效運作奠定了堅實的基礎。

Compared to traditional safety training methods, these innovative training approaches not only significantly save time but also effectively raise overall safety awareness. After participating in such highly interactive training, employees gain a deeper understanding of the importance of safety standards and naturally follow them in their daily work.

相較於傳統的安全培訓方式，此類創新培訓形式不僅可顯著節省時間，更能有效地提高全員安全意識。員工在參加上述互動性強的培訓後，能夠深入理解安全規範的重要性，並在日常工作中自覺遵循。

The Group regularly collects feedback from employees on training activities, evaluates the content and effectiveness of the training, and improves the quality of training in a timely manner, ensuring its effectiveness and relevance.

本集團定期收集員工對培訓活動的反饋意見，評估培訓內容及成效，及時改進培訓質量，確保培訓的有效性和針對性。

The Group's health and safety trainings cover the following aspects:

本集團為員工提供的健康與安全培訓涵蓋以下內容：



Health and Safety Laws and Regulation
健康與安全方面的法律法規



ESHs Management System
ESHs管理體系



Safe Use of Equipment
設備裝置的安全使用



Identification and Control of Sources of Hazards
危險源的辨識和控制措施



Risk Control and Troubleshoot by Risk Level
風險分級管控和隱患排查



Procurement and Storage of Hazardous Items
採購及貯存危險物品



Accident Contingency Plan
事故應急管理



Occupational Health
職業健康管理



First Aid
急救

We also provide training to third-party contractors and subcontractors' on-site workers, covering topics such as the ESHS management system and accident emergency management.

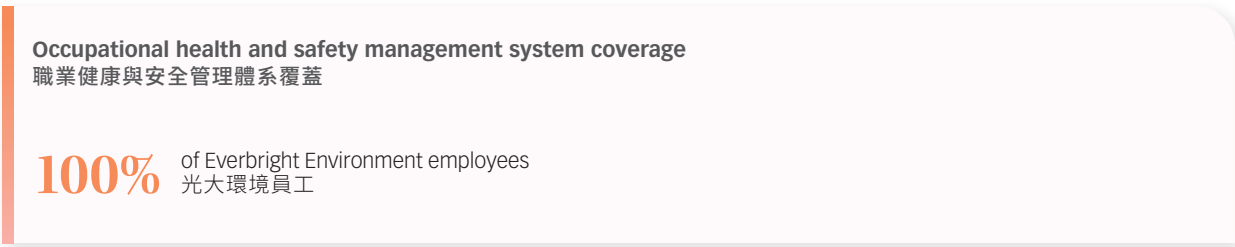
我們亦向第三方承包商及分包商駐場工人提供培訓，內容涵蓋ESHs管理體系及事故應急管理等。

Health and Safety Statistics in 2024
二零二四年健康與安全統計

Health and Safety Training
健康與安全培訓



Occupational Health and Safety Management System
職業健康與安全管理體系



Total Working Hours
工作總時數



Employees 員工



On-site Third-party Contractors and Subcontractors 第三方承包商及分包商駐場工人



Notes:

- (1) Rate of work-related fatalities = (Total number of fatalities as a result of work-related injury/Total working hours) × 200,000.
- (2) High-consequence work-related injuries (excluding fatalities) refer to work-related injuries that result in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within six months.
- (3) Rate of high-consequence work-related injuries (excluding fatalities) = (Total number of high-consequence work-related injuries (excluding fatalities)/Total working hours) × 200,000.
- (4) Work-related injuries also include work-related fatalities and high consequence work-related injuries.
- (5) Rate of work-related injuries = (Total number of work-related injuries/Total working hours) × 200,000.

附註：

- (1) 因工死亡率 = (因工傷所造成的死亡個案總計／工作總時數) × 200,000。
- (2) 嚴重工傷(不包括死亡個案)是指導致工作者無法或難於六個月內恢復至受傷前健康狀態的工傷。
- (3) 嚴重工傷率(不包括死亡個案) = (嚴重工傷個案總計(不包括死亡個案)／工作總時數) × 200,000。
- (4) 工傷亦包含因工死亡及嚴重工傷。
- (5) 工傷率 = (工傷個案總計／工作總時數) × 200,000。

Community Care 社區關懷



Building a sustainable environment and
giving back to the society
創造可持續環境・回饋社會大眾

Everbright Environment has consistently upheld its responsibility and mission as a social enterprise, guided by the principle of “Creating Investment Value and Undertaking Social Responsibility”. The company promotes sustainable development through the implementation of the *General Principles of Safety and Environmental Management*, which not only underscores its commitment to environmental protection but also ensures that social and environmental impacts are thoroughly considered in its operations.

During the Reporting Period, the Group focused its community initiatives on three key areas: quality education, community inclusion, and rural revitalisation. We regularly organise and support a variety of charitable, educational, and environmental activities, proactively addressing the needs of different social groups and fostering strong, positive connections with the community. Additionally, through the promotion of environmental projects, we contribute to the comprehensive development of local communities, giving back to society and the public. We are dedicated to enhancing community resilience to climate change and natural disasters, ensuring stronger, more adaptable communities.

光大環境始終堅守作為社會企業的责任與使命，以「創造投資價值，承擔社會責任」為宗旨，推動可持續發展，並落實《安全環境管理總則》。該制度不僅彰顯了我們對環境保護的承諾，更引導我們在業務運營中充分考慮社會和環境的影響。

報告期內，本集團的社區工作重點聚焦於優質教育、社區共融和鄉村振興三大領域。我們定期舉辦並支持各類公益、教育及環保活動，主動關注不同社群的需求，與社區建立友好而緊密的聯繫。此外，在業務運營中，我們通過推動環保業務以促進當地社區的綜合發展，積極回饋社會及公眾。我們致力於幫助社區增強應對氣候變化和自然災害的能力，提升社區的韌性。



Community
Engagement
社區共融



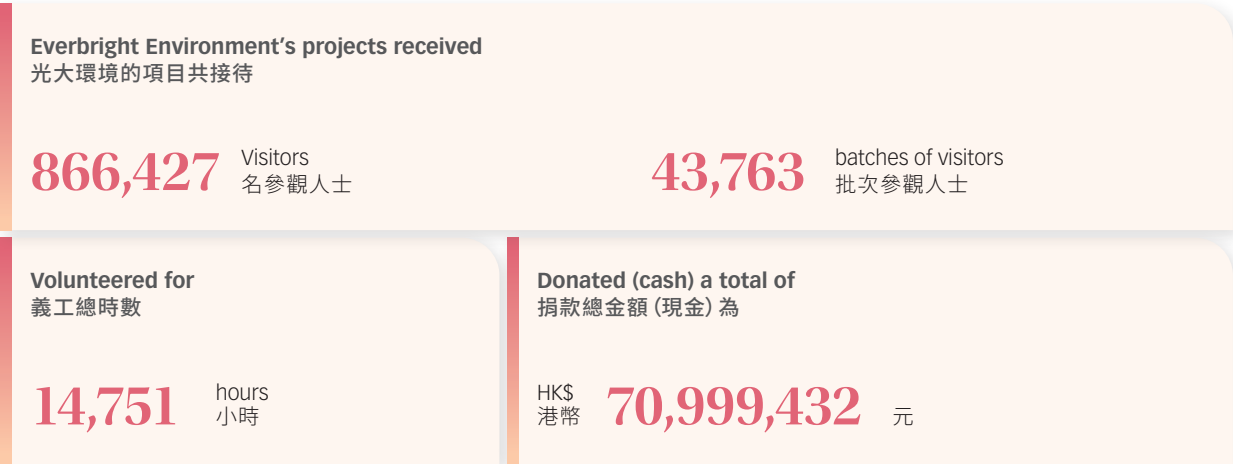
Quality
Education
優質教育



Rural
Revitalisation
鄉村振興

Cumulative Social Contributions
累計社會貢獻

Since 2017
自二零一七年起



Since 2010
自二零一零年起



Quality Education

Everbright Environment firmly believes that children and youth possess boundless potential and are the future pillars of the nation. Over the years, we have consistently devoted substantial resources to education, striving to cultivate outstanding future generations. Simultaneously, we actively promote environmental awareness and green technology, aiming to instill a sense of environmental responsibility and creativity in young people, encouraging them to contribute to the sustainable development of the PRC.

Promoting Opening Up of Projects to the Public and Popularising Environmental Protection Education

Everbright Environment continuously utilises its project facilities across various locations as hubs for environmental education and science popularisation. These facilities regularly host diverse activities aimed at deepening awareness of sustainable development and green living among youth and the general public.

The public opening events are open to a wide range of groups, including primary and secondary school students, university students, domestic and international industry peers, environmental organisations, and community members. To ensure a high-quality and well-organised visitor experience, each project company has established policies such as the *Reception Etiquette Guidelines for Visits* and *Reception Safety Guideline for Visits*. Additionally, dedicated reception teams have been formed, led by the integrated management department and supported by the production department. These teams strive to provide visitors with safe, enjoyable, and educational experiences, fostering greater understanding and support for environmental initiatives.

During the Reporting Period, the Group's environmental protection projects actively fulfilled their roles in promoting environmental education, science popularisation, the circular economy, and industrial tourism. Over 80,000 visitors from various domestic and international sectors participated in tours and inspections of these projects.

優質教育

光大環境深信兒童和青少年擁有無限潛能，是國家未來的棟樑。我們多年來持續投入大量資源於教育工作，致力培養優秀的下一代。同時，我們積極推廣環保知識及綠色科技，旨在培養下一代的環保意識，並激發年輕人的創造力與責任感，鼓勵他們為祖國的可持續發展貢獻力量。

推動公眾開放，普及環保教育

光大環境持續依託位於各地的項目設施，打造環保教育基地和科普教育體驗中心，組織各類環保教育活動，從而深化年輕人和大眾對可持續發展和綠色生活的認識。

我們的公眾開放活動對象涵蓋中小學生、大專院校、國內外同行企業、環保組織、社會民眾等多個群體。為進一步提升參觀接待的質量和水平，各項目公司相繼制定了《參觀接待禮儀準則》、《參觀接待安全須知》等制度規範，並成立了以綜合管理部為主導、相關生產部門為輔的公眾開放日接待小組，旨在為參觀者提供安全、愉快且富有教育意義的體驗，增強他們對環保事業的認識和支持。

報告期內，本集團旗下環保項目積極承擔環境教育、環境科普、循環經濟及工業旅遊基地的重要角色，共接待國內外各界人士參觀考察達超過80,000人次。

Key Activities 重點活動里程碑



Notes : ⁽¹⁾ The school has been renamed as Anhui Dangshan No. 5 High School.
附註：該學校已更名為安徽蕪山縣第五中學。

⁽²⁾ The Company has been renamed as Everbright Environment Charitable Foundation Company Limited since September 2020.
該公司已於二零二零年九月更名為光大環境慈善公益基金會有限公司。

⁽³⁾ The foundation has been renamed as Everbright Environment Charitable Foundation since September 2020.
該基金會已於二零二零年九月更名為光大環境慈善公益基金會。

Launched the “Cloud Opening” mode and opened up the environmental protection facilities and held the relevant activities
實踐「雲開放」模式，通過線上直播、連線互動，向公眾開放活動及環保設施

During the pandemic, the Group tried our best to ensure the health of employees as well as the normal operation of various environmental protection projects by setting up emergency plans and purchasing sufficient resources in advance. Meanwhile, we fully supported the anti-epidemic works of local Governments. Employees not only performed their duties, but also took the initiative to share the epidemic prevention work and hence we overcame the difficulties together successfully
在疫情期間，本集團一方面制定應急方案及儲備足夠物資保障員工健康以及各環保項目運作正常，另一方面全力支持各地政府抗疫工作。員工不但謹守崗位，亦主動分擔防疫工作，一起成功共渡難關

The “Everbright Environment Charitable Foundation” launched the “Green Wings Program” environmental education initiative in Hong Kong. It aims to enhance environmental awareness among Hong Kong youth and the public through activities such as environmental lectures, workshops, field visits, and student internships, promoting green and low-carbon development
「光大環境公益基金」在香港啟動「綠翼計劃」環保教育公益行動。該計劃旨在通過環保講座、工作坊、實地考察和學生實習等活動，增強香港青少年和公眾的環保意識，推動綠色低碳發展

2020
二零二零年

2022
二零二二年

2024
二零二四年

Oct
2019
二零一九年
十月

2021
二零二一年

2023
二零二三年

Partnered with UNICEF HK to sponsor the “Adventure in the Woods” outdoor carnival for families, the proceeds went to support maternal and newborn health projects in the rural areas of the PRC
攜手聯合國兒童基金會香港委員會，贊助「童『闖』大自然」親子戶外慈善嘉年華，捐助山區母嬰健康項目

“Everbright Environment Charitable Foundation” supported the construction of the solar dome at the Island House in Yuen Chau Tsai, Taipo, Hong Kong, and already in operation. The facility would serve as a sustainability educational hub for Hong Kong students and other groups to promote the concepts and knowledge relating to renewable energy, sustainable development and ecological conservation
「光大環境公益基金」支持建造的太陽能溫室穹頂於香港大埔元州仔自然環境保護研究中心落成並投入使用，未來將作為可持續發展教育基地，面向香港學生等各界群體，傳遞可再生能源、可持續發展、生態保育等理念和知識

The Group proactively supported the “Strive and Rise Programme”, which was initiated by the Hong Kong Government. Leveraging its business strengths, the Group delivered environmental protection lectures in Hong Kong. Moreover, its Sanya Project in Hainan Province, received a group of Hong Kong teenagers and offered them an environmental protection-themed study tour, popularising environmental protection knowledge and advocating environmental protection concepts
本集團積極支持香港政府的「共創明『Teen』計劃」，結合業務特點在港舉辦環保講座活動，並接待香港青少年在旗下的海南三亞項目展開環保研學之旅，普及環保知識，倡導環保理念

In 2024
二零二四年

Our projects received over
我們的項目共接待超過

80,000 visitors
名參觀人士

Exceeding
超過

2,900 batches of visitors
批次參觀人士

A total of
共有

130

projects were recognised as “Environmental
Education Hubs” or “Science Popularisation and
Education Hubs”

項目獲得「環境教育基地」或「科普教育基地」的稱號

The Group opened up to the public
本集團已向公眾開放

226 environmental protection facilities
個環保設施

Everbright Water Organised “World Water Day” Environmental Education Activities for Seven Consecutive Years**光大水務連續七年開展世界水日環保教育活動**

From 22 to 28, March, 2024, during “World Water Day” and “China Water Week”, Everbright Water organised a series of activities under the theme “Water Nourishes Dreams, Together We Build the Future”. These initiatives aimed to strengthen ties with local communities and actively fulfill corporate social responsibility, with waste water treatment project companies across various regions enthusiastically participating to promote the importance of water resources and environmental protection.

The Nanjing Waste Water Treatment Project collaborated with the local water authority to host a public awareness event in a city square, distributing brochures, environmental handbooks, and engaging the public with interactive games to emphasise the significance of water conservation and resource protection. Meanwhile, the Zibo Waste Water Treatment Project company demonstrated the waste water treatment process in a park square and shared practical water-saving tips to enhance public environmental awareness. In Tianjin, the project company conducted science classes in elementary schools, educating students about water resources, relevant laws, and regulations to foster a deeper understanding of environmental issues.

Similarly, the Jiangyin Project team invited young reporters to tour its waste water treatment facility, watch animated videos, and observe the water purification process, inspiring a stronger commitment to environmental values among youth. The Jinan Project company opened its facilities to the public, providing guided tours and explanations about water resource management and waste water treatment processes, actively promoting environmental concepts. In Nanning, open house events highlighted achievements in black-odor water treatment, using before-and-after images and videos to draw greater public attention to environmental remediation efforts. Lastly, in Shenyang, a painting activity for our employees’ children was organised to promote water conservation and resource protection. The children’s artwork was displayed at the facility, further embedding environmental values in the community.

二零二四年三月二十二日至二十八日，即「世界水日」與「中國水週」期間，光大水務舉辦了以「水潤初心，攜手築夢」為主題的環保教育活動。光大水務已連續七年舉辦此活動，旨在與社區建立更緊密的聯繫，積極履行企業社會責任。各地的污水處理項目公司亦踴躍參與，攜手推廣水資源和水環境保護的理念。

南京污水處理項目與當地水務局聯合開展廣場宣傳活動，通過宣傳單頁、環保手冊及互動遊戲，向市民介紹節約用水及保護水資源的重要性。淄博污水處理項目則在公園廣場向市民展示污水處理流程，分享節水小技巧，以提升民眾的環保意識。天津項目公司走進小學，舉辦科普課堂，為學生講解水資源現狀及相關法律法規，增強學生的環保認知。

江陰項目組織小記者參觀污水處理設施，觀看動畫影片，直觀感受污水淨化過程，增強青少年的環保意識。濟南項目公司於公眾開放日接待參觀者，講解水資源及污水處理相關知識，積極傳播環保理念。南寧項目公司舉辦廠區開放活動，展示黑臭水體治理成果，通過前後對比圖片和影片，提升公眾對環境治理的關注。瀋陽項目公司組織員工子女參加繪畫活動，宣傳節約用水與水資源保護，並於廠區展示作品，讓環保理念更加深入人心。

Wuxi Xidong Waste-to-energy Project 無錫錫東垃圾發電項目

Building a Child-Friendly Brand through Environmental Education 以環保教育打造兒童友好品牌

Wuxi Xidong Waste-to-energy Project (“Wuxi Xidong Project”) actively participated in the “United Hearts, Joyful Children, Friendly Xinshan” Child-Friendly Special Service Pilot Scheme, demonstrating its commitment to public engagement and environmental education. The Xinshan District launched this pilot scheme to expand child-friendly spaces, innovate practical settings, and explore new channels for children to integrate into social life and participate in community governance. The first event took place at the Wuxi Xidong Project, where 20 families, guided by an interpreter, visited the exhibition hall, corporate culture corridor, central control room, and waste crane control room. They gained an in-depth understanding of the waste transportation, incineration, and treatment processes, experiencing first-hand environmental concept of “Turning Waste into Treasure”. This initiative effectively promotes public education, fostering a sense of sustainable development among children and families. The Wuxi Xidong Project has been honoured as the “Xinshan District Child-Friendly Practice Base”, enhancing its reputation as a child-friendly brand within the environmental sector.

無錫錫東垃圾發電項目（「無錫錫東項目」）積極參與「同心童樂 友好錫山」兒童友好特色服務試點項目，以此展現其對公眾開放及環保教育的承諾。錫山區啟動這項試點項目，旨在拓展兒童友好空間，創新實踐場景，並探索兒童融入社會生活及參與社會治理的新路徑。首場活動於無錫錫東項目舉行，20組親子家庭在講解員帶領下，參觀展示大廳、企業文化長廊、中央控制室及垃圾吊控制室，深入了解垃圾運輸、焚燒及處理過程，直觀體驗「變廢為寶」的環保理念。此舉有效推動公眾教育，為兒童及家庭樹立可持續發展意識。無錫錫東項目榮獲「錫山區兒童友好實踐基地」殊榮，擦亮了環保行業的兒童友好品牌名片。



Community Engagement

Everbright Environment has always adhered to its corporate philosophy of “Creating Investment Value and Undertaking Social Responsibility” to drive sustainability. The Group is committed to ensuring the safe and stable operation of its projects while meeting environmental compliance standards. From the project design stage, the Group proactively considers the development needs of surrounding communities and actively practices collaboration between enterprises and villages. By prioritising employment opportunities for local residents, the Group aims to improve their living standards while enhancing the environment and facilitating industrial upgrades locally and in nearby areas.

To ensure that the Group’s environmental protection projects align with international principles and standards for environmental and social safeguards, we incorporate social concerns into the early stages of project development. These include environmental and social impact screening and classification, relocation and resettlement, considerations for indigenous peoples and local communities, environmental impact assessments, information disclosure, public participation, gender equality, due diligence and review, as well as monitoring and reporting. These measures ensure that community-related activities associated with the projects are managed lawfully and appropriately, guaranteeing fair and adequate compensation and restoration arrangements for all affected individuals.

The Group’s ESHS Management System also features a stringent Incident Reporting Procedure to ensure thorough investigation of public complaints, along with proper follow-up and resolution of the issues raised. In 2024, the Group did not receive any complaints regarding its products or services.

The Group’s environmental protection projects not only serve as valuable extracurricular educational resources for universities and primary and secondary schools but also actively host site visits from various social sectors. By continuously enhancing public accessibility, promoting industrial tourism, and advocating for a circular economy, the Group fosters close connections with local communities. These efforts deepen public understanding of environmental protection, promote community cohesion and sustainable development, and bring significant economic and social benefits to the local areas.

社區共融

光大環境始終秉承「創造投資價值，承擔社會責任」的企業理念，積極推動本集團的可持續發展。本集團致力於確保項目安全穩定運行，並達到環保排放標準。在項目設計階段，我們主動考慮周邊社區的發展需求，積極實踐村企共建。我們優先為當地居民提供就業機會，旨在提升他們的生活水平，同時促進當地及周邊區域的環境改善和產業升級。

為確保本集團的環保項目符合國際環境及社會保障原則和標準，我們在項目的早期便將社會關注的議題納入考慮，包括環境和社會影響篩選和分類、搬遷安置、原住民、當地社區、環境影響評估、資訊披露、公眾參與、性別平等、盡職調查和審查，及監測和報告等範疇。這些措施確保與項目開發相關的社區工作依法妥善管理，並保障相關受影響人士得到公平充分的補償和修復安排。

此外，本集團的ESHS管理體系中亦設有嚴格的事故匯報程序，以確保我們徹底調查並跟進公眾投訴，妥善解決所提出的問題。本集團於二零二四年沒有接獲任何關於產品及服務的投訴。

本集團旗下的環保項目不僅為各大高校和中小學生提供重要的課外教學資源，更積極接待社會各界代表團實地參觀考察。通過不斷完善公眾開放、推廣工業旅遊及鼓勵循環經濟，我們與社區保持緊密聯繫，持續加深公眾對環保工作的認識，促進了社區的可持續發展和凝聚力，更為當地社區帶來了更好的經濟與社會效益。

Five Key Elements of Everbright Environment's Benchmark Environmental Protection Projects 光大環境環保項目的五大要素



Solving the “NIMBY” Effect

The Group's integrated biomass utilisation projects align with the central government's call for advancing green development in rural areas. By introducing advanced waste treatment facilities, these projects have effectively prevented waste mismanagement and reduced pollution, establishing a solid foundation for the sustainable development of rural China. Additionally, the Group's Hangzhou Project, inspired by the success of the Changzhou Project, has opened its facility boundaries to include community amenities, transforming the area into a “living room of the city”. This public space not only offers a leisure area for local residents but also serves as a model for the development of the waste-to-energy industry nationwide, providing valuable insights into addressing the “NIMBY” effect.

Walk into Everbright Environment's Garden-like Factory

Time has flown since the launch of our first waste-to-energy project. Everbright Environment has grown from an unknown newcomer in the environmental sector to a comprehensive service provider for the construction of “Zero-Waste Cities” and a leader in the environmental protection industry. With over 20 years of expertise in environmental protection, Everbright Environment has actively addressed the “NIMBY” effect by creating garden-like factories, embracing the concept of green development, and contributing to the “Building a Beautiful China” strategy through concrete actions, paving the way for a sustainable future. During the Reporting Period, The Group's Henan Nanyang Waste-to-energy Project, Heilongjiang Harbin Waste-to-energy Project, Zhejiang Ninghai Waste-to-energy Project, Henan Xinyang Waste-to-energy Project and Jiangsu Wuxi Xidong Waste-to-energy Project were recognised as “National AAA-rated Household Waste Incineration Plants”.

破解「鄰避效應」

為響應中央政府推進鄉村綠色發展的號召，本集團的生物質綜合利用項目為農村地區引入先進的垃圾處理設施，旨在預防廢物棄置並減少其相關污染問題，為中國農村的可持續發展奠定了堅實的基礎。同時，本集團的杭州項目借鑑常州項目的經驗，開放合適的廠房的邊界，增設社區設施，打造「城市客廳」的公共空間，不僅為當地居民提供休閒場所，更為國內垃圾發電行業的發展和緩解「鄰避效應」提供了寶貴的參考。

走進光大環境花園式工廠

時光荏苒，自落地首個垃圾發電項目以來，光大環境已從寂寂無名的環保新兵成長為「無廢城市」建設的綜合服務商與環保行業翹楚。在環保領域深耕逾二十年，我們有效化解了「鄰避效應」，積極打造花園式工廠，踐行綠色發展理念，以實際行動響應「建設美麗中國」發展戰略，為可持續未來貢獻力量。報告期內，本集團河南南陽垃圾發電項目、黑龍江哈爾濱垃圾發電項目、浙江寧海垃圾發電項目、河南信陽垃圾發電項目及江蘇無錫錫東垃圾發電項目榮獲「國家AAA級生活垃圾焚燒廠」榮譽稱號。

Key Projects 重點項目

Wuxi Xidong Waste-to-energy Project
無錫錫東垃圾發電項目

Wuxi Xidong Project is the first project undertaken by Everbright Environment through an entrusted operation model, where the company is responsible for resuming construction as well as managing and operating the project. It is also the first waste-to-energy project to be re-activated at its original location in China. The project incorporates environmental protection in its design and operation, using advanced equipment to ensure emissions meet national standards, providing clean energy to the surrounding areas, and maintaining

the local pristine ecological environment. The successful operation of the project not only highlights Everbright Environment's outstanding brand impact but also demonstrates our comprehensive capabilities in technology control, operational management, and resolving the "NIMBY" issue.

無錫錫東項目，是光大環境首個以「委託運營」方式主導復工建設並負責運營管理的項目，同時也是全國首個「原址復活」的垃圾發電項目。該項目採用在設計和運營中注重環境保護，使用先進設備確保排放符合國家標準，為周邊地區提供了清潔能源，維護了當地優良的生態環境。該項目的成功投運，不僅彰顯了光大環境在品牌影響力上的卓越表現，還體現了其在技術掌控、運營管理以及化解「鄰避效應」方面的綜合能力。

Boluo Waste-to-energy Project
博羅垃圾發電項目

Boluo Project holds the distinction of being the first in China to successfully implement smart power plant technology. Spanning an area of 700 mu, it is thoughtfully divided into production zones, office and residential quarters, and spaces for ecological planting and leisure. Built to exemplary standards and infused with the distinctive charm of Lingnan culture, the project serves as a leading modern environmental protection education hub and ecological and environmental protection park in China, which seamlessly embodies environmental

education, environmental culture, and green tourism linked with the Luofu Mountain tourist area.

博羅項目是國內首個成功應用智慧電廠技術的垃圾發電項目，佔地面積達700畝，涵蓋生產區、辦公生活區以及生態種植休閒區三大區域。該項目按照高標準精心打造，充分展現濃厚的嶺南文化特色，將環保教育、環保文化以及與羅浮山旅遊區相連的綠色旅遊融為一體，成為國內領先的現代化環保教育基地和環保生態園區。

Changzhou Waste-to-energy Project 常州垃圾發電項目



The Changzhou Project is the PRC's first waste-to-energy plant built within an urban community that embodies the concepts of a "living room of the city" and a "neighbourhood-benefiting factory". With no walls and ultra-low emissions, the project is equipped with facilities such as basketball courts, fitness plazas, children's playgrounds, an environmental science museum, a city library, a coffee bar, and a street park, thoughtfully catering to the needs of local residents.

For years, the Changzhou Project has coexisted harmoniously with its surrounding 100,000 residents while actively pioneering the innovative concept and model of "Industry + Tourism". By opening its factory grounds, production processes, and employee work scenes to the public, the project has transformed into an industrial tourism destination, further contributing to the sustainable and healthy development of the industry.

常州項目是中國首個建在城鎮社區的無圍牆、全開放、超低排放垃圾發電廠，融合了「城市客廳」和「鄰利工廠」的理念。項目配備了籃球場、健身廣場、兒童樂園、環保科普館、城市圖書館、咖啡吧、街心公園等便民設施，充分考慮了居民的需求。

多年來，常州項目與周邊十萬居民和諧共處，積極推動「工業+旅遊」的全新理念和模式，打造工業旅遊景點，將廠區風貌、生產過程和員工的工作場景向公眾開放，進一步促進了行業的健康發展。

Rural Revitalisation

Everbright Environment has been actively supporting the national rural revitalisation strategy, dedicated to creating a better living environment for both urban and rural residents. The Group places great emphasis on volunteer work, disaster relief, and charitable activities, fostering harmonious relationships and meaningful interactions with local communities. Simultaneously, Everbright Environment offers diverse volunteering opportunities for its employees, encouraging them to engage in community initiatives and give back to society, collectively contributing to sustainable social development.

Rural Revitalisation Industry Chain

The Group is committed to solving local issues by continuously promoting effective public and community partnerships. Through its integrated biomass utilisation projects, the Group has successfully established and enhanced the fuel collection and storage system, implementing the strategy of “Increasing Income for Farmers, Facilitating Corporate Development, and Achieving Mutual Benefits for All Parties”. This strategy directly and indirectly boosts the local rural economy and helps reduce poverty. Local governments organise underprivileged households to collect and sell biomass materials to the Group’s operational projects, providing extra income to the local population while addressing waste management issues. This collaborative model fosters the simultaneous development of environmental, social, and economic benefits.

The Group’s Xinhua Project is a key ecological industry assistance project that highlights Everbright Environment’s advantages in implementing designated support for the environmental protection industry. In addition to constructing local infrastructure and renovating composting toilets, this project has established a supply chain linking underprivileged households and supporting organisations for fruits, vegetables, and daily necessities. This initiative has effectively stimulated economic activity and improved efficiency in the area. The Xinhua Project has not only promoted local economic development and alleviated poverty by creating more employment opportunities, but also played a crucial role in improving environmental infrastructure, ensuring environmental health and safety, and contributing to designated support and pollution prevention efforts.

鄉村振興

光大環境一直積極響應國家鄉村振興戰略，致力為城鄉居民創造更美好的生活環境。本集團重視各種義務工作、災難救濟及慈善活動，積極以服務回饋社會大眾，促進與鄰里社區的融和交流。同時，我們為員工提供多樣的義工機會，鼓勵他們熱心參與社區活動，積極回饋社會，從而共同推動社會的可持續發展。

鄉村振興產業鏈

本集團通過不斷開展並推進有效的公共和公民社會合作，尋求有效方案解決當地問題。通過建立和完善其生物質綜合利用項目的燃料收儲體系，我們踐行「農民增收、企業發展、多方共贏」的策略，直接和間接帶動農村經濟，幫助當地民眾脫貧。政府通過此模式組織貧困戶收集生物質原料，並將燃料出售予本集團的運營項目，不僅為民眾提供了額外收入，更有助於解決當地的廢物處理問題，實現環境、社會和經濟效益的協同發展。

新化項目是本集團重點發展的生態產業定點幫扶項目，展現了光大環境依靠專業技術實施環保產業定點幫扶的優勢。除建設當地基礎設施、實施生態廁所改建工程外，此項目更與當地貧困戶和幫扶企業建立了果蔬及日用品供貨等聯繫，從而有效激活貧困地區的經濟，提升經濟效能。新化項目的建設不僅帶動了地方經濟發展，改善了就業情況，並在環境建設、定點幫扶和污染防治方面發揮了重要作用，保障了環境的健康與安全。

In 2024, Integrated Biomass Utilisation Projects of Everbright Environment
二零二四年，光大環境的生物質綜合利用項目

Directly and/or indirectly created 直接及／或間接提供工作崗位	Increased farmers' income by approximately 帶動農民增收約	Benefited over 令逾
43,875 jobs 個	RMB 人民幣 2.503 billion 十億元	4.956 million farmers 百萬名農民受益

Charitable Activities

During the Reporting Period, the Group has actively discharged its corporate social responsibility, integrating charitable initiatives with sustainable development through the implementation of diverse programmes. For instance, we prioritised enhancing basic level educational environments by donating learning resources to schools in mountainous regions, committed to fostering improved learning conditions for students. Additionally, the Group proactively organised tree-planting initiatives, leveraging hands-on participation to instil environmental stewardship principles in younger generations and progressively strengthen their ecological awareness through practical experience.

慈善與公益

報告期內，本集團積極履行企業社會責任，通過舉辦多種形式的活動，將慈善公益與可持續發展緊密相連。例如，我們積極關注基層教育環境的改善，向山區學校捐贈學習用品，致力為學子創造更優質的學習條件。此外，本集團亦積極舉辦植樹公益活動，在活動中向下一代傳遞環保理念，使其在實踐中逐步增強環保意識。

Overview of Charity Work in 2024
二零二四年慈善公益活動概覽

Participated in 參與	Volunteer services 義工總時數
23 charitable activities 次慈善公益活動	367 hours 小時
Volunteers' paid working hours amounted to 義工有薪工時為	Total charitable donation (cash) 捐款總金額 (現金)
HK\$ 港幣 104,240 元	HK\$ 港幣 1,192,730 元
In-kind giving 物資捐贈折算為	Management overheads 管理費用為
HK\$ 港幣 12,120 元	HK\$ 港幣 4,063,485 元

Hue Project in Vietnam Donated Educational Supplies to Children in Local Mountainous Areas

越南順化項目向當地山區兒童捐贈學習用品

The Hue Project actively enhances basic level education through charitable initiatives. On 25 May 2024, representatives from the project company visited the A Luoi Plateau region in Thua Thien Hue Province to donate educational supplies to local underprivileged primary schools. The employee representatives visited two schools, bringing 90 gifts—including backpacks, pens, and notebooks—valued at over RMB2,000, all personally contributed by our project staff. At the event, students lined up neatly, eagerly receiving their brand-new backpacks and stationery with delight. Beyond the donations, the representatives organised engaging cultural activities, interacting with teachers and students to learn about their educational and daily lives, fostering a warm and lively atmosphere. The school staff and pupils expressed deep gratitude for the Hue Project company's support, noting that it not only broadens the students' horizons but also enhances their personal development, contributing positively to Vietnam-China friendship.

The Hue Project's charitable efforts extend beyond material donations, reflecting the Group's commitment to integrating with local culture and promoting sustainable development. Beyond creating a green and clean environment, the Hue Project actively participates in local events, embracing Hue's cultural traditions, customs, and management practices. This fosters a new framework of mutual understanding, respect, and appreciation. Through these initiatives, the Group introduced the concept of "Green Development" to Vietnam, establishing a positive image for waste-to-energy facilities.

順化項目積極通過公益慈善改善基層教育環境。二零二四年五月二十五日，項目公司員工代表前往承天順化阿雷高原地區，向當地貧困小學捐贈學習用品。員工代表走訪了兩所小學，帶來90份由員工自發捐助的禮物，包括背包、鋼筆、筆記本等學習用品，總值超過人民幣2,000元。活動現場，學生們整齊排隊，滿心歡喜地領取全新書包及文具。此外，員工代表還組織了趣味文化活動，與師生互動交流，了解他們的學習及生活情況，現場氣氛熱烈且活躍。學校師生對順化項目公司的捐助深表感激，認為此舉不僅開闊學生視野，亦有助提升學生素質，為中越友好關係作出積極貢獻。

順化項目的公益行動不止於物質捐贈，更體現本集團融入當地文化及推動綠色發展的決心。順化項目不僅致力創造綠色清潔環境，還積極參與當地活動，融入順化文化、民俗及管理模式，推動相互理解、相互尊重、相互欣賞的新格局。通過這些舉措，本集團將「綠色發展」的環保理念引入越南，樹立了垃圾發電廠的良好形象。



Wuxi Xidong Project Actively Participated in the Tree-Planting Activity, Contributing Green Vitality to “Beautiful Wuxi”

無錫錫東項目積極參與植樹活動，為「美麗無錫」增添綠色活力

During the tree-planting activity titled “Parent-Child Unity, Green Journey Together”, employees of the Wuxi Xidong Project joined hands with leaders from the local municipal party committee and the Women’s Federation, along with their families, to plant 40 tree saplings within the project site, contributing green vitality to “Beautiful Wuxi”. Our employees began by planting and watering the saplings, then guided the children to participate. The scene was filled with laughter and a harmonious atmosphere. Family members divided the tasks and worked together, digging soil, supporting the saplings, and planting small trees bearing their signatures, showcasing the success of collaboration between government and enterprises. On Tree Planting Day, more than 40 volunteers from the Wuxi Xidong Project and other industry matrix units took part in the “Spring Returns, Civilisation Accompanies” tree-planting activity at the Wuxi Xidong Ecological Park. The volunteers shovelled soil, supported the saplings, watered them, and participated in a ring-tossing game to win small potted plants and succulents, promoting the concept of a green lifestyle. Through this series of activities, the Group will continue to explore green volunteer services, contributing to urban ecological civilisation and sustainable development.

在「親子同心·綠意同行」植樹活動中，無錫錫東項目的員工攜手當地市委及婦聯領導以及其親子家庭在廠區內種植了40株樹苗，為「美麗無錫」增添綠色活力。員工們揮動鐵鍬栽植樹苗並澆水，帶領孩子們參與其中，現場充滿了歡聲笑語與和諧的氛圍。親子家庭分工合作，挖土扶苗，種下署名的小樹，體現了政企共建的成果。植樹節當天，無錫錫東項目與其他行業矩陣單位的40多名志願者在無錫錫東生態園參加了「春回大地·文明同行」植樹活動。志願者們揮鍬培土、扶苗澆水，並參與綠植套圈趣味遊戲，贏取小型盆栽與多肉植物，推廣綠色生活理念。通過一系列的活動，本集團將持續探索綠色志願服務，為城市生態文明與綠色發展貢獻力量。



**Together for the Sustainable
Development Goals**

攜手邁向可持續發展目標



The United Nations adopted the 2030 Agenda for Sustainable Development in 2015, emphasising the importance of achieving overall global sustainable development. The agenda covers 17 SDGs and emphasises the importance of achieving overall sustainable development. These goals aim to end poverty, protect the planet, promote prosperity, and ensure a peaceful and prosperous future for all.

With the vision to become a world-class integrated environmental service provider with Chinese characteristics, Everbright Environment fully supports the SDGs of the United Nations and is devoted to join hands to help address the world’s most pressing environmental, social and economic issues.

聯合國於二零一五年通過了二零三零年可持續發展議程，強調實現全球持續發展的重要性。議程涵蓋17項可持續發展目標，旨在消除貧困、保護地球、促進繁榮，並確保所有人享有和平與繁榮的未來。

光大環境秉持打造具有中國特色的世界一流環境綜合服務商的願景，全力支持聯合國可持續發展目標，致力於攜手解決最迫切的世界環境、社會和經濟議題。

Environment

環境

SDG 可持續發展目標	Our Contribution 我們的貢獻
3 GOOD HEALTH AND WELL-BEING  Ensure healthy lives and promote well-being for all ages 確保健康的生活方式，促進各年齡段人群的福祉 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination. 到二零三零年，大幅減少危險化學品以及空氣、水和土壤污染導致的死亡和患病人數。	The Group’s waste-to-energy projects are designed and operated fully in compliance with the <i>Standard for Pollution Control on the Municipal Solid Waste Incineration</i> (GB 18485-2014) with the daily average values of online continuously monitored parameters well below the respective emissions limits as stipulated under the EU 2010 Emission Standards; all of the Group’s biomass combustion operations meet the <i>Emission Standard of Air Pollutants for Thermal Power Plants</i> (GB 13223-2011). Our hazardous and solid waste treatment business can safely process over 90% of hazardous waste types listed in the <i>National Catalogue of Hazardous Wastes</i>, hence effectively minimising public health risk. 本集團垃圾發電項目的設計及運營完全符合《生活垃圾焚燒污染控制標準》(GB 18485-2014)，當中煙氣在線監測指標日均值全面優於歐盟2010排放標準中的相關排放限值；所有生物質燃燒的運營達《火電廠大氣污染物排放標準》(GB 13223-2011)。我們的危廢及固廢處置業務亦可安全處置《國家危險廢物名錄》中超過90%的危廢種類，有效減低公眾的健康風險。 Effluent discharged from the majority of the Group’s waste water treatment projects comply with Grade 1A standard of <i>Discharge Standard of Pollutants for Municipal Waste Water Treatment Plant</i> (GB 18918-2002). 本集團大部分污水處理廠的出水均符合《城鎮污水處理廠污染物排放標準》(GB 18918-2002)的一級A標準。

SDG 可持續發展目標	Our Contribution 我們的貢獻
 Ensure availability and sustainable management of water and sanitation for all 為所有人提供水和環境衛生並對其進行可持續管理 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity. 到二零三零年，所有行業大幅提高用水效率，確保可持續取用和供應淡水，以解決缺水問題，大幅減少缺水人數。	The Group's waste water treatment projects effectively treat waste water strictly in compliance with national standards and produce high quality industrial reusable water to help soothe water quality and sanitation problems. 本集團的污水處理項目嚴格按照國家標準有效處理污水，並生產高質量的工業回用水，以協助緩解水質量和衛生問題。 The Group treated a total of 1,763,000,000 m³ of waste water and produced 48,480,000 m³ of reusable water in 2024. 二零二四年，本集團共處理污水約1,763,000,000立方米及生產回用水約48,480,000立方米。
 Ensure access to affordable, reliable, sustainable and modern energy for all 確保人人獲得負擔得起的、可靠和可持續的現代能源 By 2030, ensure universal access to affordable, reliable and modern energy services. 到二零三零年，確保人人都能獲得負擔得起的、可靠的現代能源服務。	The Group generates clean energy by utilising household waste and agricultural and forestry waste, thus relieving pressure on landfills and saving precious land resources. 本集團利用生活垃圾、農業及林業廢棄物生產清潔能源，有效減少填埋量壓力，從而節省寶貴的土地資源。
 Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation 建造具備抵禦災害能力的基礎設施，促進具有包容性的可持續工業化，推動創新 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with the increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities. 到二零三零年，所有國家根據自身能力採取行動，升級基礎設施，改進工業以提升其可持續性，提高資源使用效率，更多採用清潔和環保技術及產業流程。	The Group developed a unique business model of urban-rural integration combining biomass utilisation projects and waste-to-energy projects, providing one-stop services for integrated treatment of agricultural and forestry waste as well as rural household waste in a pioneering attempt to ecological environmental management in county areas. 本集團開發出獨特的城鄉一體化業務模式，將生物質處理項目與垃圾發電項目融為一體建設，統籌處理農林廢棄物及農村生活垃圾，開創了縣域生態環境治理的先河。 The Group's river-basin ecological restoration projects construct more stable ecological environment, and thus improve the cities' resilience against regional water environment pollution, while "Sponge City" projects facilitate effective drainage and rainwater reuse, strengthen the urban ecosystem, and promote sustainable development. 本集團的流域治理項目通過構建更穩固的生態環境提升城市水污染抵禦能力；海綿城市項目則有助疏導和回用雨水、改善城市生態系統及促進可持續發展。

SDG 可持續發展目標	Our Contribution 我們的貢獻
 Make cities and human settlements inclusive, safe, resilient and sustainable 建設包容、安全、有抵禦災害能力和可持續的城市和人類住區 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management. 到二零三零年，減少城市的人均負面環境影響，包括特別關注空氣品質，以及城市廢物管理等。	Waste disposal is one of the most pressing environmental problems faced by modern society. The Group's waste-to-energy projects effectively reduce the volume of household waste through thermal treatment, while the majority of the bottom ash produced from waste incineration can be used to produce bricks, thus relieving pressure on landfills and resolving the waste crisis. Through its integrated biomass utilisation projects, the Group introduced advanced waste processing facilities in the rural villages, thereby laying a foundation to support sustainable rural development in the PRC by preventing waste disposal and related pollution problems before they arise. 廢物處置是現代社會面臨最迫切的環境問題之一。本集團的垃圾發電項目通過熱處理有效減少生活垃圾體積，而大部分焚燒垃圾產生的爐渣則可用於製磚，從而減輕填埋場壓力及解決垃圾圍城危機。通過生物質綜合利用項目，我們將先進的垃圾處理設施引入農村，防止垃圾及其相關污染問題發生，進一步促進中國農村的可持續發展。 Through a series of water environment integrated management services including raw water protection, municipal waste water treatment, industrial waste water treatment, water supply, reusable water, and sludge treatment and disposal projects, etc., the Group has contributed to the construction of sustainable cities and communities, relieved the pressure on urban water supply and substantially minimised the impact of harmful substances on the aquatic and terrestrial ecosystems. 本集團可提供一系列的水環境綜合治理服務，包括原水保護、市政污水處理、工業廢水處理、供水、中水回用及污泥處理處置等，旨在為可持續城市和社區的建設作出貢獻，緩解城市供水壓力，並將有害污染物對水體和陸地生態的影響降至最低。
 Ensure sustainable consumption and production patterns 採用可持續的消費和生產模式 By 2030, achieve sustainable management and efficient use of natural resources. 到二零三零年，實現自然資源的可持續管理和高效利用。	The environmental energy sector is committed to expanding the eco-recycling business in the three areas of household waste sorting, environmental sanitation services and recyclable resources utilisation, aiming to provide front-end waste management services and the utilisation of recyclable resources. 本集團的環保能源板塊致力於拓展至生活垃圾分類、環衛作業服務以及再生資源利用三個領域的生態資源業務，並提供固廢處置前端服務與再生資源綜合利用服務等。

SDG

可持續發展目標

Our Contribution

我們的貢獻



Take urgent action to combat climate change and its impacts
採取緊急行動應對氣候變化及其影響

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries. 加強各國抵禦和適應氣候相關的災害和自然災害的能力。

The Group's waste-to-energy projects and integrated biomass utilisation projects effectively displace fugitive methane emissions from the decomposition of household waste and biomass raw materials. Additionally, these projects generate green electricity to replace fossil fuel-based energy, thereby displacing GHG emissions.

本集團的垃圾發電項目及生物質綜合利用項目有效替代生活垃圾和生物質原材料的降解導致的無組織甲烷釋放。同時，項目產生綠色電力以替代化石能源燃燒發電，從而替代溫室氣體排放。

The Group has also included climate risk into its Risk Management System in order to formulate more comprehensive emergency and natural disaster contingency plans.

本集團已把氣候變化風險納入至現有的風險管理體系中，以制定更完善的緊急與自然災害應變方案。



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

保護和可持續利用海洋和海洋資源以促進可持續發展

By 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution.

到二零二五年，預防和大幅減少各類海洋污染，特別是陸上活動造成的污染，包括海洋廢棄物污染和營養鹽污染。

The Group's project site selection practice complies with stringent environmental impact assessment requirements, which prevents the water bodies and animal habitats nearby the project site from adverse impact.

本集團的項目選址均嚴格符合環評準則，從而避免對項目周邊的水體和動物棲息地帶來的不利影響。

SDG 可持續發展目標	Our Contribution 我們的貢獻
 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss 保護、恢復和促進可持續利用陸地生態系統，可持續管理森林，防治荒漠化，制止和扭轉土地退化，遏制生物多樣性的喪失	The Group's waste-to-energy projects help tackle the waste problem in an environmentally sound manner. This results in the avoidance of waste in landfills which would otherwise cause environmental problems and affect ecosystems. 本集團的垃圾發電項目以不損害環境的方式應對垃圾問題，從而減少垃圾送至填埋場處理所引發的環境問題及對生態系統的影響。
 Strengthen the means of implementation and revitalise the global partnership for sustainable development 加強執行手段，重振可持續發展全球夥伴關係	The Group is actively participating in the overseas environmental protection industry. We have developed two garden-like waste-to-energy projects in Can Tho and Hue in Vietnam, thereby making contributions to the green and low-carbon economic development as well as the energy transformation of Vietnam. 本集團積極參與海外環保市場，已在越南建成運營芹苴及順化垃圾發電項目，為越南綠色低碳經濟發展和能源轉型作出貢獻。

Social

社會

SDG 可持續發展目標	Our Contribution 我們的貢獻
 End poverty in all its forms everywhere 在全世界消除一切形式的貧困 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions. 到二零三零年，按各國標準界定的陷入各種形式貧困的各年齡段男女和兒童的比例至少減半。	The Group's biomass utilisation business not only solves the pollution problems caused by the burning of local agricultural and forestry straws, but also creates job opportunities for local farmers and increases their source of income through the establishment of the collection, storage, and transportation of agricultural wastes. The Group has actively responded to the country's rural revitalisation policy. With the commencement of project operations and the establishment, improvement and development of the biomass intake and storage systems, the Group has developed a strategy of "Increasing Income for Farmers, Ensuring Development for the Enterprise, and Procuring Mutual Success for Multiple Parties" which drives the rural economy in direct and indirect ways to lift villagers from poverty. 本集團的生物質業務除解決當地農林秸稈焚燒帶來的污染問題外，更通過成立農林廢棄物收儲運體系，為當地農民創造就業機會，增加收入來源。本集團積極響應國家鄉村振興政策。隨著項目的不斷投產以及生物質收儲運體系的完善和發展，我們打造出「農民增收、企業發展、多方共贏」的戰略，直接和間接帶動農村經濟，推動鄉村振興與發展。

SDG

可持續發展目標

Our Contribution

我們的貢獻



End hunger, achieve food security and improved nutrition and promote sustainable agriculture
消除饑餓，實現糧食安全，改善營養狀況和促進可持續農業

By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

到二零三零年，消除饑餓，確保所有人，特別是窮人和弱勢群體，包括嬰兒，全年都有安全、營養和充足的食物。

The Group's food waste processing projects can turn food waste into compost, which can in turn support the agricultural development of the Group's project neighbourhoods. Our projects have an annual food and kitchen waste processing capacity of 3,169,295 tonnes.

本集團的餐廚垃圾處理項目利用餐廚垃圾堆肥，從而支持鄰近地區的農業發展。我們的項目每年可處理3,169,295噸餐廚及廚餘垃圾，為提高土壤質量和促進可持續農業作出重要貢獻。



Ensure healthy lives and promote wellbeing for all at all ages
確保健康的生活方式，促進各年齡段人群的福祉

By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

到二零三零年，大幅減少危險化學品以及空氣、水和土壤污染導致死亡和患病人數。

The Group continued to improve the level of domestic waste and sewage treatment, strengthen the safe disposal of medical waste, and protect the environmental safety and public health of local communities.

本集團持續提升保障生活垃圾和污水的處理水平，並強化醫療廢棄物的安全處置工作從而有效降低環境風險，守護當地社區的安全和健康。

SDG 可持續發展目標	Our Contribution 我們的貢獻
4 QUALITY EDUCATION Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all 確保包容和公平的優質教育，讓全民終身享有學習機會 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship. 到二零三零年，大幅增加掌握就業、體面工作和創業所需相關技能，包括技術性和職業性技能的青年和成年人數。	The Group’s environmental protection projects have been selected as environmental and science popularisation and education hubs and act as demonstration sites for circular economy and industrial tourism. The Group also proactively opens up its projects for public visits, offering every individual with opportunities to understand how environmental infrastructures tackle pollution and improve the community’s living environment. During the Reporting Period, the Group’s environmental protection projects received over 80,000 domestic and foreign visitors from all social circles. 本集團的環保項目被選為環保科普教育基地，並作為循環經濟和工業旅遊的示範項目。我們亦積極開放項目供公眾參觀，使大眾了解環保基礎設施如何處理污染及改善社區的居住環境。報告期內，本集團的項目共接待國內外各界人士超過80,000人次。 In 2024, multiple project companies of the Group continued to carry out project opening-up activities through virtual platforms. These virtual activities advocated environmental protection and sustainable development concepts to the public with higher flexibility. 二零二四年，我們的項目公司繼續積極通過線上平台展開公眾開放活動，以更高的靈活性向公眾宣傳環保和可持續發展理念。
5 GENDER EQUALITY Achieve gender equality and empower all women and girls 實現性別平等，增強所有婦女和女童的權能 End all forms of discrimination against women and girls everywhere. 在全球消除對婦女和女童一切形式的歧視。	The Group ensures that its human resources management structure, including compensation, training opportunity, career prospect, etc., is not affected by gender biases, thus achieving gender equality. 本集團確保我們的人力資源管理架構在薪酬水平、培訓機會及就業前景等方面不受性別影響，以實現性別平等。

SDG
可持續發展目標

Our Contribution
我們的貢獻



Promote sustained, inclusive and sustainable economic growth, facilitate full and productive employment and decent work for all

促進持久、包容和可持續經濟增長，促進充分的生產性就業和人人獲得體面工作

Achieve higher levels of productivity of economies through diversification, technological upgrading and innovation, including through a focus on high value-added and labour-intensive sectors
通過多樣化經營、技術升級和創新，包括重點發展高附加值和勞動密集型行業，實現更高水準的經濟生產力。

Through investment, construction and operation of advanced waste-to-energy facilities, the Group drives the development of upstream waste collection industries as well as downstream metal and bottom ash recycling industries, completing a sustainable waste management industry chain. 本集團通過投資、建造及運營先進的垃圾發電設施，帶動上游垃圾清運行業及下游金屬和爐渣回收行業，形成了完整的可持續廢物管理產業鏈。

The Group's integrated biomass utilisation projects are located in rural areas, where the Group's operations can foster local economic development through providing job opportunities and improving infrastructure services. 我們的生物質綜合利用項目均位於市郊地區，因此我們的運營可以為當地提供就業機會及改善基礎設施，從而推動當地經濟發展。

In addition, to foster local economic development and employment opportunities, the Group has paid special attention to local talents. During the Reporting Period, many new employees hired are from local regions. 另外，為促進當地經濟發展和創造就業機會，本集團特別關注本地人才的培養和聘用，報告期內聘請的新員工不少均來自本地。



Reduce inequality within and among countries
減少國家內部和國家之間的不平等

By 2030, empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status. 到二零三零年，增強所有人的權能，促進他們融入社會、經濟和政治生活，而不論其年齡、性別、殘疾與否、種族、族裔、出身、宗教信仰、經濟地位或其他任何區別。

The Group implements a fair and competitive remuneration and welfare system. The remuneration is determined based on qualification, experience, nature of work, performance, and market conditions to strive to create equal employment opportunities. 本集團實施公平及具競爭力的薪酬福利制度，薪酬乃根據資歷、經驗、工作性質、表現以及市場情況計算釐定，致力創造平等的就業機會。

The Group also pays special attention to adopting methods to ensure that the Group's project operations do not affect the dignity, rights, livelihood, or culture of indigenous peoples. Local ethnic minorities and Han ethnic group are treated with the same respect and treatment at work. 我們特別關注原住民，並採取措施以確保項目運營不會影響原住民族的尊嚴、權利、生計或文化。在工作環境中，當地少數民族和漢族員工均受到同樣同等的尊重和公平對待，促進了和諧的勞動關係。

SDG 可持續發展目標	Our Contribution 我們的貢獻
 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels 創建和平、包容的社會以促進可持續發展，讓所有人都能訴諸司法，在各級建立有效、負責和包容的機構 Substantially reduce corruption and bribery in all their forms. 大幅減少一切形式的腐敗和賄賂行為。 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements. 根據國家立法和國際協議，確保公眾獲得各種資訊，保障基本自由。	To uphold the public's right to know and to appreciate the importance of public supervision, the Group promotes environmental justice by initiating disclosure of air emissions data of the Group's operating waste-to-energy projects on the public domain. 為維護公眾的知情權和發揮公眾監督的重要性，本集團已向大眾公佈各垃圾發電運營項目的煙氣排放數據，以倡導環境正義。 In terms of social justice, the Group included the social concerns into the entire project life cycle, thus ensuring that any resettlement associated with the Group's project development is properly managed in compliance with applicable laws, and all affected people have received fair and adequate compensation and rehabilitation. 在社會正義方面，本集團將社會關注點納入項目生命週期的整個階段，從而確保與項目開發相關的搬遷安置工作遵循法律妥善管理，讓受影響人士得到公平、充分的補償和修復安排。 The Group also strives to promote a peaceful and inclusive working environment. The Group's <i>Staff Handbook</i> and <i>Employee Code of Conduct</i> prohibit unethical issues such as corruption, bribery (including any form of facilitating payment), conflict of interest and discrimination within the Group's working environment. 本集團亦致力創建和平及包容的工作環境。我們的《員工手冊》及《員工守則》禁止工作環境內出現如貪污、受賄（包括任何形式的疏通費）、利益衝突和歧視等任何不道德問題。

Long-Term Targets of the Group

本集團的長期目標

Material Topics 實質性議題	Targets 目標	Progress as at 31 December 2024 截至二零二四年 十二月三十一日的進度	Relevant SDGs 相關聯合國 可持續發展目標
Technological R&D 科研及開發	To reach accumulated technological R&D investment of RMB1 billion throughout the five-year period of 2023-2027. 科研及開發於五年間(二零二三至二零二七年)的累計投放資金達人民幣10億元。	Accumulated technological R&D investment reached RMB576 million. 累計投放科研及開發資金達人民幣5.76億元。	
Social Integration 社區共融	To receive 80,000 visitors at our environmental protection facilities each year throughout the five-year period of 2023-2027. 本集團環保設施於五年間(二零二三至二零二七年)每年接待參觀人數達80,000人次。	In 2024, the Group's environmental protection facilities received over 80,000 domestic and foreign visitors from all social circles. 於二零二四年,本集團環保設施共接待國內外各界人士參觀考察超過80,000人次。	 
Occupational Health and Safety 職業健康與安全	To maintain the rate of work-related injuries of employees at 0.25 or below in every year throughout the five-year period of 2023-2027. 員工工傷率於五年間(二零二三至二零二七年)每年維持在0.25或以下。	In 2024, the rate of work-related injuries of employees was 0.14. 二零二四年員工工傷率為0.14。	

Review of 2024 Targets

二零二四年目標回顧

Aspect 範疇	Targets 目標		Achieved 已達成
Environment 環境	Total GHG emissions intensity 總溫室氣體排放強度	not more than the average of the past five years 不高於過往五年的均值	✓
	Total GHG emissions reduction 總溫室氣體減排量	increased by 5% compared with the average of the past three years 較過往三年的均值增5%	✓
	Total GHG emissions displacement 總溫室氣體排放替代量	increased by 10% compared with the average of the past three years 較過往三年的均值增10%	✓
	PM emission per kWh of green electricity supplied 每千瓦時綠色上網電量的顆粒物排放量	not more than the average of the past seven years 不高於過往七年的均值	✓
	Energy consumption intensity 能源消耗強度	not more than the average of the past three years 不高於過往三年的均值	✓
Society 社會	Farmers' income increased as a result of integrated biomass utilisation projects 生物質綜合利用項目帶動農民增收	increased by 10% compared with the average of the past four years 較過往四年的均值增10%	✓
	Average health and safety training hours per employee 健康與安全培訓平均員工時數	10 hours 10小時	✓
	Overall customer satisfaction rate 客戶整體滿意度	Score 8.5 out of 10 8.5分（滿分為10分）	✓
Operation 運營	Effective complaints from the public 有效的公眾投訴	not more than 10 cases 不多於10宗	✓
	Suppliers (including contractors) participated in sustainability risk assessment 參與可持續風險評估的供應商（包括承包商）	amounting to 20% of the total annual purchasing amount 佔全年採購總金額的20%	✓
	Major suppliers' participation in sustainability risk assessment 參與可持續發展風險評估的主要供應商	shall reach 100% 需達到100%	✓
	Suppliers with their own occupational health and safety policies in place 已建立職業健康和安全政策的供應商	not less than 40% of suppliers participated in the sustainability risk assessment 佔參與可持續發展風險評估的 供應商總數不少於40%	✓

Economic Performance

經濟表現

		2024 HK\$'000 港幣千元	2023 HK\$'000 港幣千元	2022 HK\$'000 港幣千元
Direct Economic Value Generated	產生的直接經濟價值			
Revenue	收益	30,258,009	32,090,207	37,321,229
Other income ⁽¹⁾	其他收益 ⁽¹⁾	1,169,183	1,064,351	1,170,414
Other income and losses, net	其他收入及虧損淨額	(1,990,227)	(1,209,978)	(1,292,897)
Economic Value Distributed	分配的經濟價值			
Staff costs	員工開支	4,206,368	4,138,122	3,936,061
Other costs ⁽¹⁾	其他成本 ⁽¹⁾	15,154,673	14,977,391	20,417,383
Finance costs	財務費用	3,006,954	3,527,788	3,488,268 (re-stated) (經重列)
Dividends	股息	1,412,885	1,351,455	1,474,314
Taxes ⁽²⁾	稅項 ⁽²⁾	1,171,467	1,076,607	772,316
Profit attributable to non-controlling interests	非控股權益應佔盈利	405,507	641,428	841,339
Holders of perpetual capital instruments	永續資本工具持有人應佔盈利	190,939	226,563	71,686
Charitable donations ⁽³⁾	慈善捐款 ⁽³⁾	1,193	1,106	3,515
Economic Value Retained	留存的經濟價值			
Retained for Everbright Environment sustainable operation and development	留存作光大環境的可持續運營和發展	3,886,979	6,004,120	6,193,864 (re-stated) (經重列)

Operational Performance

運營表現

		Unit 單位	2024	2023	2022
Business Performance	業務表現				
On-grid green electricity sold	綠色上網電量	kWh 千瓦時	23,717,917,000	22,302,289,000	21,385,620,000
Steam supplied	蒸汽供應量	Tonne 噸	6,520,405	4,469,800	2,419,000
Household waste processed	生活垃圾處理量	Tonne 噸	56,162,000	52,440,000	48,968,000
Biomass raw materials processed	生物質原材料處理量	Tonne 噸	7,686,000	7,845,000	8,186,000
Hazardous waste and solid waste processed	危廢及固廢處置量	Tonne 噸	499,000	449,000	431,000
Waste water treated ⁽⁴⁾	污水處理量 ⁽⁴⁾	m ³ 立方米	1,763,000,000	1,749,000,000	1,770,260,000
Leachate treated ⁽⁵⁾	滲濾液處理量 ⁽⁵⁾	m ³ 立方米	14,039,000	12,571,000	11,357,000
COD reduction	COD減排量	Tonne 噸	852,000	850,000	824,000
Average on-grid green electricity sold per tonne of waste processed (environmental energy – waste-to-energy projects)	平均處理每噸垃圾綠色上網電量 (環保能源—垃圾發電項目)	kWh/Tonne 千瓦時/噸	328	326	332
Project Overview	項目概覽				
Total number of projects	項目總數	No. 個	604	592	564

Environmental Performance⁽⁶⁾

環境表現⁽⁶⁾

		Unit 單位	2024	2023	2022
GHG Emissions ⁽⁷⁾		溫室氣體排放 ⁽⁷⁾			
Scope 1 (direct emissions)	範疇一 (直接排放)	Tonne CO ₂ e 噸二氧化碳當量	16,460,790	14,800,577	12,801,212
– incineration of household waste ⁽⁸⁾	– 生活垃圾焚燒 ⁽⁸⁾	Tonne CO ₂ e 噸二氧化碳當量	15,908,317	14,592,081	12,549,458
– other sources	– 其他來源	Tonne CO ₂ e 噸二氧化碳當量	552,473	208,496	251,754
Scope 2 (energy indirect emissions)	範疇二 (能源引致的間接排放)	Tonne CO ₂ e 噸二氧化碳當量	466,031	519,563	547,406
Scope 3 (other indirect emissions) ⁽⁹⁾	範疇三 (其他間接排放) ⁽⁹⁾	Tonne CO ₂ e 噸二氧化碳當量	346,937	323,903	171,048
Total GHG emissions	溫室氣體排放總量	Tonne CO ₂ e 噸二氧化碳當量	17,273,758	15,644,043	13,519,667
GHG emissions intensity (Based on on-grid electricity)	溫室氣體排放強度 (以上網電量計)	kg CO ₂ e/kWh 公斤二氧化碳當量／千瓦時	0.73	0.70	0.63
GHG emissions intensity (Based on operation service revenue)	溫室氣體排放強度 (以運營服務收益計)	kg CO ₂ e/HK\$'000 公斤二氧化碳當量／千港元	571	488	362
GHG emissions displacement ⁽¹⁰⁾	溫室氣體排放替代量 ⁽¹⁰⁾	Tonne CO ₂ e 噸二氧化碳當量	26,414,402	26,049,149	20,463,179
GHG emissions reduction ⁽¹¹⁾	溫室氣體減排量 ⁽¹¹⁾	Tonne CO ₂ e 噸二氧化碳當量	9,140,644	10,405,106	6,943,512
Key Air Emissions ⁽¹²⁾		主要煙氣排放 ⁽¹²⁾			
Particulate matter	顆粒物	Tonne 噸	612	626	641
Sulphur dioxide (SO ₂)	二氧化硫	Tonne 噸	6,216	5,750	4,430
Nitrogen oxides (NO _x)	氮氧化物	Tonne 噸	28,404	26,716	20,077
Energy Consumption ⁽¹³⁾		能源消耗 ⁽¹³⁾			
Natural gas	天然氣	GJ 吉焦	390,833	554,570	531,130
Diesel	柴油	GJ 吉焦	1,171,502	1,456,471	2,370,146
Petrol	汽油	GJ 吉焦	153,081	67,023	64,942
Liquefied petroleum gas	液化石油氣	GJ 吉焦	2,155	9	9
Non-renewable electricity	非再生能源電力	GJ 吉焦	3,001,614	3,165,449	2,663,292
Renewable electricity	可再生電力	GJ 吉焦	14,166,342	10,979,218	24,745,094
Total non-renewable energy consumed	非再生能源消耗總量	GJ 吉焦	4,719,185	5,243,523	5,629,519
Non-renewable energy consumption intensity	非再生能源消耗強度	kJ/kWh 千焦／千瓦時	199	235	263
Total energy consumed	總能源消耗量	GJ 吉焦	18,885,527	16,222,741	30,374,613
Energy consumption intensity (Based on on-grid electricity)	能源強度 (以上網電量計)	kJ/kWh 千焦／千瓦時	796	727	1,420
Energy consumption intensity (Based on operation service revenue)	能源強度 (以運營服務收益計)	kJ/HK\$'000 千焦／千港元	0.62	0.51	0.81

		Unit 單位	2024	2023	2022
Freshwater Consumption		淡水消耗			
Total freshwater consumed ⁽¹⁴⁾	淡水消耗總量 ⁽¹⁴⁾	m ³ 立方米	80,752,341	80,165,527	68,677,294
Freshwater consumption intensity	淡水消耗強度	m ³ /kWh 立方米／千瓦時	0.003	0.004	0.003
Hazardous Waste Generated^{(15),(17)}		有害廢棄物產生^{(15),(17)}			
Fly ash	飛灰	Tonne 噸	1,822,302	1,729,477	1,614,380
Bottom ash	爐渣	Tonne 噸	53,796	60,431	73,921
Sludge	污泥	Tonne 噸	15,913	1,190	18,403
Total hazardous waste generated	有害廢棄物產生總量	Tonne 噸	1,892,011	1,791,098	1,706,704
Hazardous waste intensity (Based on on-grid electricity)	有害廢棄物強度 (以上網電量計)	Tonne/MWh 噸／兆瓦時	0.08	0.08	0.08
Hazardous waste intensity (Based on operation service revenue)	有害廢棄物強度 (以運營服務收益計)	Tonne/HK\$'000 噸／千港元	0.06	0.06	0.05
Non-Hazardous Waste Generated^{(16),(17)}		無害廢棄物產生^{(16),(17)}			
Fly ash	飛灰	Tonne 噸	758,397	776,955	571,870
Bottom ash	爐渣	Tonne 噸	14,597,555	14,214,569	12,417,384
Sludge	污泥	Tonne 噸	1,585,260	1,594,662	1,339,391
General waste	一般廢物	Tonne 噸	2,750	1,032	4,981
Total non-hazardous waste generated	無害廢棄物產生總量	Tonne 噸	16,943,961	16,587,218	14,333,625
Non-hazardous waste intensity (Based on on-grid electricity)	無害廢棄物強度 (以上網電量計)	Tonne/MWh 噸／兆瓦時	0.70	0.74	0.67
Non-hazardous waste intensity (Based on operation service revenue)	無害廢棄物強度 (以運營服務收益計)	Tonne/HK\$'000 噸／千港元	0.60	0.52	0.38

Water Intake, Discharge and Consumption Performance

進水、排水及耗水錶現

		2024	
		All areas 所有地區	Areas with water stress 具水資源壓力 的地區
Water Intake 進水量			
Water intake by source (m³) 依來源劃分進水量 (立方米)	Surface water (total) 地表水 (總量)	172,004,817	26,404,545
	≤1,000mg/L Total dissolved solids ≤1,000mg/L總溶解固體	172,004,817	26,404,545
	>1,000mg/L Total dissolved solids >1,000mg/L總溶解固體	—	—
	Groundwater (total) 地下水 (總量)	708,025	474,999
	≤1,000mg/L Total dissolved solids ≤1,000mg/L總溶解固體	708,025	474,999
	>1,000mg/L Total dissolved solids >1,000mg/L總溶解固體	—	—
	Seawater (total) 海水 (總量)	—	—
	≤1,000mg/L Total dissolved solids ≤1,000mg/L總溶解固體	—	—
	>1,000mg/L Total dissolved solids >1,000mg/L總溶解固體	—	—
	Produced water (total) 產出水 (總量)	25,791,244	7,526,427
	≤1,000mg/L Total dissolved solids ≤1,000mg/L總溶解固體	25,791,244	7,526,427
	>1,000mg/L Total dissolved solids >1,000mg/L總溶解固體	—	—
	Third-party water (total) 第三方的水 (總量)	1,810,167,049	1,291,948,390
	≤1,000mg/L Total dissolved solids ≤1,000mg/L總溶解固體	1,810,167,049	1,291,948,390
	>1,000mg/L Total dissolved solids >1,000mg/L總溶解固體	—	—
	Total third-party water Intake by the Intake source 依進水來源劃分 第三方的總進水量		
	Surface water 地表水	25,864,313	11,608,717
	Groundwater 地下水	—	—
	Seawater 海水	—	—
	Waste water 污水	1,757,575,860	1,271,847,279
	Produced water 產出水	26,726,875	8,492,394
Total water Intake (m³) 總進水量 (立方米)	Surface water (total) + groundwater (total) + seawater (total) + produced water (total) + third-party water (total) 地表水 (總量) + 地下水 (總量) + 海水 (總量) + 產出水 (總量) + 第三方的水 (總量)	2,008,671,135	1,326,354,361

		2024	
		All areas 所有地區	Areas with water stress 具水資源壓力 的地區
Water Discharge 排水量			
Water discharge by destination (m ³) 依來源劃分排水量 (立方米)	Surface water 地表水	1,336,083,614	961,465,827
	Groundwater 地下水	–	–
	Seawater 大海	136,137,833	136,137,833
	Third-party water (total) 第三方的水 (總量)	319,128,176	100,267,267
	– Waste water treatment plants operated by reusable water – 第三方機構運營的污水處理廠	146,501,953	30,379,789
	– Water supplied to third parties for use as reusable water – 作回用水供應至第三方使用	172,626,223	69,887,478
Total water discharge (m³) 總排水量 (立方米)	Surface water + groundwater + seawater + third-party water (total) 地表水+地下水+海水+第三方的水 (總量)	1,791,349,622	1,198,615,688
Water discharge by freshwater and other water (m³) 依總溶解固體濃度劃分之 排水量 (立方米)	≤1,000mg/L Total dissolved solids	1,791,349,622	1,198,615,688
	≤1,000mg/L總溶解固體		
	>1,000mg/L Total dissolved solids	–	–
	>1,000mg/L總溶解固體		
Water Consumption⁽¹⁸⁾ 耗水量 ⁽¹⁸⁾			
Total water consumption (m³) 耗水量 (立方米)		217,321,513	127,738,672
Water consumption density (m ³ /kWh) 耗水密度 (立方米/千瓦時)		0.009	0.005

Social Performance

Employee Profile⁽¹⁹⁾

社會表現

員工概況⁽¹⁹⁾

				2024	2023	2022
Total Number of Employees		員工總數		14,867	11,931	12,396
By gender		按性別劃分				
Male		男性		11,506	9,101	9,427
Female		女性		3,361	2,830	2,969
By age		按年齡劃分				
30 and below		30歲及以下		4,482	3,605	3,851
31-40		31-40歲		7,041	5,475	5,753
41-50		41-50歲		2,606	2,170	2,087
51 and above		51歲及以上		738	681	705
By employment contract		按合約類別劃分				
Permanent contract	長期合約	Male	男性	4,640	4,276	4,363
		Female	女性	1,342	1,316	1,315
		Mainland China	中國內地	5,511	5,096	5,206
		Hong Kong	香港	63	74	75
		Singapore	新加坡	4	3	3
		Vietnam	越南	57	41	32
		Poland	波蘭	347	378	362
Temporary/fixed-term contract	臨時／定期合約	Male	男性	6,844	4,825	5,070
		Female	女性	2,041	1,514	1,648
		Mainland China	中國內地	8,745	6,187	6,544
		Hong Kong	香港	0	0	0
		Singapore	新加坡	0	1	0
		Vietnam	越南	45	62	52
		Poland	波蘭	95	89	122

		2024	2023	2022
By employment type	按受聘類別劃分			
Full-time	全職	14,867	11,931	12,396
Part-time	兼職	0	0	0
By employee ranking	按員工職級劃分			
Senior management	高級管理人員	543	539	509
Middle-level management	中層管理人員	2,273	2,007	2,148
General and technical staff	一般及技術員	12,051	9,385	9,739
By geographical region	按地區劃分			
Mainland China	中國內地	14,256	11,283	11,750
Hong Kong	香港	63	74	75
Singapore	新加坡	4	4	3
Vietnam	越南	102	103	84
Poland	波蘭	442	467	484
Local employees ⁽²⁰⁾	本地員工 ⁽²⁰⁾	12,130	9,420	9,103
Non-local employees ⁽²⁰⁾	外地員工 ⁽²⁰⁾	2,737	2,511	3,293
By ethnicity	按民族劃分			
Chinese (Han)	中國人 (漢族)	13,940	11,090	11,554
Chinese (ethnic minorities)	中國人 (少數族裔)	379	268	271
Singaporean (non-minority group)	新加坡人 (非少數族裔)	4	3	3
Vietnamese (non-minority group)	越南人 (非少數族裔)	102	103	84
Polish (non-minority group)	波蘭人 (非少數族裔)	442	467	484

Employee Diversity

員工多元化

		2024	2023	2022
Percentage of Female Employees by Positions	按職位劃分的女性員工比率			
All management positions	所有管理人員	15.80%	16.46%	18.22%
Senior management	高級管理人員	11.79%	12.24%	11.00%
Middle-level and junior management	中層及初級管理人員	16.76%	17.59%	19.93%
Management in revenue-generating functions	創收職能中的管理人員	12.63%	12.10%	10.97%
STEM-related positions	科學、科技、工程及數學相關職位	10.73%	13.95%	14.49%

		2024		2023		2022	
Percentage of Employees by Ethnicity	按民族劃分的員工比率						
		All full-time employees 所有全職員工	All management positions 所有管理人員	All full-time employees 所有全職員工	All management positions 所有管理人員	All full-time employees 所有全職員工	All management positions 所有管理人員
Chinese (Han)	中國人 (漢族)	93.76%	96.16%	92.95%	95.80%	93.21%	93.44%
Chinese (ethnic minorities)	中國人 (少數族裔)	2.55%	2.63%	2.25%	2.63%	2.19%	2.71%
Singaporean (non-minority group)	新加坡人 (非少數族裔)	0.03%	0.00%	0.03%	0.04%	0.02%	0.04%
Vietnamese (non-minority group)	越南人 (非少數族裔)	0.69%	0.14%	0.86%	0.08%	0.68%	0.08%
Polish (non-minority group)	波蘭人 (非少數族裔)	2.97%	1.07%	3.91%	1.45%	3.90%	3.73%

		2024	2023	2022
Percentage of employees with disabilities	殘疾員工比率	0.14%	0.14%	0.15%

New Hires and Employee Turnover

新聘及離職員工

		2024		2023		2022	
		Total Number	Percentage of employees in this category	Total Number	Percentage of employees in this category	Total Number	Percentage of employees in this category
		總人數	佔該類別員工百分比	總人數	佔該類別員工百分比	總人數	佔該類別員工百分比
Total Number of New Hires	新聘員工總數	3,648	24.54%	1,184	9.92%	1,136	9.16%
By gender	按性別劃分						
Male	男性	2,958	25.71%	943	10.36%	873	9.26%
Female	女性	690	20.53%	241	8.52%	263	8.86%
By age	按年齡劃分						
30 and below	30歲及以下	1,757	39.20%	800	22.19%	602	15.63%
31-40	31-40歲	1,545	21.94%	317	5.79%	411	7.14%
41-50	41-50歲	303	11.63%	51	2.35%	100	4.79%
51 and above	51歲及以上	43	5.83%	16	2.35%	23	3.26%
By geographical region	按地區劃分						
Mainland China	中國內地	3,536	24.80%	1,085	9.62%	969	8.25%
Hong Kong	香港	5	7.94%	7	9.46%	6	8.00%
Singapore	新加坡	2	50.00%	0	0%	0	0%
Vietnam	越南	12	11.76%	31	30.10%	50	59.52%
Poland	波蘭	93	21.04%	61	13.06%	111	22.93%
Local employees ⁽²⁰⁾	本地員工 ⁽²⁰⁾	3,058	25.21%	985	10.46%	728	8.00%
Non-local employees ⁽²⁰⁾	外地員工 ⁽²⁰⁾	590	21.56%	199	7.93%	408	12.39%
Total Number of Employee Turnover (Resignation/Retirement)	員工流失 (離職／退休) 總數	1,751	11.78%	1,295	10.85%	1,526	12.31%
By gender	按性別劃分						
Male	男性	1,387	12.05%	1,001	11.00%	1,174	12.45%
Female	女性	364	10.83%	294	10.39%	352	11.86%
By age	按年齡劃分						
30 and below	30歲及以下	692	15.44%	440	12.21%	629	16.33%
31-40	31-40歲	700	9.94%	546	9.97%	686	11.92%
41-50	41-50歲	257	9.86%	200	9.22%	138	6.61%
51 and above	51歲及以上	102	13.82%	109	16.01%	73	10.35%
By geographical region	按地區劃分						
Mainland China	中國內地	1,602	11.24%	1,194	10.58%	1,411	12.01%
Hong Kong	香港	14	22.22%	11	14.86%	10	13.33%
Singapore	新加坡	1	25.00%	0	0%	1	33.33%
Vietnam	越南	14	13.73%	12	11.65%	26	30.95%
Poland	波蘭	120	27.15%	78	16.70%	78	16.12%

Training and Development

培訓及發展

		2024 Hours 小時	2023 Hours 小時	2022 Hours 小時
Total Training Hours	總培訓時數	1,132,288	1,097,572	659,468
Average Training Hours Per Employee	人均培訓時數	76	92	53
By gender	按性別劃分			
Male	男性	86	102	57
Female	女性	43	59	41
By employee ranking	按員工職級劃分			
Senior management	高級管理人員	24	53	65
Middle-level management	中層管理人員	32	66	49
General and technical staff	一般及技術員工	87	100	53

Health and Safety

健康與安全

		2024	2023	2022
Employees	員工			
Number of work-related fatalities	因工死亡個案	1	0	0
Rate of work-related fatalities ⁽²¹⁾	因工死亡率 ⁽²¹⁾	0.01	0	0
Number of occupational disease cases	職業病個案	0	0	0
Number of high-consequence work-related injuries (excluding fatalities) ⁽²²⁾	嚴重工傷個案 (不包括死亡個案) ⁽²²⁾	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities) ⁽²³⁾	嚴重工傷率 (不包括死亡個案) ⁽²³⁾	0	0	0
Number of work-related injuries ⁽²⁴⁾	工傷個案 ⁽²⁴⁾	21	11	10
Rate of work-related injuries ⁽²⁵⁾	工傷率 ⁽²⁵⁾	0.14	0.10	0.08
Days of absence from work due to work-related injury	因工傷缺勤日數	1,403	617	434
Lost-time injuries frequency rate (LTIFR) ⁽²⁶⁾	損失工作日事故頻率 ⁽²⁶⁾	0.68	0.50	0.40
Third-Party Contractors and Sub-Contractors Working On-site	第三方承包商及分包商駐場工人			
Number of work-related fatalities	因工死亡個案	0	0	3
Rate of work-related fatalities ⁽²¹⁾	因工死亡率 ⁽²¹⁾	0	0	0.02
Number of occupational disease cases	職業病個案	0	0	0
Number of high-consequence work-related injuries (excluding fatalities) ⁽²²⁾	嚴重工傷個案 (不包括死亡個案) ⁽²²⁾	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities) ⁽²³⁾	嚴重工傷率 (不包括死亡個案) ⁽²³⁾	0	0	0
Number of work-related injuries ⁽²⁴⁾	工傷個案 ⁽²⁴⁾	5	4	9
Rate of work-related injuries ⁽²⁵⁾	工傷率 ⁽²⁵⁾	0.03	0.02	0.05
Days of absence from work due to work-related injury	因工傷缺勤日數	296	525	456
Lost-time injuries frequency rate (LTIFR) ⁽²⁶⁾	損失工作日事故頻率 ⁽²⁶⁾	0.13	0.10	0.25

Remuneration

薪酬

		2024	2023	2022
Annual Remuneration and Ratio		年度總薪酬及比例數據		
Total remuneration of the highest-paid individual (HK\$)	最高薪人士的薪酬總額 (港幣元)	4,180,666	3,061,926	3,936,960
The median of the total remuneration of all employees (excluding the highest-paid individual) (HK\$)	全體員工薪酬總額的中位數 (不包括最高薪人士) (港幣元)	122,063	116,246	117,465
Ratio of the total remuneration of the highest-paid individual to the median of the total remuneration of all employees (excluding the highest-paid individual)	最高薪人士的薪酬總額與全體員工 (不包括最高薪人士) 薪酬總額的中位數的比例	34:1	26:1	34:1
Ratio of the annual percentage change in total remuneration of the highest-paid individual to the median percentage change in annual total remuneration of all employees (excluding the highest paid individual)	最高薪人士薪酬總額的年度百分比變化與全體員工 (不包括最高薪人士) 薪酬總額中位數的年度百分比變化的比例	7:1	21:1	8:1 (re-stated) (經重列)
Average Remuneration by Employee Ranking (HK\$)		各級員工職級的平均薪酬 (港幣)		
Senior management		高級管理人員		
Basic salary of senior management (male)	高級管理人員的基本工資 (男)	273,757	303,856	326,870
Basic salary of senior management (female)	高級管理人員的基本工資 (女)	256,464	272,672	298,751
Ratio of the basic salary of senior management (female) to the basic salary of senior management (male)	高級管理人員的基本工資 (女) 與高級管理人員的基本工資 (男) 的比例	0.94:1	0.90:1	0.91:1
Basic salary and bonus of senior management (male)	高級管理人員的基本工資和獎金 (男)	397,275	464,939	457,712
Basic salary and bonus of senior management (female)	高級管理人員的基本工資和獎金 (女)	384,537	423,225	423,400
Ratio of the basic salary and bonus of senior management (female) to the basic salary and bonus of senior management (male)	高級管理人員的基本工資和獎金 (女) 與高級管理人員的基本工資和獎金 (男) 的比例	0.97:1	0.91:1	0.93:1
Middle-level management		中層管理人員		
Basic salary of middle-level management (male)	中層管理人員的基本工資 (男)	162,223	189,817	195,132
Basic salary of middle-level management (female)	中層管理人員的基本工資 (女)	162,098	192,797	165,648
Ratio of the basic salary of middle-level management (female) to the basic salary of middle-level management (male)	中層管理人員的基本工資 (女) 與中層管理人員的基本工資 (男) 的比例	0.999:1	1.02:1	0.85:1
Basic salary and bonus of middle-level management (male)	中層管理人員的基本工資和獎金 (男)	240,700	286,589	258,648
Basic salary and bonus of middle-level management (female)	中層管理人員的基本工資和獎金 (女)	232,208	280,139	222,600
Ratio of the basic salary and bonus of middle-level management (female) to the basic salary and bonus of middle-level management (male)	中層管理人員的基本工資和獎金 (女) 與中層管理人員的基本工資和獎金 (男) 的比例	0.96:1	0.98:1	0.86:1
General and technical staff		一般及技術員工		
Basic salary of general and technical staff (male)	一般及技術員工的基本工資 (男)	82,222	109,311	107,194
Basic salary of general and technical staff (female)	一般及技術員工的基本工資 (女)	74,253	88,684	91,451
Ratio of the basic salary of general and technical staff (female) to the basic salary of general and technical staff (male)	一般及技術員工的基本工資 (女) 與一般及技術員工的基本工資 (男) 的比例	0.9:1	0.81:1	0.85:1
Basic salary and bonus of general and technical staff (male)	一般及技術員工的基本工資和獎金 (男)	113,795	135,512	128,334
Basic salary and bonus of general and technical staff (female)	一般及技術員工的基本工資和獎金 (女)	104,348	113,785	111,745
Ratio of the basic salary and bonus of general and technical staff (female) to the basic salary and bonus of general and technical staff (male)	一般及技術員工的基本工資和獎金 (女) 與一般及技術員工的基本工資和獎金 (男) 的比例	0.92:1	0.84:1	0.87:1

Notes:

- (1) Represents other costs, share of profits of joint ventures and share of profits/losses of associates but excludes depreciation and amortisation for the year.
- (2) Represents current income tax and the under or over provision in prior years but excludes deferred tax for the year.
- (3) All donations in 2024 were made in cash.
- (4) Waste water treatment includes all operating municipal and industrial waste water treatment projects under environmental water.
- (5) Leachate treatment includes all operating waste-to-energy projects and integrated biomass utilisation projects.
- (6) Due to rounding, the numbers may not add up to the total, and there may be a slight discrepancy between the items of the statistics table and the corresponding analysed data as shown in other chapters of the Report.
- (7) The calculation of GHG emissions and displacement refers to CDM methodologies *ACM0022: Alternative Waste Treatment Processes (Version 2.0)*, *AM0080: Mitigation of Greenhouse Gases Emissions with Treatment of Waste Water in Aerobic Waste Water Treatment Plants (Version 1.0)*, *ACM0018: Electricity Generation from Biomass Residues in Power-Only Plants (Version 3.0)*, *ACM0006: Electricity and Heat Generation from Biomass (Version 14.0)* and *AMS-I.C.: Thermal Energy Production With or Without Electricity (Version 20.0)*.
- (8) GHG emissions (scope 1) from the incineration of household waste are calculated based on the fraction of fossil carbon in total carbon content of the household waste. The calculation principle was primarily based on CDM methodologies, however, some of the coefficients or emission factors that are more in line with the PRC's situation were adopted. In order to more accurately reflect the actual conditions, we have adopted the use of measured moisture content in our calculations this year, resulting in an increase in scope 1 emissions. Furthermore, the amount of such GHG emissions may substantially fluctuate from time to time due to the varying composition of the household waste received, which is beyond Everbright Environment's control.
- (9) GHG emissions from air travel are calculated by ICAO Carbon Emissions Calculator.
- (10) "GHG Emissions Displacement" refers to the emissions that could otherwise have been produced from sources such as the use of fossil fuel power and from waste decomposition at the landfills, in the absence of Everbright Environment's key projects (waste-to-energy and integrated biomass utilisation in particular). It is an optimistic estimation based on referenced CDM methodologies. The actual contribution is dependent on the "without project" scenario of each location, which may vary case by case. The value is not a confirmation of GHG removal from the atmosphere and is for reference only.
- (11) GHG emissions reductions refer to total GHG emissions displacement minus total GHG emissions. This figure is for reference only.

附註：

- (1) 代表年度的其他成本、所佔合營企業盈利及所佔聯營公司虧損，但不包括年度的折舊及攤銷。
- (2) 代表本期所得稅及過往年度撥備過剩／撥備不足，但不包括本年度的遞延稅項。
- (3) 二零二四年所有捐款均為現金。
- (4) 污水處理包括環保水務所有運營生活及工業污水處理項目。
- (5) 滲濾液處理包括所有運營垃圾發電項目及生物質綜合利用項目。
- (6) 由於捨入關係，數值加起來可能不等於總計，而表內個別項目的數字經分析計算後可能與本報告其他章節內的相關數據略有出入。
- (7) 溫室氣體的排放及替代的計算參照CDM方法《ACM0022：多選垃圾處理方式（2.0版）》、《AM0080：透過在有氧污水處理廠處理污水減少溫室氣體排放（1.0版）》、《ACM0018：純發電廠利用生物廢棄物發電（3.0版）》、《ACM0006：生物質熱電聯供（14.0版）》及《AMS-I.C.：電力或非電力用戶提供熱能（20.0版）》。
- (8) 生活垃圾焚燒引致的溫室氣體排放（範疇一）以生活垃圾中化石碳佔總碳的比例為計算基礎。我們的計算原則主要基於CDM方法，但採納了一些更符合中國國情的系數和排放因子。為了更真實地反映實際情境，我們在今年的生活垃圾焚燒溫室氣體排放計算中改用實測含水量，因此範疇一排放量有所增長。此外生活垃圾成分的差異可對此溫室氣體排放不時造成大幅波動，這並不屬於光大環境的控制範圍之內。
- (9) 飛機差旅的溫室氣體排放以國際民航組織的碳排放計算器計算得出。
- (10) 「溫室氣體排放替代量」是指在沒有光大環境的重點項目（尤其是垃圾發電和生物質綜合利用）的情況下原本可能產生的排放量，例如使用化石燃料發電和垃圾在填埋場分解產生的溫室氣體排放。這是基於參考CDM方法得出的一個樂觀估計。實際貢獻取決於每個地點的「沒有項目」情境，而個別具體狀況可能會有所不同。該值並非從大氣中移除溫室氣體的確證值，數字僅供參考。
- (11) 溫室氣體減排量是指溫室氣體排放替代總量減去溫室氣體排放總量。該數字僅供參考。

Key Statistics
主要數據

(12)	Includes all projects of environmental energy and greentech sectors that involve combustion and incineration operations.	(12)	包括環保能源及綠色環保板塊的所有燃燒和焚燒運營項目。
(13)	Relevant energy conversion factors from <i>China Energy Statistical Yearbook 2023</i> are adopted.	(13)	能量轉換計算採用《中國能源統計年鑒2023》的相關能量轉換因子。
(14)	Environmental water's river-basin ecological restoration projects, raw water projection project, water supply projects and reusable water projects were excluded from the calculation of freshwater consumption. This is with due consideration that those projects' key objectives are to purify water for use by the public/clients, therefore the freshwater processed were not considered as consumed.	(14)	淡水消耗的計算並不包括環保水務旗下的流域治理項目、原水保護項目、供水項目及中水回用項目。這是考慮到這些項目的主要目標是淨化水資源供公眾／客戶使用，因此，涉及的淡水處理並不視為被消耗。
(15)	Hazardous waste includes fly ash generated from waste-to-energy projects, hazardous and solid waste projects and general industrial solid waste projects, bottom ash and sludge generated from hazardous solid waste projects, as well as sludge generated from waste water treatment projects.	(15)	有害廢棄物包括垃圾發電項目、危固廢項目及一般工業固廢項目所產生的飛灰，危固廢項目所產生爐渣及污泥，以及污水處理項目所產生的污泥。
(16)	Non-hazardous waste includes general waste generated from project companies and offices, fly ash generated from biomass projects, bottom ash and sludge generated from biomass projects, waste-to-energy projects and general industrial solid waste projects as well as sludge generated from waste water treatment projects.	(16)	無害廢棄物包括所有項目及辦公室所產生的一般廢物，生物質項目所產生的飛灰，生物質項目、垃圾發電項目及一般工業固廢項目所產生的爐渣及污泥，以及污水處理項目所產生的污泥。
(17)	The layout and certain figures may differ slightly from previous years due to a reclassification implemented in 2024 to provide a clearer waste breakdown. However, these changes do not reflect any significant differences in actual waste volumes.	(17)	由於二零二四年年進行了重新分類，以更清晰地呈現廢棄物的細項，因此版面及部分數據可能與往年略有不同。然而，這些變化並不代表實際廢棄物產生量有顯著差異。
(18)	The total water consumption is calculated based on <i>GRI 303: Water and Effluents 2018</i> : Total water consumption = Total water intake – Total water discharge.	(18)	總耗水量按照《GRI 303：水資源與污水2018》計算：總耗水量=總進水量－總排水量。
(19)	Data as of 31 December 2024.	(19)	數據截至二零二四年十二月三十一日。
(20)	Employees hired from the same province in Mainland China are regarded as local employees, whereas the employees hired from other provinces in Mainland China are regarded as non-local employees.	(20)	在中國內地同省受聘的員工被視為本地員工，而在中國內地外省受聘的員工則被視為外地員工。
(21)	Rate of work-related fatalities = (Total number of fatalities as a result of work-related injury/Total working hours) x 200,000.	(21)	因工死亡率= (因工傷所造成的死亡個案總計／工作總時數) x200,000。
(22)	High-consequence work-related injuries (excluding fatalities) refer to work-related injuries that result in an injury from which the worker cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months.	(22)	嚴重工傷(不包括死亡個案)是指導致工作者無法或難於六個月內恢復至受傷前健康狀態的工傷。
(23)	Rate of high-consequence work-related injuries (excluding fatalities) = (Total number of high-consequence work-related injuries (excluding fatalities)/Total working hours) x 200,000.	(23)	嚴重工傷率(不包括死亡個案)= (嚴重工傷個案總計(不包括死亡個案)／工作總時數) x200,000。
(24)	Work-related injuries also include work-related fatalities and high-consequence work-related injuries.	(24)	工傷亦包含因工死亡及嚴重工傷。
(25)	Rate of work-related injuries = (Total number of work-related injuries/Total working hours) x 200,000.	(25)	工傷率= (工傷個案總計／工作總時數) x200,000。
(26)	LTIFR = (Number of lost-time injuries/Total working hours) x 1,000,000.	(26)	損失工作日事故頻率= (損失工作日事故總計／工作總時數) x1,000,000。



Verification Statement

Scope and Objective

Hong Kong Quality Assurance Agency ("HKQAA") was commissioned by China Everbright Environment Group Limited (hereinafter referred to as "Everbright Environment") to conduct an independent verification for its Sustainability Disclosures (the "Selected Disclosures") stated in its Sustainability Report 2024 ("the Report"). The selected disclosures covered the period from 1st January 2024 to 31st December 2024 and represented the sustainability performance of Everbright Environment.

The objective of this verification is to provide an independent opinion with a reasonable level of assurance on whether the selected disclosures are prepared in accordance with the following reporting criteria:

- the Global Reporting Initiative's Sustainability Reporting Standards ("GRI Standards")
- the Environmental, Social and Governance Reporting Guide ("ESG Guide") set out in Appendix C2 of the Listing Rules of The Stock Exchange of Hong Kong Limited (version effective from 31 December 2023, which remains applicable to annual reports for financial years commencing before 1 January 2025).

Level of Assurance and Methodology

HKQAA's verification procedure has been conducted with reference to the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information ("ISAE 3000") issued by the International Auditing and Assurance Standards Board. The evidence gathering process was designed to obtain a reasonable level of assurance as set out in the ISAE 3000 by using a risk-based approach.

Our verification procedure included, but not limited to:

- Sampling the sustainability information stated in the Report, e.g. claims and performance data for detail verification;
- Verifying the raw data and supporting information of the selected samples of the sustainability information;
- Interviewing responsible personnel; and
- Checking the internal control mechanism

Roles and Responsibilities

Everbright Environment is responsible for the organization's information system, the development and maintenance of records and reporting procedures in accordance with the system, including the calculation and determination of sustainability information and performance. HKQAA verification team is responsible for providing an independent verification opinion on the selected disclosures provided by Everbright Environment for the reporting period. The verification was based on the verification scope, objectives and criteria as agreed between the Everbright Environment and HKQAA.



Independence

HKQAA did not involve in collecting and calculating data or compiling the reporting contents. Our verification activities were entirely independent and there was no relationship between HKQAA and Everbright Environment that would affect the impartiality of the verification.

Limitation and Exclusion

The following limitations and exclusions were applied to this verification due to the service scope, nature of verification criteria, and characteristics of the verification methodology.

- I. Our verification scope is limited to verifying the transcription/transformation of the raw data or information into the selected disclosures, e.g., Claims and Performance Data stated in the Report. This Sustainability Information may be subject to inherent uncertainty.
- II. Evaluating the quality of execution and implementation effectiveness of the ESG practices, the appropriateness of the assumptions made, and the estimation techniques applied are outside the scope of our verification.
- III. The verification of raw data or information is based on the use of a sampling approach and reliance on the client's representation. As a result, errors or irregularities may occur and remain undetected.
- IV. Any information outside the established verification period has been excluded.

Conclusion

Based on the evidence obtained and the results of the verification process, it is the opinion of the verification team, with a reasonable level of assurance, that the Report has been prepared, in all material respects, in accordance with the GRI Standards 2021 and the ESG Guide set out in Appendix C2 of the Listing Rules of The Stock Exchange of Hong Kong Limited.

Signed on behalf of Hong Kong Quality Assurance Agency

A handwritten signature in black ink, appearing to be 'KT Ting', is written over a horizontal line.

KT Ting

Chief Operating Officer

April 2025

Ref: 14949317 -VER



核實聲明

範圍及目的

香港品質保證局獲中國光大環境(集團)有限公司(下稱「光大環境」)委託為其 2024 年可持續發展報告(「報告」)中所述的可持續發展信息披露(「選定披露」)進行獨立核實工作。選定披露涵蓋了 2024 年 1 月 1 日至 2024 年 12 月 31 日期間的信息,代表了光大環境的可持續發展表現。

核實工作的目的是對選定披露提供獨立的合理保證意見,該報告是依據以下報告披露框架編制:

- 全球報告倡議組織《可持續發展報告標準》(《GRI 標準》)
- 香港聯合交易所有限公司上市規則附錄 C2 所載之《環境、社會及管治報告指引》(《ESG 指引》)(2023 年 12 月 31 日起生效版,該規則仍然適用於 2025 年 1 月 1 日之前開始的財政年度的報告)

保證程度和核實方法

香港品質保證局的核實程序是參考國際審計與核證準則委員會發布的《國際核證聘用準則 3000》(修訂版)「歷史財務資料審計或審閱以外的核證聘用」(“ISAE 3000”)進行的。證據收集過程採用基於風險的方法來獲得 ISAE 3000 中規定的合理保證水平。

我們的核實程序包括但不限於:

- 對報告中的可持續發展信息進行抽樣,例如相關聲明和表現數據,用於詳細驗證;
- 核實選定的可持續發展信息樣本的原始數據資料及相關支持證據;
- 訪問相關負責人員;和
- 檢查內部控制機制。

角色和責任

光大環境負責相關的信息管理系統,依照該系統建立和維護記錄和報告程序,包括可持續發展信息和表現的計算和確定。香港品質保證局負責對光大環境報告期間內的選定披露作出獨立核實意見。

核實是根據光大環境與香港品質保證局雙方同意的核實範圍、目的和標準進行。



獨立性

香港品質保證局沒有參與收集和計算此報告內的數據或報告內容的編制。就提供此報告核實服務而言，核實過程是完全獨立的。香港品質保證局與光大環境之間並無任何會影響核實公正性的關係。

局限性和除外情況

由於服務範圍、核實標準的性質和核實方法的特點，本次核實存在以下局限性和除外情況：

- I. 核實範圍僅限於驗證有關原始數據或資料轉錄和轉換至報告中所披露的可持續發展信息，例如報告中所述的聲明和表現數據。可持續發展信息可能存在本質上的不確定性。
- II. 評估可持續發展措施的執行質素和實施有效性、估算方法和技術的適宜性並不包括在核實範圍之內。
- III. 原始數據或資料的核實是採用抽樣方法並信賴客戶的陳述，因此，可能會存在未被發現的錯誤或錯誤陳述的情況。
- IV. 核實不包括任何超出核實時間覆蓋範圍的信息或資料。

結論

根據核實過程所獲得的證據和結果，核實組作出合理保證結論認為該報告是依據 GRI 標準 2021 及香港聯合交易所有限公司上市規則附錄 C2 所載之《ESG 指引》(2023 年 12 月 31 日起生效版，該規則仍然適用於 2025 年 1 月 1 日之前開始的財政年度的報告) 框架編制。

香港品質保證局代表簽署

丁國滔

運營總監

2025 年 4 月

參考編號: 14949317 -VER



14949293-OTH

Verification Opinion

Scope and Objectives

Hong Kong Quality Assurance Agency ("HKQAA") has been commissioned by China Everbright Environment Group Limited ("CEEGL") to conduct an independent verification of the Greenhouse Gases ("GHG") emissions inventory ("Emissions Inventory") for the period 1st January 2024 to 31st December 2024. The aim of this verification is to provide a reasonable assurance on the data consolidated in the Emissions Inventory compiled by CEEGL using the operational control approach against the requirements of ISO 14064-1:2018 'Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals'.

Based on the preparation of the "CEEGL Summary Table for ISO14064 (The Inventory)" by CEEGL in accordance with the criteria of ISO 14064-1:2018, an opinion was concluded by the verification team from the verification activities, including:

- Offsite verification with the aid of Information Communication Technology (ICT) of the GHG emission data associated to mobile emissions, electricity consumption as well as GHG emissions from activities of waste treatment facilities and environmental operations; and
- Desk-top review for documentation and supporting evidence.

Methodology

The verification was conducted in accordance with ISO 14064-3: 2019 '*Specification with guidance for the verification and validation of greenhouse gas statements*'. The process included the assessment of:

- reporting boundaries selected;
- quantification methodology and emission factors used;
- integrity of the historical activity data used;
- accuracy and completeness of the GHG calculations; and
- conformance with the requirements of the ISO 14064-1:2018.

Integrity and accuracy of the aggregated data was tested by tracing the sampled data to its sources. The underlying processes for data collection, aggregation, estimation, calculation and internal checking were reviewed and undergone reliability test. Materiality threshold of 5% was adopted for this verification. Qualitative materiality of GHG data reporting requirements such as internal Production Management System were followed. HKQAA verification team did not partake in the GHG data preparation process.



14949293-OTH

Conclusion

Total GHG emissions and removals of China Everbright Environment Group Limited in 2024:

2024 GHG Emissions and Removals	Tonnes (T) of CO ₂ equivalent
Category 1): Direct GHG emissions (excluding anthropogenic biogenic GHG emissions)	16,432,864.5
Anthropogenic biogenic GHG emissions	27,925.5
Category 1): Direct GHG removals (excluding anthropogenic biogenic GHG removals)	25,248,860.8
Anthropogenic biogenic GHG removals	1,165,541.1
Indirect GHG emissions	812,968.2
Category 2): Imported Energy	466,030.9
Category 3): Transportation	324,120.8
Category 4): Products used	/
Category 5): Use of products	/
Category 6): Other sources	22,816.5
Total (Direct + Indirect Emissions excluding anthropogenic biogenic GHG emissions)	17,245,832.7
Total (Direct + Indirect Emissions including anthropogenic biogenic GHG emissions)	17,273,758.2
Total (Direct + Indirect Removals excluding anthropogenic biogenic GHG removals)	25,248,860.8
Total (Direct + Indirect Removals including anthropogenic biogenic GHG removals)	26,414,401.9

Signed on behalf of Hong Kong Quality Assurance Agency:

Lead Verifier:

Chief Operating Officer:

Tommy Lo

K.T. Ting

Date of Issuance: 8 April 2025

Hong Kong Quality Assurance Agency
19/F., K. Wah Centre, 191 Java Road, North Point, Hong Kong
Contact detail www.hkqaa.org

2

Remarks:
This verification opinion includes page <1> to page <5>



14949293-OTH

Verification Opinion (Continued)

Introduction:

HKQAA has been commissioned by China Everbright Environment Group Limited ("CEEGL", address: Room 2703, 27/F., Far East Finance Centre, 16 Harcourt Road, Hong Kong) for the verification of its direct and indirect Greenhouse Gas emissions and removals in accordance with ISO 14064-1:2018 as provided by CEEGL in its GHG Statement in form of "CEEGL Summary Table for ISO14064 (The Inventory)" covering GHG emissions and removals of the reporting period 1st January 2024 to 31st December 2024.

Roles and responsibilities:

CEEGL is responsible for the organization's carbon assets management system, the development and maintenance of records and reporting procedures in accordance with the system, including the calculation and determination of GHG emissions and removals information, and the reported GHG emissions and removals. HKQAA verification team is responsible for providing an independent GHG verification opinion on the GHG Statement provided by CEEGL for the reporting period.

HKQAA has conducted a third-party independent verification of the provided GHG Statement against the requirements of ISO 14064-3:2019 from February to April 2025. The verification was based on the verification scope, objectives and criteria as agreed between CEEGL and HKQAA.

Detail of the Scope:

- The organizational boundary was established following the operational control approach.
- The reporting boundaries were established including the identification of direct and indirect GHG emissions and removals associated with the following CEEGL's operations of various waste treatment facilities and environmental operations.
- Title or description activities: Verification of GHG Inventory 2024 for CEEGL
- Location/boundary of the activities:
 - o Covers all overseas and local projects and offices with majority operational control across five major sectors: Environmental Energy, Greentech, Environmental Water, Equipment Manufacturing, Eco-recycling, Greenenergy and Envirotech
 - o Over 85% of GHG emissions and 80% of GHG removals were contributed from Environmental Energy sector

3

Remarks:
This verification opinion includes page <1> to page <5>



14949293-OTH

- Physical infrastructure, activities, technologies and processes of the organization:
 - o Stationary combustion sources such as fuel combustion for generator set and machinery equipment, combustion of biomass, municipal solid waste and hazardous waste
 - o Mobile combustion sources such as plant vehicles, mobile machines, transportation vehicles for biomass, municipal solid waste and hazardous waste
 - o Indirect energy emissions from purchased energy
 - o Electricity generation from integrated biomass utilization, municipal solid waste incineration, solar and wind power projects
 - o Anthropogenic biogenic emissions from biomass combustion and wastewater treatment
 - o Contractor / Third-party transportation of biomass, municipal solid waste, hazardous waste, fly ash, bottom ash and sludge from / to projects
 - o Air travel by employees
- GHG sources, sinks and/or reservoirs included: GHG sources as presented in the worksheets of “CEEGL Summary Table for ISO14064 (The Inventory)”
- Types of GHGs included: CO₂, CH₄ and N₂O, where NF₃, SF₆, HFCs and PFCs are either not used by CEEGL or not in significant amount.
- The data and information supporting the GHG Statement were hypothetical, projected and/or historical in nature.
- GWP adopted: 100-year global warming potentials (GWPs) identified in the IPCC’s Sixth Assessment Report.
- GHG information for the following period was verified: 1st January 2024 to 31st December 2024
- Intended user of the verification opinion: Stakeholders identified by CEEGL



14949293-OTH

Conclusion:

CEEGL provided the GHG Statement in form of “CEEGL Summary Table for ISO14064 (The Inventory)” based on the requirements of ISO14064-1:2018. The GHG information for the reporting period disclosing the total direct and indirect greenhouse gas emissions of 17,245,832.7 tonnes of CO₂ equivalent (excluding anthropogenic biogenic GHG emissions), and anthropogenic biogenic GHG emissions of 27,925.5 tonnes of CO₂ equivalent, direct greenhouse gas removals of 25,248,860.8 tonnes of CO₂ equivalent (excluding anthropogenic biogenic GHG removals), and anthropogenic biogenic GHG removals of 1,165,541.1 tonnes of CO₂ equivalent are verified by HKQAA to a reasonable level of assurance (within 5%), consistent with the agreed verification scope, objectives and criteria.

HKQAA adopted a risk-based approach for the verification. Our examination includes assessment of evidence relevant to the amounts and disclosures in relation to CEEGL’s reported GHG emissions.

The verification team assessed the GHG Statement in form of “CEEGL Summary Table for ISO14064 (The Inventory)” including the carbon assets management system and reporting protocol. This assessment covered the collection of supporting evidence of the reported data and verified the consistency and appropriateness of the provided protocol reference.

Based on the verification results, the verification team concluded that no material error or omission was identified in the year 2024 Emissions Inventory of CEEGL. It is materially correct and is a fair representation of the GHG data and information for the reporting periods at reasonable level assurance. The quantification and reporting is prepared in accordance with ISO14064-1 on GHG quantification, monitoring and reporting.

HKQAA shall be responsible, and shall remain authority to forthwith suspend or withdraw CEEGL’s verification opinion under the scheme or reduce the scope of such verification or terminate the contract if CEEGL is unable to comply with the requirements of the “Terms and Conditions”.

5

Remarks:
This verification opinion includes page <1> to page <5>



審核編號：14949293-OTH

核查聲明

範圍和目的

香港品質保證局（“HKQAA”）受中國光大環境(集團)有限公司（光大環境）委託，對光大環境於2024年1月1日至2024年12月31日期間的溫室氣體（“GHG”）排放盤查（“Emissions Inventory”）進行獨立核查。此核查的目的是確認溫室氣體排放盤查根據 ISO 14064-1:2018《組織層級溫室氣體排放與移除量化及報告附指引之規範》的要求編製，並對光大環境營運控制範圍的溫室氣體排放盤查中資料的完整性和準確性提供合理保證。

根據光大環境按 ISO 14064-1:2018 標準編製的「CEEGL Summary Table for ISO14064」，核查團隊進行了核查活動，包括：

- 使用資訊通信技術（ICT）對移動排放、電力消耗以及廢物處理設施和環境運營活動產生的溫室氣體排放相關的數據進行驗證；和
- 桌面審查溫室氣體排放文件和證據。

方法

核查活動是根據 ISO 14064-3:2019《溫室氣體主張確證與查證附指引之規範》進行的。過程包括評估：

- 選定的報告範圍；
- 所使用的量化方法和排放因子；
- 所使用的歷史活動資料的完整性；
- 溫室氣體計算的準確性與完整性；
- 符合ISO 14064-1: 2018的要求。

核查團隊透過抽樣資料的來源以核查資料的完整性和準確性。對資料收集、整理、估算、計算和內部檢查的基本流程進行了審查並進行了可靠性核查。本次核查採用合理保證±5%的重要性門檻。根據光大環境內部生產管理系統，確認了溫室氣體資料報告的性質重要性。香港品質保證局核查團隊並沒有參與溫室氣體資料準備過程。

備註：本驗證聲明包括第<1>頁至第<4>頁

HKQAA-F1025-HKO-7TC-OB 18 November 2021 (#4134577)

第 1 頁



審核編號：14949293-OTH

結論

2024 年中國光大環境(集團)有限公司溫室氣體排放總量及清除總量：

2024 溫室氣體排放及清除	噸二氧化碳當量 (tCO ₂ e)
1) 類：直接溫室氣體排放（不包括非自然生物溫室氣體排放）	16,432,864.5
非自然生物溫室氣體排放	27,925.5
1) 類：直接溫室氣體清除（不包括非自然生物溫室氣體清除）	25,248,860.8
非自然生物溫室氣體清除	1,165,541.1
間接溫室氣體排放	812,968.2
2) 類：進口能源	466,030.9
3) 類：交通運輸	324,120.8
4) 類：材料使用	/
5) 類：產品的使用	/
6) 類：其他來源	22,816.5
總計（直接+間接排放，不包括非自然生物溫室氣體排放）	17,245,832.7
總計（直接+間接排放，包括非自然生物溫室氣體排放）	17,273,758.2
總計（直接+間接清除，不包括非自然生物溫室氣體清除）	25,248,860.8
總計（直接+間接清除，包括非自然生物溫室氣體清除）	26,414,401.9

代表香港品質保證局簽署：

核査員：羅永雄

發行日期：8/4/2025

香港品質保證局

香港北角渣華道 191 號嘉華國際中心 19 樓

聯絡方式 www.hkqaa.org

運營總監：丁國滔

備註：本驗證聲明包括第<1>頁至第<4>頁

HKQAA-F1025-HKO-7TC-OB 18 November 2021 (#4134577)

第 2 頁



香港品質保證局

審核編號：14949293-OTH

驗證聲明（續）

簡介：

香港品質保證局（“HKQAA”）受中國光大環境(集團)有限公司「光大環境」（地址：香港夏慤道 16 號遠東金融中心 27 樓 2703 室）委託，對光大環境於 2024 年 1 月 1 日至 2024 年 12 月 31 日期間的溫室氣體（“GHG”）排放盤查（“Emissions Inventory”, CEEGL Summary Table for ISO14064）進行獨立核查。此核查的目的是確認溫室氣體排放盤查根據 ISO 14064-1 :2018《組織層級溫室氣體排放與移除量化及報告附指引之規範》的要求編製，並對光大環境營運控制範圍的溫室氣體排放盤查中資料的完整性和準確性提供合理保證。

角色和職責：

光大環境負責組織的碳資產管理系統，根據該系統制定維護記錄和報告程序，包括計算和確定溫室氣體排放和清除資訊，以及報告溫室氣體排放和清除。香港品質保證局核查團隊負責就光大環境報告提供的溫室氣體盤查聲明提供獨立的溫室氣體核查聲明。

香港品質保證局於2025年2月至4月期間，根據ISO 14064-3: 2019的要求，對所提供的溫室氣體聲明進行了第三方獨立核查。核查是根據光大環境與香港品質保證局制定的核查範圍、目標和標準進行的。

範圍詳情：

- 組織邊界是按照營運控制範圍決定的。
- 報告邊界確定了以下光大環境的各種廢物處理設施運作和環境運作相關的直接和間接溫室氣體排放和清除。
- 標題或描述活動：光大環境 2024 年溫室氣體盤查核查
 - 活動地點/邊界：涵蓋環保能源、綠色環保、環保水務、裝備製造、研究院共五大板塊擁有營運控制權的所有海外和本地項目和辦事處
 - 超過85%的溫室氣體排放量和80%的溫室氣體清除量來自光大環境其下的環保能源項目
- 組織的實體基礎設施、活動、技術和流程包括：
 - 定燃燒源，例如發電機組和機械設備的燃料燃燒，生物質、城市固體廢棄物和危險廢物的燃燒
 - 移動燃燒源，例如工廠車輛和移動機器，生物質、城市固體廢棄物和危險廢物的運輸車輛
 - 購買能源所產生的間接能源排放
 - 利用燃燒生物質和都市固體廢物發電
 - 生物質燃燒和廢水處理產生的非自然生物排放
 - 承包商/第三方的生物質、城市固體廢物、危險廢物、飛灰、底灰和污泥等運輸
 - 員工航空商務旅程等

備註：本驗證聲明包括第<1>頁至第<4>頁

HKQAA-F1025-HKO-7TC-OB 18 November 2021 (#4134577)

第 3 頁



香港品質保證局

審核編號：14949293-OTH

- 溫室氣體來源、匯集/或儲存庫：光大環境的「CEEGL Summary Table for ISO14064」中列出的溫室氣體來源
- 溫室氣體類型包括：CO₂、CH₄ 和 N₂O，其中 NF₃、SF₆、HFC 和 PFC 未被光大環境使用或用量極少。
- 溫室氣體聲明的數據和資訊本質上是假設的、預測的和/或過去的
- GWP：IPCC 第六次評估報告中確定的 100 年全球暖化潛勢 (GWP)
- 已核查的溫室氣體資訊期間：2024年1月1日至2024年12月31日
- 核查意見的使用者：光大環境的利益相關方

結論：

光大環境根據ISO14064-1:2018的要求，以「CEEGL Summary Table for ISO14064」提供了溫室氣體聲明。報告期間的直接及間接溫室氣體排放總量為17,245,832.7 噸二氧化碳當量（不含非自然生物溫室氣體排放），非自然生物溫室氣體排放為27,925.5 噸二氧化碳當量，直接溫室氣體清除量為25,248,860.8 噸二氧化碳當量（不包括非自然生物溫室氣體清除量）和非自然生物溫室氣體清除量為1,165,541.1 噸二氧化碳當量。由香港品質保證局核查提供合理保證（±5%以內），符合確定的核查範圍、目標和標準。

香港品質保證局採用風險為本的方法進行核查，包括評估與光大環境報告的溫室氣體排放量和揭露相關的證據。

核查團隊評估了光大環境「CEEGL Summary Table for ISO14064」的溫室氣體聲明，包括碳資產管理系統和報告協議。核查包括收集報告資料的支持證據，並核查所提供方案的一致性和適當性。

根據核查結果，核查團隊認為光大環境2024年度排放清單不存在重大錯誤或遺漏。並確認其真實性，在合理保證下反映了報告期間的溫室氣體數據和資訊。量化和報告的內容是根據ISO14064-1有關溫室氣體量化、監測和報告的要求制定。

如光大環境無法遵守核查合約中「條款及條件」的要求，香港品質保證局有責任並有權立即暫停或撤回光大環境在該聲明下的核查意見，或縮小核查範圍或終止合約。本核查聲明的英文及中文版本如有任何不符之處，概以英文版本為準。

備註：本驗證聲明包括第<1>頁至第<4>頁

HKQAA-F1025-HKO-7TC-OB 18 November 2021 (#4134577)

第 4 頁

Appendix I - Reporting Boundary
附錄I — 報告邊界

環境數據

Environmental Statistics

Operation Unit 運營單位	GHG Emissions				Energy Consumption 能源消耗	Water Consumption and Discharge 耗水及排水	Hazardous Waste Generated 有害廢棄物產生				Non-hazardous Waste Generated 無害廢棄物產生				Materials Consumption 物料使用	Waste Recycling 廢棄物回收
	GHG Emissions 溫室氣體排放	Displacement 溫室氣體排放 替代	Air Emissions 廢氣排放	Fly Ash 飛灰			Bottom Ash 爐渣	Sludge 污泥	Furnace Ash 爐灰	Bottom Ash 爐渣	Sludge 污泥	General Waste 一般廢物產生				
Environmental energy 環保能源	Waste-to-energy 垃圾發電	✓	✓	✓	✓	✓							✓	✓	✓	✓
	Food waste treatment 餐厨垃圾處理	✓	△		✓	✓								✓		✓
	Sludge treatment and disposal 污泥處理處置	✓		△	✓	✓					✓		✓	✓	✓	✓
	Leachate treatment 滲濾液處理	✓	△	△	✓	✓							△		△	✓
	Methane-to-energy 沼氣發電	✓	△	△	✓	✓							△		△	✓
	Fecal treatment 糞便處理															
	Fly ash landfill 飛灰填埋	✓			✓	✓							✓	✓	✓	✓
	Medical waste treatment 醫療廢物處理				✓	✓							✓		✓	
	Solid waste treatment 固廢處理	✓		△	✓	✓								△	△	✓

Operation Unit 運營單位		GHG Emissions			Energy Consumption 能源消耗	Water Consumption and Discharge 耗水及排水	Hazardous Waste Generated 有害廢棄物產生				Non-hazardous Waste Generated 無害廢棄物產生				Materials Consumption 物料使用	Waste Recycling 廢棄物回收		
		GHG Emissions 溫室氣體排放	Displacement 溫室氣體排放替代	Air Emissions 廢氣排放			Fly Ash 飛灰	Bottom Ash 爐渣	Sludge 污泥	Furnace Ash 爐灰	Bottom Ash 爐渣	Sludge 污泥	General Waste 一般廢物產生					
Environmental water 環保水務	Municipal waste water treatment 市政污水處理	✓	✓		✓									✓		△	✓	✓
	Industrial waste water treatment 工業廢水處理	✓			✓										✓	△	✓	✓
	Reusable water 中水回用	✓			✓										✓	△	✓	✓
	River-basin ecological restoration 流域治理	✓			✓										✓	△	✓	✓
	Water supply 供水	✓			✓										✓	△	✓	✓
	Waste water source heat pump 污水源熱泵	✓			✓										✓	△	✓	✓
	Raw water protection 原水保護	✓	✓		✓											△	✓	✓
	Livestock and poultry manure resource utilisation project 畜禽糞污資化利用項目	✓	✓		✓										✓	△	✓	✓
	Sludge treatment and disposal projects 污泥處理處置項目	✓	✓		✓										✓	△	✓	✓

Appendix I – Reporting Boundary
附錄I – 報告邊界

Sustainability Performance Indicators																		
Operation Unit 運營單位	GHG Emissions 溫室氣體排放				Air Emissions 廢氣排放	Energy Consumption 能源消耗	Water Consumption and Discharge 耗水及排水	Hazardous Waste Generated 有害廢棄物產生				Non-hazardous Waste Generated 無害廢棄物產生				Materials 物料使用		Waste Recycling 廢棄物回收
	GHG Emissions 溫室氣體排放	GHG Displacement 溫室氣體排放替代						Fly Ash 飛灰	Bottom Ash 爐渣	Sludge 污泥	Furnace Ash 爐灰	Bottom Ash 爐渣	Sludge 污泥	General Waste 一般廢物產生	Consumption 物料使用			
Greentech 綠色環保	Integrated biomass utilisation 生物質綜合利用	✓	✓	✓	✓				✓	✓			✓	✓		✓	✓	
	Hazardous waste and solid waste treatment 危險及固廢處置	✓		✓	✓			✓				✓		✓			✓	
	Environmental remediation 環境修復	✓			✓									✓		✓	✓	
	Solar energy 光伏發電	✓	✓		✓									✓		✓	✓	
	Wind power 風電	✓	✓		✓											✓	✓	

Operation Unit 運營單位	GHG Emissions 溫室氣體排放		Air Emissions 廢氣排放	Energy Consumption 能源消耗	Water Consumption and Discharge 耗水及排水	Hazardous Waste Generated 有害廢棄物產生				Non-hazardous Waste Generated 無害廢棄物產生				Materials Consumption 物料使用	Waste Recycling 廢棄物回收
	GHG Emissions 溫室氣體排放	GHG Emissions 溫室氣體排放				Fly Ash 飛灰	Bottom Ash 爐渣	Sludge 污泥	Furnace Ash 爐灰	Bottom Ash 爐渣	Sludge 污泥	General Waste 一般廢棄物產生			
Envirotech 環境研究院	✓			✓	✓								✓	✓	✓
Equipment Manufacturing 設備製造	✓		△	✓	✓								✓	✓	✓
Headquarters and Representative Offices 總部及代表處	✓			✓	✓								✓		✓

- * Under preparatory stage 在籌建階段
- ✓ Fully disclosed 全面披露
- △ Insignificant 不顯著
- Not applicable for full disclosure 全面披露不適用

社會數據

Social Statistics

Operation Unit 運營單位	Employee Profile 員工概況 (total number of employees, new hires and employee turnover, employee eligible for retirement) (員工總數、新聘及離職員工、合資退休員工)	Health and Safety Statistics 健康與安全數據			Community Engagement 社會貢獻			Supply Chain 供應鏈		
		Training Hours 培訓時數	Maternity/ Paternity Leave Statistics 產假/ 侍產假數據	Employees 員工	Third-party Contractors and Sub-contractors Working On-Site 第三方承包商及 分包商駐場工人	Visitors Received by Our Environmental Protection Projects 環保項目參觀人次	Volunteer Services 義工總時數	Number of Suppliers 供應商數目	Number of Outsourced Service Workers 外聘服務工人數目	Remuneration Statistics 薪酬數據
Environmental energy 環保能源	Waste-to-energy 垃圾發電	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Food waste treatment 餐厨垃圾處理	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Sludge treatment and disposal 污泥處理處置	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Leachate treatment 滲濾液處理	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Methane-to-energy 沼氣發電	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Fecal treatment 糞便處理	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Fly ash landfill 飛灰填埋	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Medical waste treatment 醫療廢物處理	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Solid waste treatment 固廢處理	✓	✓	✓	✓	✓	✓	✓	✓	✓

Operation Unit 運營單位	Employee Profile 員工概況 (total number of employees, new hires and employee turnover, employee eligible for retirement) (員工總數、新聘及離職員工、合資退休員工)										
	Health and Safety Statistics 健康與安全數據					Community Engagement 社會貢獻			Supply Chain 供應鏈		
	Training Hours 培訓時數	Maternity/ Paternity Leave Statistics 產假/待產假數據	Employees 員工	Third-party Contractors and Sub-contractors Working On-Site 第三方承包商及 分包商駐場工人	Visitors Received by Our Environmental Protection Projects 環保項目參觀人次	Volunteer Services 義工總時數	Number of Suppliers 供應商數目	Number of Outsourced Service Workers 外聘服務工人數目	Remuneration Statistics 薪酬數據		
Environmental water 環保水務	Municipal waste water treatment 市政污水處理	✓	✓	✓	✓	✓	✓	✓	✓		
	Industrial waste water treatment 工業廢水處理	✓	✓	✓	✓	✓	✓	✓	✓		
	Reusable water 中水回用	✓	✓	✓	✓	✓	✓	✓	✓		
	River-basin ecological restoration 流域治理	✓	✓	✓	✓	✓	✓	✓	✓		
	Water supply 供水	✓	✓	✓	✓	✓	✓	✓	✓		
	Waste water source heat pump 污水源熱泵	✓	✓	✓	✓	✓	✓	✓	✓		
	Raw water protection 原水保護	✓	✓			✓	✓	✓	✓		
	Leachate treatment 滲濾液處理	✓	✓	✓	✓	✓	✓	✓	✓		

Operation Unit 運營單位	Employee Profile 員工概況 (total number of employees, new hires and employee turnover, employee eligible for retirement) (員工總數、新聘及離職員工、合資退休員工)									
	Health and Safety Statistics 健康與安全數據					Community Engagement 社會貢獻			Supply Chain 供應鏈	
	Training Hours 培訓時數	Maternity/ Paternity Leave Statistics 產假/侍產假數據	Employees 員工	Third-party Contractors and Sub-contractors Working On-Site 第三方承包商及 分包商駐場工人	Visitors Received by Our Environmental Protection Projects 環保項目參觀人次	Volunteer Services 義工總時數	Number of Suppliers 供應商數目	Number of Outsourced Service Workers 外聘服務工人數目	Remuneration Statistics 薪酬數據	
Greentech 綠色環保	Integrated biomass utilisation 生物質綜合利用	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Hazardous waste and solid waste treatment 危險及固廢處置	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Environmental remediation 環境修復	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Solar energy 光伏發電	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Wind power 風電	✓	✓	✓	✓	✓	✓	✓	✓	✓

Operation Unit 運營單位	Employee Profile 員工概況 (total number of employees, new hires and employee turnover, employee eligible for retirement) (員工總數、新聘及離職員工、合資退休員工)									
	Health and Safety Statistics 健康與安全數據					Community Engagement 社會貢獻			Supply Chain 供應鏈	
	Training Hours 培訓時數	Maternity/ Paternity Leave Statistics 產假/ 待產假數據	Employees 員工	Third-party Contractors and Sub-contractors Working On-Site 第三方承包商及分包商駐場工人	Visitors Received by Our Environmental Protection Projects 環保項目參觀人次	Volunteer Services 義工總時數	Number of Suppliers 供應商數目	Number of Outsourced Service Workers 外判服務工人數目	Remuneration Statistics 薪酬數據	
Envirotech 環境研究院	✓	✓	✓	✓		✓	✓	✓	✓	
Equipment manufacturing 裝備製造	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Headquarters and Representative Offices 總部及代表處	✓	✓	✓	✓			✓	✓	✓	

- * Under preparatory stage 在籌建階段
- ✓ Fully disclosed 全面披露
- Not applicable for full disclosure 全面披露不適用

Appendix II – Main Corporate Memberships

附錄II – 主要企業會籍

Key Associations Joined by Everbright Environment 光大環境參與的主要協會	Key Activities in 2024 二零二四年重點活動
China Association of Urban Environmental Sanitation 中國城市環境衛生協會 Association’s Ambition 協會願景 To actively promote the scientific development of city appearance and environmental sanitation in cities across the country. 積極推進全國城市市容環境衛生事業科學發展。	<i>Unmanned Coking Machine Technology and Application</i> won the first prize of the Association’s Science and Technology Progress Award 《無人打焦機技術及應用》獲得協會科技進步獎一等獎 - Participated in the “15th Five-Year Plan” Innovation and Development Seminar for the Domestic Waste Incineration Industry 參加生活垃圾焚燒行業「十五五」創新發展研討會 Total amount contributed in 2024: RMB80,000 二零二四年總貢獻金額：人民幣80,000元
E20 Environmental Platform – China Solid Waste Web E20環境平台－中國固廢網 Association’s Ambition 協會願景 To utilise the platform to support the growth of environmental companies and to assist local governments to actively explore environmental solutions. 利用平台的力量幫助環保企業成長，協助地方政府積極探索環境解決方案。	- Attended the annual Solid Waste Forum 參與年度固廢論壇 - Recognised as the “Top Ten Most Influential Enterprises” in solid waste industry 獲得固廢行業「十大影響力企業」 - Xiangtan Project was awarded the “Socialised Benchmark of Waste-to-energy Project in Terms of Construction and Operation” 湘潭項目獲評「垃圾焚燒發電廠建設運營社會化標杆」 Total amount contributed in 2024: RMB300,000 二零二四年總貢獻金額：人民幣300,000元

Key Associations Joined by Everbright Environment 光大環境參與的主要協會	Key Activities in 2024 二零二四年重點活動
E20 Environmental Platform – China Water Web E20環境平台－中國水網 Association’s Ambition 協會願景 To utilise the platform to support the growth of environmental companies and to assist local governments to actively explore environmental solutions. 利用平台的力量幫助環保企業成長，協助地方政府積極探索環境解決方案。	Recognised as the “Top Ten Most Influential Enterprises” in China’s water industry 獲評中國水業「十大影響力企業」 Total amount contributed in 2024: RMB120,000 二零二四年總貢獻金額：人民幣120,000元
Chinese Society for Environmental Sciences 中國環境科學學會 Association’s Ambition 協會願景 To enhance the public’s scientific knowledge, and create positive scientific and cultural atmosphere for contribution to ecological civilisation and environmental protection. 提高全民科學知識，營造良好科學文化氛圍，為生態文明建設和環保事業貢獻力量。	- Attended the annual meeting 參加年會 - Participated in the eco-environmental interpreter contest and awarded the “Top Ten Promotional Videos Award” 參加生態環境講解員比賽並獲「十佳宣傳片獎」

Key Associations Joined by Everbright Environment 光大環境參與的主要協會	Key Activities in 2024 二零二四年重點活動
China Council for International Cooperation on Environment and Development 中國環境與發展國際合作委員會 Association's Ambition 協會願景 To open the door to international experience on sustainable development, built a bridge between China and the international community on environment and development and establish a platform of exchange, enabling the international community to understand China and support China's engagement with the world. 打開了一扇大門，把國際可持續發展先進理念帶入中國；架設了一座橋樑，促進中國與國際社會在環境與發展領域的交流與互鑒；提供了一個平台，通過中外坦誠對話，促進世界了解中國，推動中國走向世界。	The Chairman of the Board of Directors attended the 2024 Annual Meeting and made a presentation at the roundtable meeting "Building a Green Silk Road and Promoting Global South-South Cooperation". 董事會主席出席二零二四年年會，並參加「共建綠色絲綢之路，助力全球南南合作」圓桌會議並發言。



Everbright Environment has reported in accordance with the GRI Standards for the period 1 January 2024 to 31 December 2024. There are no GRI sector standards currently applicable to the Group. For the Content Index – Advanced Service, GRI Services reviewed that the GRI content index has been presented in a way consistent with the requirements for reporting in accordance with the GRI Standards, and that the information in the index is clearly presented and accessible to the stakeholders. The service was performed on the English version of the Report.

光大環境已根據GRI準則針對二零二四年一月一日至二零二四年十二月三十一日期間進行報告。目前沒有適用於本集團的GRI行業準則。於本次內容索引—進階服務(Content Index – Advanced Service)中，GRI服務審查了GRI內容索引的呈現方式符合GRI標準的報告要求，並且索引中的資訊以可供持份者易於閱讀的形式清晰呈現。本次服務按本報告的英文版本進行。

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
GRI 1: Foundation 2021 基礎 2021		
GRI 2: General Disclosures 2021 一般披露 2021		
The Organization and its Reporting Practices 組織及其報告做法		
2-1	Organizational details 組織詳細情況	About This Report 關於本報告
		About Everbright Environment 關於光大環境
		Annual Report 2024 – Notes to the Financial Statements 二零二四年年報－財務報表附註
2-2	Entities included in the organisation's sustainability reporting 納入組織可持續發展報告的實體	About Everbright Environment 關於光大環境
		Annual Report 2024 – Notes to the Financial Statements 二零二四年年報－財務報表附註
2-3	Reporting period, frequency and contact point 報告期、報告頻率和聯繫人	About This Report 關於本報告
2-4	Restatements of information 信息重述	Restated information are annotated clearly in the Report. 本報告對重述信息進行了明確的註釋。
2-5	External assurance 外部鑑證	Verification Statements 審核聲明
		The Board reviews the Report and the external assurance report before publication. 董事會在發布前審查本報告和外部鑑證報告。

Appendix III – GRI Content Index
附錄III – GRI內容索引

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
Activities and Workers 活動和工作		
2-6	Activities, value chain and other business relationships 活動、價值鏈和其他業務關係	Message from the Chairman of the Board 董事會主席致辭
		About Everbright Environment 關於光大環境
		Sustainable Operations Management 可持續的運營管理
		Stakeholder Engagement 持份者參與
		Annual Report 2024 二零二四年年報
2-7	Employees 員工	Talent Development 人才發展
		Key Statistics 主要數據
2-8	Workers who are not employees 員工之外的工作者	Sustainable Operations Management 可持續的運營管理
Governance 管治		
2-9	Governance structure and composition 管治架構和組成	Sustainable Operations Management 可持續的運營管理
		Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告
		None of the members of the highest governance body is from an underrepresented social group. 最高治理機構的成員都不是來自弱勢社會群體。
2-10	Nomination and selection of the highest governance body 最高管治機構的提名和遴選	Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告
2-11	Chair of the highest governance body 最高管治機構的主席	Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告
2-12	Role of the highest governance body in overseeing the management of impacts 在管理影響方面，最高管治機構的監督作用	Sustainable Operations Management 可持續的運營管理
		Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告
2-13	Delegation of responsibility for managing impacts 為管理影響的責任授權	Sustainable Operations Management 可持續的運營管理
		Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告
2-14	Role of the highest governance body in sustainability reporting 最高管治機構在可持續發展報告中的作用	Sustainable Operations Management 可持續的運營管理
		Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告

	Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
2-15	Conflicts of interest 利益衝突	Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告	–
2-16	Communication of critical concerns 重要關切問題的溝通	Sustainable Operations Management 可持續的運營管理	34-55
		Stakeholder Engagement 持份者參與	56-67
		Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告	–
		During the Reporting Period, 9 whistleblowing cases were reported through the CEO's mailbox, covering cases concerning tender procedures and abuse of authority. 5 cases have been investigated, and the findings were reported to the Audit Committee. 在報告期間，總裁信箱共收到了9宗舉報案件，涉及招標程序及濫用職權的舉報。5宗案件已完成調查，調查結果已向審核委員會報告。	
2-17	Collective knowledge of the highest governance body 最高管治機構的共同知識	Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告	–
2-18	Evaluation of the performance of the highest governance body 最高管治機構的績效評估	Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告	–
2-19	Remuneration policies 薪酬政策	Sustainable Operations Management 可持續的運營管理	34-55
		Annual Report 2024 – Notes to Financial Statements 二零二四年年報－財務報表附註	–
		There is no difference in retirement benefits between the Senior Management and other employees of the Group. 本集團高級管理層和其他員工的退休福利並無不一樣。	
2-20	Process to determine remuneration 確定薪酬的程序	Sustainable Operations Management 可持續的運營管理	34-55
		Annual Report 2024 – Notes to Financial Statements 二零二四年年報－財務報表附註	–
		The Group considers the opinions expressed by employees through various channels in the formulation of remuneration policy. 本集團在制定薪酬政策時會參考員工在各渠道提出的意見。	
2-21	Annual total compensation ratio 年度總薪酬比率	Key Statistics 主要數據	217-228
		The main business of the Group and more than 90% of its employees are located in Mainland China. Therefore, we do not report compensation data broken down by geographical region. 本集團的主要業務，以及超過90%的員工均位於中國內地，因此我們沒有匯報按地區劃分的薪酬數據。	

Appendix III – GRI Content Index
附錄III – GRI內容索引

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
Strategy, Policies and Practices 戰略、政策和實踐		
2-22	Statement on sustainable development strategy 關於可持續發展戰略的聲明	Message from the Chairman of the Board 董事會主席致辭 8-13
2-23	Policy commitments 政策承諾	Sustainable Operations Management 可持續的運營管理 34-55 Environmental Protection 環境保護 108-153 Talent Development 人才發展 154-174 Safety Culture 安全文化 175-187 Annual Report 2024 – Sustainability Report 二零二四年年報－可持續發展報告 － Everbright Environment's ESG commitments are generally in line with relevant international initiatives including <i>UN Guiding Principles on Business and Human Rights</i> , <i>OECD Guidelines for Multinational Enterprises</i> , <i>OECD Due Diligence Guidance for Responsible Business Conduct</i> , and Principle 15 of the <i>Rio Declaration on Environment and Development</i> . 光大環境的ESG承諾與各相關國際倡議大體一致，包括《聯合國工商企業與人權指導原則》、《經濟合作暨發展組織跨國企業準則》、《經濟合作暨發展組織責任商業行為盡職調查指南》和《里約環境與發展宣言》第十五項原則。
2-24	Embedding policy commitments 融入政策承諾	Sustainable Operations Management 可持續的運營管理 34-55
2-25	Processes to remediate negative impacts 補救負面影響的程序	Sustainable Operations Management 可持續的運營管理 34-55 During the period of publicity of procurement bidding results, the public/customer can complain through the procurement platform; during the publicity period before the promotion of employees, employees can make complaints through email; after feedback on the performance appraisal results, employees can appeal through the EHR system or paper documents; Employees who have suggestions and any comments on the Group can provide feedback through the suggestion box. 採購招標結果公示期間，公眾／客戶可通過採購平台進行投訴；在員工晉升前的公示期內，員工可以通過郵件進行投訴；績效考核結果反饋後，員工可通過EHR系統或紙質文件進行申訴；員工對本集團有任何建議和意見，可通過意見箱進行反饋。
2-26	Mechanisms for seeking advice and raising concerns 尋求建議和提出關切的機制	Sustainable Operations Management 可持續的運營管理 34-55 Annual Report 2024 – Corporate Governance Report 二零二四年年報－企業管治報告 －
2-27	Compliance with laws and regulations 遵守法律法規	Sustainable Operations Management 可持續的運營管理 34-55 Appendix V – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Environment 附錄V－對光大環境有重大影響的相關法律及規例的遵守情況 273-276 There were no significant instances of non-compliance with laws and regulations during the Reporting Period. 報告期內沒有發生重大違反法規的事件。
2-28	Membership associations 協會的成員資格	Appendix II – Main Corporate Memberships 附錄II－主要企業會籍 250-252

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
Stakeholder Engagement 利益相關方參與		
2-29	Approach to stakeholder engagement 利益相關方參與的方法	Stakeholder Engagement 持份者參與 56-67
2-30	Collective bargaining agreements 集體談判協議	There are no formal collective bargaining agreements in place within the Group. The Group and the individual employee sign a separate labour contract to stipulate the rights and obligations of both parties, and if there is a change in the policy related to the vital interests of the employee, it will also be communicated through the employee representative assembly. 本集團內部沒有正式的集體談判協議。本集團與職工個人另行簽訂勞動合同，約定雙方的權利和義務，如涉及職工切身利益的政策發生變化，也將通過職工代表大會進行溝通。 –
GRI 3: Material Topics 2021 實質性議題 2021		
3-1	Process to determine material topics 確定實質性議題的過程	Stakeholder Engagement 持份者參與 56-67
3-2	List of material topics 實質性議題清單	Stakeholder Engagement – List of Sustainability Topics 持份者參與－可持續發展議題列表 64
Corporate Governance 公司治理		
GRI 3: Material Topics 2021 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	Sustainable Operations Management 可持續的運營管理 34-55
GRI 201: Economic Performance 2016 經濟績效 2016		
201-1	Direct economic value generated and distributed 直接產生和分配的經濟價值	Key Statistics 主要數據 217-228
201-2	Financial implications and other risks and opportunities due to climate change 氣候變化帶來的財務影響以及其它風險與機遇	Response to Climate Change 應對氣候變化 68-107
201-3	Defined benefit plan obligations and other retirement plans 義務性固定福利計劃和其他退休計劃	Talent Development 人才發展 151-174
		Annual Report 2024 – Report of the Directors 二零二四年年報－董事會報告 –
201-4	Financial assistance received from government 政府給予的財務補貼	Annual Report 2024 – Notes to Financial Statements 二零二四年年報－財務報表附註 –

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
Business Ethics, Anti-Corruption/Anti-Bribery 商業道德、反貪污／反賄賂		
GRI 3: Material Topics 2021 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	Sustainable Operations Management 可持續的運營管理 34-55
GRI 205: Anti-corruption 2016 反腐敗 2016		
205-1	Operations assessed for risks related to corruption 已進行腐敗風險評估的運營點	Annual Report 2024 – Audit Committee 二零二四年度報告－審核委員會 The risk assessment and internal control carried out by the Group for all operating projects have included the risk of corruption. 本集團為所有運營項目進行的風險評估及內部控制已包含貪腐的風險。
205-2	Communication and training about anti-corruption policies and procedures 反腐敗政策和程序的傳達及培訓	Talent Development 人才發展 Number of employees participated in anti-corruption training: 已接受反貪腐培訓的員工數據： – Number of senior management (percentage): 543 (100%) – 高級管理人員 (百分比): 543 (100%) – Number of middle-level management (percentage): 2,273 (100%) – 中級管理人員 (百分比): 2,273 (100%) – Other employees (percentage): 12,051 (100%) – 其他員工人數 (百分比): 12,051 (100%) In 2024, all of the Directors of the Company received trainings on anti-corruption. 於二零二四年，本公司全體董事接受了反貪腐培訓。
205-3	Confirmed incidents of corruption and actions taken 經確認的腐敗事件和採取的行動	Appendix V – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Environment 附錄V－對光大環境有重大影響的相關法律及規例的遵守情況 273-276

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
Energy Efficiency 能源效益		
GRI 3: Material Topics 2021 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	Environmental Protection 環境保護 108-153
GRI 302: Energy 2016 能源 2016		
302-1	Energy consumption within the organisation 組織內部的能源消耗量	Environmental Protection 環境保護 108-153 Key Statistics 主要數據 217-228 Energy consumption within the organisation includes electricity consumption. The Group also sells steam; but no cooling is sold. 組織內部的能源消耗量包括電力消耗。本集團另有出售蒸汽；但沒有出售製冷。 With waste to energy as our major business, the Group uses household waste as the major source of fuel to generate green electricity to supply to the grid. Due to the highly varying composition and heat content of household waste, it is not feasible to arrive at a meaningful calculation of total energy consumption within the organisation. 本集團以垃圾發電為主營業務，以生活垃圾為主要燃料，生產綠色電力供應電網。由於生活垃圾的成分和熱值差異很大，因此無法對組織內的總能源消耗進行有意義的計算。
302-2	Energy consumption outside of the organisation 組織外部的能源消耗量	Environmental Protection 環境保護 108-153 Key Statistics 主要數據 217-228 Energy consumption outside the organisation includes the Group's supply of on-grid electricity and steam. 組織外部的能源消耗量包括本集團的上網電量及蒸汽供應量。
302-3	Energy intensity 能源強度	Key Statistics 主要數據 217-228 Energy intensity only includes those within the organisation. 能源密集度只包括組織內部。
302-4	Reduction of energy consumption 減少能源消耗量	Environmental Protection 環境保護 108-153
302-5	Reductions in energy requirements of products and Services 降低產品和服務的能源需求	Environmental Protection 環境保護 108-153

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
Usage of Water Resources, Waste and Waste Water Management, Circular Economy 水資源使用、廢物和污水管理、循環經濟		
GRI 3: Material Topics 2021 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	Environmental Protection 環境保護 108-153
GRI 303: Water and Effluents 2018 水資源與污水 2018		
303-1	Interactions with water as a shared resource 組織與水（作為共有資源）的相互影響	Environmental Protection 環境保護 108-153
The Group's operations in the Mainland China make use of the municipal water supply, groundwater, surface water and reclaimed water. Among them, the main source of municipal water supply is surface water. Part of the waste water will be reused in the plant, and the rest will be discharged to public or private waste water treatment facilities, surface water and the ocean in accordance with applicable discharge permits and discharge standards. 本集團在中國內地的業務會使用市政供水、地下水、地表水及再用水。其中，市政供水主要源自地表水。部分污水會於廠內回用，其餘則按照適用的排放許可證及排放標準排放至公共或私有的污水處理設施、地表水及海洋。 The Vietnam operation of the environmental energy sector mainly uses surface water, followed by municipal water supply, where the local municipal water supply also mainly comes from surface water. The Poland operation of this sector uses municipal water supply and groundwater; according to the Polish National Water Agency, the local freshwater sources are mainly surface water, groundwater and from catchment areas. All water used in Vietnam and Poland is consumed and reused in-plant, thus there is no discharge. 環保能源板塊的越南業務主要使用地表水，其次為市政供水，而當地的市政供水亦主要源自地表水。該板塊位於波蘭的業務則使用市政供水及地下水；根據波蘭國家水務局，當地的淡水來源主要為地表水、地下水及集水區。越南及波蘭業務的所有用水均為廠內消耗及回用，因此沒有排放。 The Group's operation in Hong Kong uses water from the Water Supplies Department, including freshwater for potable use, cooling, washing, toilet and landscaping, and seawater for flushing. Hong Kong's two main sources of freshwater are rainfall from natural catchments and Dongjiang water from Guangdong Province. All effluents are discharged to public sewers and/or the sea in accordance with applicable discharge licences. 本集團在香港的業務所使用的水均來自水務署，包括用於飲用水、冷卻、洗滌、洗手間和澆灌的淡水，以及用於沖廁的海水。香港的兩個主要淡水來源是自然流域的降雨和廣東省的東江水。根據適用的排放許可證，所有廢水均排入公共污水收集系統和／或海洋。 The Group's operation in Singapore uses water from third-party water source(s) supplied by the Public Utilities Board ("PUB"). According to PUB, Singapore's water demand is currently met by water from local catchment areas, imported water, NEWater and desalinated water. The waste water from Singapore's operation is collected by public sewers. 本集團在新加坡的業務所使用的水均由公用事業局第三方水源提供。根據公用事業局，新加坡目前可透過使用當地集水區的水、進口水、「新生水」和化淡水來滿足對水的需求。新加坡的業務的污水均由公共污水收集系統收集。		

	Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
303-2	Management of water discharge-related impacts 管理與排水相關的影響	Environmental Protection 環境保護	108-153
303-3	Water withdrawal 取水	Environmental Protection 環境保護	108-153
		Key Statistics 主要數據	217-228
303-4	Water discharge 排水	Environmental Protection 環境保護	108-153
		Key Statistics 主要數據	217-228
303-5	Water Consumption 耗水	Environmental Protection 環境保護	108-153
		Key Statistics 主要數據	217-228
GRI 306: Waste 2020 廢棄物 2020			
306-1	Waste generation and significant waste-related impacts 廢棄物的產生及廢棄物相關重大影響	Environmental Protection 環境保護	108-153
306-2	Management of significant waste-related impacts 廢棄物相關重大影響的管理	Environmental Protection 環境保護	108-153
306-3	Waste generated 產生的廢棄物	Environmental Protection 環境保護	108-153
		Key Statistics 主要數據	217-228
306-4	Waste diverted from disposal 從處置中轉移的廢棄物	Environmental Protection 環境保護	108-153
		Key Statistics 主要數據	217-228
306-5	Waste directed to disposal 進入處置的廢棄物	Environmental Protection 環境保護	108-153
		Key Statistics 主要數據	217-228

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數	
Climate Change Mitigation, Greenhouse Gas Emission, Air Pollution Management 應對氣候變化、溫室氣體排放、空氣污染管理			
GRI 3: Material Topics 2021 實質性議題 2021			
3-3	Management of material topics 實質性議題的管理	Responding to Climate Change 應對氣候變化 Environmental Protection 環境保護	68-107 108-153
	GRI 305: Emissions 2016 排放 2016		
305-1	Direct (Scope 1) GHG emissions 直接（範疇一）溫室氣體排放	Responding to Climate Change 應對氣候變化	68-107
		Environmental Protection 環境保護	108-153
		Key Statistics 主要數據	217-228
		Calculations are based on the global warming potentials published in the IPCC AR6; calculation of GHG emissions include carbon dioxide (CO ₂), methane (CH ₄) and nitrous oxides (N ₂ O). Emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF ₆) and nitrogen trifluoride (NF ₃) are not significant. 計算參考IPCC AR6中發布的相對全球變暖潛能；溫室氣體排放量的計算包括二氧化碳(CO ₂)、甲烷(CH ₄)及氧化亞氮(N ₂ O)。氫氟碳化物(HFCs)、全氟化碳(PFCs)、六氟化硫(SF ₆)及三氟化氮(NF ₃)的排放並不顯著。	
		Scope 1 GHG emissions by biogenic/non-biogenic source: 按生物源／非生物源劃分的範疇1溫室氣體排放量：	
		Biogenic emissions: 27,899 tonnes CO ₂ equivalent 生物源排放量：27,899噸二氧化碳當量	
		Non-biogenic emissions: 16,460,793 tonnes CO ₂ equivalent 非生物源排放量：16,460,793噸二氧化碳當量	
305-2	Energy indirect (Scope 2) GHG emissions 能源間接（範疇二）溫室氣體排放	Responding to Climate Change 應對氣候變化	68-107
		Environmental Protection 環境保護	108-153
		Key Statistics 主要數據	217-228

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
305-3	Other indirect (Scope 3) GHG emissions 其它間接（範疇三）溫室氣體排放	68-107
	Responding to Climate Change 應對氣候變化	108-153
	Environmental Protection 環境保護	217-228
	Key Statistics 主要數據	
	Calculations are based on the global warming potentials published in the IPCC AR6; calculation of GHG emissions include carbon dioxide (CO ₂), methane (CH ₄) and nitrous oxides (N ₂ O). Emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF ₆) and nitrogen trifluoride (NF ₃) are not significant. 計算參考IPCC AR6中發布的相對全球變暖潛能；溫室氣體排放量的計算包括二氧化碳(CO ₂)、甲烷(CH ₄)及氧化亞氮(N ₂ O)。氫氟碳化物(HFCs)、全氟化碳(PFCs)、六氟化硫(SF ₆)及三氟化氮(NF ₃)的排放並不顯著。	
	We do not have scope 3 biogenic emissions. 我們沒有範疇3生物源排放。	
305-4	GHG emissions intensity 溫室氣體排放強度	108-153
	Environmental Protection 環境保護	217-228
	Key Statistics 主要數據	
	Calculations are based on the global warming potentials published in the IPCC AR6; calculation of GHG emissions include carbon dioxide (CO ₂), methane (CH ₄) and nitrous oxides (N ₂ O). Emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF ₆) and nitrogen trifluoride (NF ₃) are not significant. 計算參考IPCC AR6中發布的相對全球變暖潛能；溫室氣體排放量的計算包括二氧化碳(CO ₂)、甲烷(CH ₄)及氧化亞氮(N ₂ O)。氫氟碳化物(HFCs)、全氟化碳(PFCs)、六氟化硫(SF ₆)及三氟化氮(NF ₃)的排放並不顯著。	
305-5	Reduction of GHG emissions 溫室氣體減排量	108-153
	Environmental Protection 環境保護	217-228
305-6	Emissions of ozone-depleting substances (ODS) 臭氧消耗物質(ODS)的排放	–
	The Group's operations do not involve emissions of significant ozone-depleting substances (ODS). 本集團的運營並不涉及顯著的臭氧消耗物質(ODS)排放。	
305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions 氮氧化物(NO _x)、硫氧化物(SO _x)和其它重大氣體排放	108-153
	Environmental Protection 環境保護	217-228
	Key Statistics 主要數據	
	Data on persistent organic pollutants (POPs), volatile organic compounds (VOCs), hazardous air pollutants (HAPs), and other air emissions are not applicable. The Group cannot quantify fugitive emissions such as volatile organic compounds (VOCs) and odour pollutants, but monitors emissions of heavy metals and dioxins through sampling, thus, total emissions data are not available. Nevertheless, we ensure that all emissions are below the thresholds specified in the national <i>Standard for Pollution Control on the Municipal Solid Waste Incineration</i> (GB 18485-2014), as well as ensuring compliance with all other applicable local standards. 關於持久性有機污染物(POPs)、揮發性有機化合物(VOCs)、有害空氣污染物(HAPs)及其他空氣排放物的數據不適用。本集團未能量化無組織氣體，例如揮發性有機化合物及惡臭污染物的排放，但透過採樣檢驗的方式監測重金屬和二噁英的排放，因此未有排放總量的數據。然而，我們確保所有排放均低於《生活垃圾焚燒污染控制標準》(GB 18485-2014)中所列的限值，並符合所有其他適用的當地標準。	

Appendix III – GRI Content Index
附錄III – GRI內容索引

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
Occupational Health and Safety, Safety Production 職業健康與安全、安全生產		
GRI 3: Material Topics 2021 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	Safety Culture 安全文化 175-187
GRI 403: Occupational Health and Safety 2018 職業健康與安全 2018		
403-1	Occupational health and safety management system 職業健康安全管理體系	Safety Culture 安全文化 175-187 The Group's ESHS management system was formulated in accordance with the <i>Labour Law of the PRC</i> , <i>Work Safety Law of the PRC</i> , <i>Criminal Law of the PRC</i> , <i>Social Insurance Law of the PRC</i> , <i>Occupational Health and Safety Management Systems – Requirements with Guidance for Use</i> (GB/T 45001-2020), <i>Environmental Management Systems – Requirements with Guidance for Use</i> (GB/T 24001-2016), etc. 本集團的ESHS管理體系乃依據《中國勞動法》、《中國安全生產法》、《中國刑法》、《中國社會保險法》、《職業健康安全管理體系要求及使用指南》(GB/T 45001-2020)、《環境管理體系要求及使用指南》(GB/T 24001-2016)等編製。
403-2	Hazard identification, risk assessment, and incident investigation 危害識別、風險評估及事件調查	Safety Culture 安全文化 175-187
403-3	Occupational health services 職業健康服務	Safety Culture 安全文化 175-187
403-4	Worker participation, consultation, and communication on occupational health and safety 職業健康安全事務：工作者的參與、協商和溝通	Safety Culture 安全文化 175-187
403-5	Worker training on occupational health and safety 工作者職業健康安全培訓	Safety Culture 安全文化 175-187
403-6	Promotion of worker health 促進工作者健康	Talent Development 人才發展 154-174 Safety Culture 安全文化 175-187
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships 預防和減輕與商業關係直接相關的職業健康安全影響	Safety Culture 安全文化 175-187
403-8	Workers covered by an occupational health and safety management system 職業健康安全管理體系適用的工作者	The Group's ESHS management system covers all employees of the Group, third-party contractors and subcontractors working onsite. 本集團的ESHS管理體系覆蓋了本集團所有員工、第三方承包商及分包商駐場工人。 The Group conducts annual internal audit for the ESHS system, but has not yet conducted external audits. 本集團每年對ESHS體系進行內部審核，但暫未進行外部審核。 –

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
403-9 Work-related injuries 工傷	Safety Culture 安全文化	175-187
	Key Statistics 主要數據	217-228
	The major risks of work-related injury in the waste-to-energy and integrated biomass utilisation industries include musculoskeletal injuries, fractures, and ocular trauma; while that of the water utility industry include slip and fall, and hearing loss. 垃圾發電及生物質綜合利用行業的主要工傷風險包括肌肉骨骼損傷、骨折、及穿透性眼外傷；水務行業的主要工傷風險則包括滑倒、跌倒、及聽力損害。 During the Reporting Period, 1 work-related fatality involving an employee was recorded, caused by accidental drowning due to losing footing. The compensation process is currently underway, and the project company has subsequently installed additional safety barriers to prevent recurrence of similar incidents. 報告期內錄得1宗員工的工傷死亡事故，原因為員工意外失足落水導致身亡。目前相關賠償程序正在進行中，項目公司事後已加裝圍欄，以防止類似事故再次發生。	
403-10 Work-related ill health 工作相關的健康問題	Safety Culture 安全文化	175-187
	Key Statistics 主要數據	217-228
	The major risks of work-related ill health in the waste-to-energy and integrated biomass utilisation industries include skin and gastrointestinal disorders, and exposure to concerning substances, such as respirable quartz dust, dioxins, bioaerosols and carcinogens; while that of the water utility industry include waterborne disease, airborne infection, and skin ailments. 垃圾發電及生物質綜合利用行業的主要職業病風險包括皮膚和腸胃疾病、以及由接觸有害物質，例如石英粉塵、二噁英、生物氣溶膠和致癌物等而引發的疾病；水務行業的主要職業病風險包括水源性疾病、空氣傳播疾病、及皮膚病。	

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋	Page Number 頁數
Child Labour and Forced Labour 童工與強制勞工		
GRI 3: Material Topics 2021 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	Sustainable Operations Management 可持續的運營管理
		Talent Development 人才發展
GRI 408: Child Labor 2016 童工 2016		
408-1	Operations and suppliers at significant risk for incidents of child labor 具有重大童工事件風險的運營點和供應商	Sustainable Operations Management 可持續的運營管理
		Talent Development 人才發展
GRI 409: Forced or Compulsory Labor 2016 強迫或強制勞動 2016		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor 具有強迫或強制勞動事件重大風險的運營點和供應商	Sustainable Operations Management 可持續的運營管理
		Talent Development 人才發展

Disclosure 披露編號	Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考／解釋		Page Number 頁數
Cybersecurity and Data Privacy 網絡安全及數據私隱			
GRI 3: Material Topics 2021 實質性議題 2021			
3-3	Management of material topics 實質性議題的管理	Sustainable Operations Management 可持續的運營管理	34-55
GRI 418: Customer Privacy 2016 客戶隱私 2016			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data 侵犯客戶隱私和丟失客戶資料有關經證實的投訴	The Group had no substantiated complaints concerning breaches of customer privacy and losses of customer data in 2024. 本集團於二零二四年沒有經證實侵犯客戶隱私或遺失客戶資料的投訴。	—
Technological Innovation 科技創新			
GRI 3: Material Topics 2021 實質性議題 2021			
3-3	Management of material topics 實質性議題的管理	Environmental Protection 環境保護	108-153

Appendix IV – Stock Exchange ESG Reporting Guide Content Index

附錄IV — 聯交所《環境、社會及管治報告指引》內容索引

ESG Aspects ESG層面	Description 描述	Relevant Chapter(s) of the Report and/or Other Explanation(s) 報告章節及／或其他說明
Governance Structure 管治架構	A statement from the board containing the following elements: (i) a disclosure of the board's oversight of ESG issues; (ii) the board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses); and (iii) how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses. 由董事會發出的聲明，當中載有下列內容： (i) 披露董事會對環境、社會及管治事宜的監管； (ii) 董事會的環境、社會及管治管理方針及策略，包括評估、優次排列及管理重要的環境、社會及管治相關事宜（包括對發行人業務的風險）的過程；及 (iii) 董事會如何按環境、社會及管治相關目標檢討進度，並解釋它們如何與發行人業務有關連。	About This Report, Sustainable Operations Management 關於本報告、可持續的運營管理
Reporting Principles 匯報原則	A description of, or an explanation on, the application of the following Reporting Principles in the preparation of the ESG report: Materiality, Quantitative and Consistency. 描述或解釋在編備環境、社會及管治報告時如何應用下列匯報原則：重要性、量化、一致性。	About This Report 關於本報告
Reporting Boundary 匯報範圍	A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change. 解釋環境、社會及管治報告的匯報範圍，及描述挑選哪些實體或業務納入環境、社會及管治報告的過程。若匯報範圍有所改變，發行人應解釋不同之處及變動原因。	About This Report, Stakeholder Engagement 關於本報告、持份者參與
“Comply or Explain” Provisions “不遵守就解釋”條文		
A. Environmental 環境		
Aspect A1: Emissions 層面 A1：排放物		
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. 有關廢氣及溫室氣體排放、向水及土地的排污、有害及無害廢棄物的產生等的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	Environmental Protection, Appendix V – Compliance with Relevant Laws and Regulations that Have a significant impact on Everbright Environment 環境保護、附錄V—對光大環境有重大影響的相關法律及規例的遵守情況
KPI A1.1	The types of emissions and respective emissions data. 排放物種類及相關排放數據。	Environmental Protection, Key Statistics 環境保護、主要數據 Air Emissions ⁽¹⁾ : 煙氣排放量 ⁽¹⁾ : Particulate Matter (PM): 612 tonnes 顆粒物(PM): 612噸 Sulphur Dioxide (SO ₂): 6,216 tonnes 二氧化硫(SO ₂): 6,216噸 Nitrogen Oxides (NO _x): 28,404 tonnes 氮氧化物(NO _x): 28,404噸 Hydrochloric Acid (HCL): 1,572 tonnes 鹽酸(HCL): 1,572噸 Carbon Monoxide (CO): 1,051 tonnes 一氧化碳(CO): 1,051噸 The Group monitors other emissions by sampling. Thus, there is no data on total emissions. Nevertheless, all emissions outstripped prevailing statutory standards. 本集團以採樣檢驗的方式監測其他排放物，因此未有排放總量的數據。然而，所有排放均優於現行的法定標準。 Note 附註： ⁽¹⁾ Includes all operations that involve incineration of household and hazardous waste; and combustion of agricultural and forestry waste. ⁽¹⁾ 涵蓋所有生活垃圾及危廢焚燒，及農林廢棄物的燃燒運營。
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). 直接（範圍1）及能源間接（範圍2）溫室氣體排放量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）。	Environmental Protection, Key Statistics 環境保護、主要數據
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). 所產生有害廢棄物總量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）。	Environmental Protection, Key Statistics 環境保護、主要數據
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility). 所產生無害廢棄物總量（以噸計算）及（如適用）密度（如以每產量單位、每項設施計算）。	Environmental Protection, Key Statistics 環境保護、主要數據

ESG Aspects ESG層面	Description 描述	Relevant Chapter(s) of the Report and/or Other Explanation(s) 報告章節及／或其他說明
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them. 描述所訂立的排放量目標及為達到這些目標所採取的步驟。	Environmental Protection, Together for the Sustainable Development Goals 環境保護、攜手邁向可持續發展目標
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them. 描述處理有害及無害廢棄物的方法，及描述所訂立的減廢目標及為達到這些目標所採取的步驟。	Environmental Protection, Together for the Sustainable Development Goals 環境保護、攜手邁向可持續發展目標 Hazardous waste is mainly composed of fly ash generated from the incineration of household waste. The amount of fly ash generated is highly dependent on the quantity and composition of household waste received, which are beyond Everbright Environment's control. 有害廢棄物主要包括焚燒生活垃圾所產生的飛灰。飛灰的數量主要取決於接收生活垃圾的數量及成分，而這些因素均不在光大環境的控制範圍之內。
Aspect A2: Use of Resources 層面A2：資源使用		
General Disclosure 一般披露	Policies on the efficient use of resources, including energy, water and other raw materials. 有效使用資源（包括能源、水及其他原材料）的政策。	Environmental Protection 環境保護
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility). 按類型劃分的直接及／或間接能源（如電、氣或油）總耗量（以千個千瓦時計算）及密度（如以每產量單位、每項設施計算）。	Environmental Protection, Key Statistics 環境保護、主要數據
KPI A2.2	Water consumption in total and intensity (per unit of production volume, per facility). 總耗水量及密度（如以每產量單位、每項設施計算）。	Environmental Protection, Key Statistics 環境保護、主要數據 The Group's total freshwater consumption and freshwater consumption intensity in 2024 were 80,752,341 m³ and 0.003 m³/kWh respectively. 本集團於二零二四年的淡水消耗總量及淡水消耗強度分別為80,752,341立方米和0.003立方米／千瓦時。
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them. 描述所訂立的能源使用效益目標及為達到這些目標所採取的步驟。	Environmental Protection, Together for the Sustainable Development Goals 環境保護、攜手邁向可持續發展目標
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them. 描述求取適用水源上可有任何問題，以及所訂立的用水效益目標及為達到這些目標所採取的步驟。	Environmental Protection, Together for the Sustainable Development Goals 環境保護、攜手邁向可持續發展目標 Regarding water sourcing, all of the Group's projects under construction and operation have obtained the respective environmental impact assessment approvals and waterdrawing permits. There are no issues related to sourcing water that is fit for purpose. 在取水方面，本集團的所有在建及運營項目均已獲得相關的環評批覆及取水證，本集團在獲得適用水源上沒有發現任何問題。
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced. 製成品所用包裝材料的總量（以噸計算）及（如適用）每生產單位佔量。	The primary products of the Group are clean energy and clean effluent, no packaging materials are used. 本集團的主要產出物為清潔能源及潔淨出水，並不使用包裝物料。
Aspect A3: The Environment and Natural Resources 層面A3：環境及天然資源		
General Disclosure 一般披露	Policies on minimising the issuer's significant impact on the environment and natural resources. 減低發行人對環境及天然資源造成重大影響的政策。	Environmental Protection 環境保護
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources. 描述業務活動對環境及天然資源的重大影響及已採取管理有關影響的行動。	Environmental Protection 環境保護
Aspect A4: Climate Change 層面A4：氣候變化		
General Disclosure 一般披露	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer. 識別及應對已經及可能會對發行人產生影響的重大氣候相關事宜的政策。	Responding to Climate Change 應對氣候變化
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them. 描述已經及可能會對發行人產生影響的重大氣候相關事宜，及應對行動。	Responding to Climate Change 應對氣候變化

Appendix IV – Stock Exchange ESG Reporting Guide Content Index
附錄IV – 聯交所《環境、社會及管治報告指引》內容索引

ESG Aspects ESG層面	Description 描述	Relevant Chapter(s) of the Report and/or Other Explanation(s) 報告章節及／或其他說明	
B. Social 社會			
Employment and Labour Practices 僱傭及勞工常規			
Aspect B1: Employment 層面B1：僱傭			
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the Issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. 有關薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇及福利的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	Talent Development, Appendix V – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Environment 人才發展、附錄V－對光大環境有重大影響的相關法律及規例的遵守情況	
KPI B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region. 按性別、僱傭類型（如全職或兼職）、年齡組別及地區劃分的僱員總數。	Talent Development, Key Statistics 人才發展、主要數據	
KPI B1.2	Employee turnover rate by gender, age group and geographical region. 按性別、年齡組別及地區劃分的僱員流失比率。	Talent Development, Key Statistics 人才發展、主要數據	
Aspect B2: Health and Safety 層面B2：健康與安全			
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the Issuer relating to providing a safe working environment and protecting employees from occupational hazards. 有關提供安全工作環境及保障僱員避免職業性危害的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	Safety Culture, Appendix V – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Environment 安全文化、附錄V－對光大環境有重大影響的相關法律及規例的遵守情況	
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year. 過去三年（包括匯報年度）每年因工亡故的人數及比率。	Safety Culture, Key Statistics 安全文化、主要數據	
KPI B2.2	Lost days due to work injury. 因工傷損失工作日數。	Safety Culture, Key Statistics 安全文化、主要數據	
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored. 描述所採納的職業健康與安全措施，以及相關執行及監察方法。	Safety Culture 安全文化	
Aspect B3: Development and Training 層面B3：發展及培訓			
General Disclosure 一般披露	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. 有關提升僱員履行工作職責的知識及技能的政策。描述培訓活動。	Talent Development 人才發展	
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management). 按性別及僱員類別（如高級管理層、中級管理層等）劃分的受訓僱員百分比。	Male: 男：	100%
		Female: 女：	100%
		Senior management: 高級管理層：	100%
		Middle-level management: 中級管理層：	100%
		General and technical staff: 一般員工：	100%
KPI B3.2	The average training hours completed per employee by gender and employee category. 按性別及僱員類別劃分，每名僱員完成受訓的平均時數。	Talent Development, Key Statistics 人才發展、主要數據	

ESG Aspects ESG層面	Description 描述	Relevant Chapter(s) of the Report and/or Other Explanation(s) 報告章節及／或其他說明
Aspect B4: Labour Standards 層面B4：勞工準則		
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour. 有關防止童工或強制勞工的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	Talent Development, Appendix V – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Environment 人才發展、附錄V – 對光大環境有重大影響的相關法律及規例的遵守情況
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour. 描述檢討招聘慣例的措施以避免童工及強制勞工。	Talent Development 人才發展 The Group regularly reviews its employment practice to ensure compliance with applicable laws and regulations in preventing child and forced labour. 本集團定期檢討其招聘措施以確保遵守適用於有關避免童工及強制勞工的法律及規例。
KPI B4.2	Description of steps taken to eliminate such practices when discovered. 描述在發現違規情況時消除有關情況所採取的步驟。	The Group has zero tolerance towards such practice. Violations are subject to internal disciplinary actions or handled by relevant authorities. 本集團並不容忍此違規情況。如有發現，將進行內部處分或送官究治。
Operating Practices 運營慣例		
Aspect B5: Supply Chain Management 層面B5：供應鏈管理		
General Disclosure 一般披露	Policies on managing environmental and social risks of the supply chain. 管理供應鏈的環境及社會風險政策。	Sustainable Operations Management 可持續的運營管理
KPI B5.1	Number of suppliers by geographical region. 按地區劃分的供應商數目。	Sustainable Operations Management 可持續的運營管理
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored. 描述有關聘用供應商的慣例，向其執行有關慣例的供應商數目，以及相關執行及監察方法。	Sustainable Operations Management 可持續的運營管理
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored. 描述有關識別供應鏈每個環節的環境及社會風險的慣例，以及相關執行及監察方法。	Sustainable Operations Management 可持續的運營管理
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored. 描述在揀選供應商時促使多用環保產品及服務的慣例，以及相關執行及監察方法。	Sustainable Operations Management 可持續的運營管理
Aspect B6: Product Responsibility 層面B6：產品責任		
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. 有關所提供產品和服務的健康與安全、廣告、標籤及隱私事宜以及補救方法的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	Sustainable Operations Management, Environmental Protection, Appendix V – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Environment 可持續的運營管理、環境保護、附錄VI – 對光大環境有重大影響的相關法律及規例的遵守情況 The Group has not identified material concerns in its operations regarding advertising and labelling matters, thus dedicated policies are not in place. 本集團並未發現運營中有關廣告及標籤事宜的重大問題，故此，本集團並無相關專門政策。 There are no laws and regulations that have a significant impact on the Group regarding advertising and labelling matters relating to products and services provided by the Group. 本集團並無有關廣告及標籤事宜的相關法律及規例對其構成重大影響。

Appendix IV – Stock Exchange ESG Reporting Guide Content Index
附錄IV – 聯交所《環境、社會及管治報告指引》內容索引

ESG Aspects ESG層面	Description 描述	Relevant Chapter(s) of the Report and/or Other Explanation(s) 報告章節及／或其他說明
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons. 已售或已運送產品總數中因安全與健康理由而須回收百分比。	The Group had no products recalled for safety and health reasons in 2024. 本集團於二零二四年沒有因安全與健康理由而須回收產品。
KPI B6.2	Number of products and service related complaints received and how they are dealt with. 接獲關於產品及服務的投訴數目以及應對方法。	Community Care 社區關懷
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights. 描述與維護及保障知識產權有關的慣例。	Sustainable Operations Management 可持續的運營管理
KPI B6.4	Description of quality assurance process and recall procedures. 描述質量檢定過程及產品回收程序。	Sustainable Operations Management, Environmental Protection 可持續的運營管理、環境保護 The majority of the Group's business is integrated environmental solutions and there are no specific product quality assurance process and recall procedures applicable. 本集團的主要業務為綜合環境解決方案，並無適用的特定產品質量保證程序和召回程序。
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored. 描述消費者資料保障及隱私政策，以及相關執行及監察方法。	Sustainable Operations Management 可持續的運營管理
Aspect B7: Anti-corruption 層面B7：反貪污		
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering. 有關防止賄賂、勒索、欺詐及洗黑錢的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	Sustainable Operations Management, Appendix V – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Environment 可持續的運營管理、附錄V—對光大環境有重大影響的相關法律及規例的遵守情況 No royalty payment was made to any governments in 2024. 本集團於二零二四年沒有向任何政府支付任何特許權費用。
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the Reporting Period and the outcomes of the cases. 於匯報期內對發行人或其僱員提出並已審結的貪污訴訟案件的數目及訴訟結果。	In 2024, there was no confirmed case of non-compliance in relation to corrupt practices that would have a significant impact on the Group. 二零二四年並沒有任何與反貪污相關並對本集團有重大影響的已確認違規事件。
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored. 描述防範措施及舉報程序，以及相關執行及監察方法。	Sustainable Operations Management 可持續的運營管理
KPI B7.3	Description of anti-corruption training provided to directors and staff. 描述向董事及員工提供的反貪污培訓。	Sustainable Operations Management 可持續的運營管理
Community 社區		
Aspect B8: Community Investment 層面B8：社區投資		
General Disclosure 一般披露	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests. 有關以社區參與來了解運營所在社區需要和確保其業務活動會考慮社區利益的政策。	Community Care 社區關懷
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport). 專注貢獻範疇（如教育、環境事宜、勞工需求、健康、文化、體育）。	Community Care 社區關懷
KPI B8.2	Resources contributed (e.g. money or time) to the focus area. 在專注範疇所動用資源（如金錢或時間）。	Community Care, Key Statistics, Appendix II – Main Corporate Memberships 社區關懷、主要數據、附錄II—主要企業會籍

Appendix V - Compliance with Relevant Laws and Regulations that have a Significant Impact on Everbright Environment 附錄V — 對光大環境有重大影響的相關法律及規例的遵守情況

Stock Exchange ESG Reporting Guide Subject Area

聯交所《環境、社會及管治報告指引》 範疇

Aspect A1: Emissions

層面A1：排放物

In order to protect and improve the environment, prevent pollution and other public hazards, safeguard public health, promote the development of ecological civilisation, and promote sustainable economic and social development, the PRC has enacted a vast number of laws and regulations to protect environmental resources. Key laws and regulations applicable to the Group's business include the *Environmental Protection Law of the PRC*, *Law of the PRC on Environmental Impact Assessment*, *Water Pollution Prevention and Control Law of the PRC*, *the Marine Environment Protection Law of the PRC*, *Law of the PRC on Prevention and Control of Noise Pollution*, *Atmospheric Pollution Prevention and Control Law of the PRC*, *Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste*, *Wetlands Conservation Law of the PRC*, *Yangtze River Protection Law of the PRC*, *Yellow River Protection Law of the PRC*, *Provisions on the Compensation for Ecological and Environmental Damage*, *Regulation on Ecological Protection Compensation*, *Measures for the Disclosure of Environmental Information by Enterprises*, *Measures for the Administration of Permit for Operation of Dangerous Wastes*, *Measures for the Administration of the Transfer of Dangerous Wastes*, *Regulation on Medical Wastes Management*, *Measures for the Administration of Environmental Surveillance*, *Measures for the Administration of Automatic Monitoring of Pollution Sources*, *Measures for the Administration of the List of Key Units of Environmental Supervision*, *Regulation on the Administration of Permitting of Pollutant Discharges*, *Administrative Measures for Permitting of Pollutant Discharges*, *Administrative Measures for Urban Household Waste*, *Provisions on the Administration of Urban Construction Waste and Regulation on Urban Drainage and Sewage Treatment*, *Regulation on Water Conservation and Measures for Ecological Environmental Administrative Penalty*. These laws and regulations provide clear requirements on air and GHG emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. The Group understands the importance of complying with these statutory obligations as violation of any applicable environmental laws and regulations may result in penalties, suspension of operation, and/or legal action against the Group imposed by regulatory authorities.

為保護和改善環境，防治污染和其他公害，保障公眾健康，推進生態文明建設，促進經濟和社會的可持續發展，中國制定實施了大量環境資源保護的法律及法規。適用於本集團的主要法律及規例包括《中華人民共和國環境保護法》、《中華人民共和國環境影響評價法》、《中華人民共和國水污染防治法》、《中華人民共和國海洋環境保護法》、《中華人民共和國噪聲污染防治法》、《中華人民共和國大氣污染防治法》、《中華人民共和國固體廢物污染環境防治法》、《中華人民共和國濕地保護法》、《中華人民共和國長江保護法》、《中華人民共和國黃河保護法》、《生態環境損害賠償管理規定》、《生態保護補償條例》、《企業環境信息依法披露管理辦法》、《危險廢物經營許可證管理辦法》、《危險廢物轉移管理辦法》、《醫療廢物管理條例》、《環境監測管理辦法》、《污染源自動監控管理辦法》、《環境監管重點單位名錄管理辦法》、《排污許可管理條例》、《排污許可管理辦法》、《城市生活垃圾管理辦法》、《城市建築垃圾管理規定》、《城市排水與污水處理條例》、《節約用水條例》及《生態環境行政處罰辦法》。該等法律及規例對廢氣及溫室氣體排放、向水及土地的排污以及有害及無害廢棄物的產生等方面提供了明確要求。本集團深明履行該等法定義務的重要性，因為違反任何適用的環境法律和法規均可能會導致監管機構對本集團作出罰款、勒令停運及／或採取法律行動。

In 2024, there was no confirmed case of non-compliance in relation to environmental protection that would have a significant impact on the Group. Please refer to the "Environmental Protection" chapter of the Report on how Everbright Environment ensures compliance with applicable environmental laws and regulations.

二零二四年並無任何與環境保護相關並對本集團有重大影響的已確認違規事件。如欲了解更多光大環境遵守相關環境法律法規的情況，請參閱本報告的「環境保護」一章。

Aspect B1: Employment

The *Labour Law of the PRC*, *Labour Contract Law of the PRC*, *Labour Union Law of the PRC*, *Regulation on the Implementation of the Labour Contract Law of the PRC*, *Regulation on Unemployment Insurance*, *Regulation on Work-Related Injury Insurance*, *Regulation on Paid Annual Leave for Employees*, *Regulation on Labour Security Supervision*, *Special Provision on Labour Protection of Female Employees* and the *Employment Ordinance* of Hong Kong stipulate the legal obligations and responsibilities of employers to provide employment protection and benefits covering compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. The *Social Insurance Law of the PRC* is formulated for the purpose of regulating sickness insurance, occupational injury insurance, maternity insurance, medical insurance, retirement insurance and death insurance, and also clarifies the legal liabilities of the employers. The *Regulation on the Management of Housing Provident Fund of the PRC* is formulated for the purpose of maintaining the lawful rights and interests of housing provident fund owners. These laws and regulations provide relevant protection for the Group's employees and safeguard their lawful rights. The Group will continue to comply with all relevant employment laws and regulations to protect the Group's most valuable asset – employees.

In 2024, there was no confirmed case of non-compliance in relation to the Group's employment practices that would have a significant impact on the Group. Please refer to the "Talent Development" chapter of the Report on how Everbright Environment ensures compliance with applicable employment laws and regulations.

層面B1：僱傭

《中華人民共和國勞動法》、《中華人民共和國勞動合同法》、《中華人民共和國工會法》、《中華人民共和國勞動合同法實施條例》、《失業保險條例》、《工傷保險條例》、《職工帶薪年休假條例》、《勞動保障監察條例》、《女職工勞動保護特別規定》及香港《僱傭條例》提供了全面的僱傭保障和福利，涵蓋對賠償及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇及福利方面的要求，明確了僱主的法定義務和責任。《中華人民共和國社會保險法》規定了疾病、工傷、生育、醫療、退休及死亡保險，並釐清了僱主的相關法律責任。《住房公積金管理條例》則維護了住房公積金所有者的合法權益。以上法律和規例為本集團的員工提供相關保障，保護員工的合法權利。本集團將繼續遵守所有相關的僱傭法律法和規例，保障本集團最寶貴的財富——員工。

二零二四年並無任何與僱傭相關並對本集團有重大影響的已確認違規事件。如欲了解更多光大環境遵守相關僱傭法律法規的情況，請參閱本報告的「人才發展」一章。

Aspect B2: Health and Safety

The *Labour Law of the PRC*, *Work Safety Law of the PRC*, *Law of the PRC on the Prevention and Treatment of Occupational Diseases*, the *Criminal Law of the PRC*, *Provisions on Fine Penalties for Work Safety Accidents* and *Provisions on the Administration of Occupational Health at Workplaces* commit to the protection of occupational safety and health and industrial safety, and require production and business units and employers to provide a safe working environment and protect employees from occupational hazards. The *Social Insurance Law of the PRC* is formulated for the purpose of regulating sickness insurance, occupational injury insurance, maternity insurance, medical insurance, retirement insurance and death insurance, and also clarifies the legal liabilities of the employers. Compliance with these laws and regulations is paramount as workplace safety is of critical importance to each and every employee of the Group. As a socially responsible enterprise, the Group complies with relevant health and safety laws and regulations to provide employees with a safe workplace and suitable insurance.

In 2024, there was no confirmed case of non-compliance in relation to health and safety that would have a significant impact on the Group. Please refer to the “Safety Culture” chapter of the Report on how Everbright Environment ensures compliance with applicable laws and regulations relating to health and safety.

Aspect B4: Labour Standards

The *Labour Law of the PRC*, *Provisions on the Prohibition of Using Child Labour* and the *Employment Ordinance* of Hong Kong set out clear rules for preventing child labour and forced labour and elaborate on the legal liabilities of employers who violate the relevant laws and regulations. Everbright Environment highly values human rights and aims to demonstrate its “People-Oriented” corporate spirit through compliance with the relevant labour standards.

In 2024, there was no confirmed case of non-compliance in relation to labour standards that would have a significant impact on the Group. Please refer to the “Talent Development” chapter of the Report on how Everbright Environment ensures compliance with applicable laws and regulations relating to labour standards.

層面B2：健康與安全

《中華人民共和國勞動法》、《中華人民共和國安全生產法》、《中華人民共和國職業病防治法》、《中華人民共和國刑法》、《生產安全事故罰款處罰規定》及《工作場所職業衛生管理規定》旨在維護勞動安全健康及工業安全，要求生產經營單位及僱主提供安全工作環境及保障僱員避免職業性危害。《中華人民共和國社會保險法》則規定了疾病、工傷、生育、醫療、退休及死亡保險，並釐清了僱主的相關法律責任。遵守這些法律法規是本集團的首要任務，因為工作場所的安全對本集團每一位員工都十分重要。為員工提供安全工作環境及合適保險是本集團作為良心企業的實踐，本集團會嚴守相關健康與安全法律和規例。

二零二四年並無任何與健康與安全相關並對本集團有重大影響的已確認違規事件。如欲了解更多光大環境遵守相關健康與安全法律法規的情況，請參閱本報告的「安全文化」一章。

層面B4：勞工準則

《中華人民共和國勞動法》、《禁止使用童工規定》及香港《僱傭條例》對防止童工或強制勞動列有明確規定，並詳細地闡述違反相關法律及規例的僱主的法律責任。光大環境高度重視人權，透過遵守相關勞工準則，充分反映其「以人為本」的企業精神。

二零二四年並無任何與勞工準則相關並對本集團有重大影響的已確認違規事件。如欲了解更多光大環境遵守相關勞工準則法律法規的情況，請參閱本報告的「人才發展」一章。

Aspect B6: Product Responsibility

Relevant laws and regulations applicable to the Group mainly include the *Civil Code of the PRC* (Tort Liability Book), *Patent Law of the PRC*, *Criminal Law of the PRC*, *Product Quality Law of the PRC*, *Environmental Protection Law of the PRC*, *Atmospheric Pollution Prevention and Control Law of the PRC*, *Water Pollution Prevention and Control Law of the PRC*, *Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste* and the *Administrative Penalty Law of the PRC*. These laws and regulations provide clear requirements on health and safety, and remedial methods relating to products and services provided. It is the Group's core value to abide by these rules in providing safe and reliable products and services.

In 2024, there was no confirmed case of non-compliance in relation to product responsibility that would have a significant impact on the Group. Please refer to the "Sustainable Operations Management" and "Environmental Protection" chapters of the Report on how Everbright Environment ensures compliance with applicable laws and regulations relating to product responsibility.

Aspect B7: Anti-Corruption

The *Anti-Unfair Competition Law of the PRC*, *Criminal Law of the PRC*, *Anti-Money Laundering Law of the PRC*, and the *Prevention of Bribery Ordinance* of Hong Kong set out clear rules on preventing bribery, extortion, fraud and money laundering. These laws and regulations aim to maintain social integrity and fairness, prevent unfair competition, and protect the legal rights of service providers and customers. The Group firmly believes that misconduct such as corruption has significant negative impact to the business development. Therefore, the Group strictly complies with relevant anticorruption laws and regulations to maintain a good reputation and enhance its competitiveness.

It is the Group's policy to avoid making any kind of political contribution. In 2024, the Group did not make payment to any lobbying, interest representation, or political campaigns or organisations.

In 2024, there was no confirmed case of non-compliance in relation to anti-corruption practices (including any form of facilitating payment) that would have a significant impact on the Group. Please refer to the "Sustainable Operations Management" chapter of the Report on how Everbright Environment ensures compliance with applicable laws and regulations relating to anti-corruption practices.

層面B6：產品責任

與本集團相關的法律法規主要包括《中華人民共和國民法典》（侵權責任編）、《中華人民共和國專利法》、《中華人民共和國刑法》、《中華人民共和國產品質量法》、《中華人民共和國環境保護法》、《中華人民共和國大氣污染防治法》、《中華人民共和國水污染防治法》、《中華人民共和國固體廢物污染環境防治法》及《中華人民共和國行政處罰法》。該等法律及規例對產品和服務的健康與安全、以及補救方法提供了明確的要求。在符合這些規則的前提下提供安全可靠的產品和服務是本集團的核心價值。

二零二四年並無任何與產品責任相關並對本集團有重大影響的已確認違規事件。如欲了解更多光大環境確保遵守相關產品責任法律法規的情況，請參閱本報告的「可持續的運營管理」及「環境保護」章節。

層面B7：反貪污

《中華人民共和國反不正當競爭法》、《中華人民共和國刑法》、《中華人民共和國反洗錢法》及香港《防止賄賂條例》對防止賄賂、勒索、欺詐及洗黑錢行為提供了明確的規定，旨在維護社會廉潔公平，制止不正當競爭行為，保護服務提供者 and 消費者的合法權益。本集團深信貪污等不當行為對業務發展百害而無一利，因此嚴格遵循相關的反貪污法律法規，致力維持本集團良好的聲譽及提升競爭力。

本集團政策是避免作出任何形式的政治捐款。在二零二四年，本集團沒有向任何遊說、利益代表和政治活動或組織支付款項。

二零二四年並無任何與反貪污相關（包括支付任何形式的通行費）並對本集團有重大影響的已確認違規事件。如欲了解更多光大環境確保遵守相關反貪污法律法規的情況，請參閱本報告的「可持續的運營管理」一章。

CHINA EVERBRIGHT ENVIRONMENT GROUP LIMITED
中國光大環境(集團)有限公司

Stock Code 股份代號: 257

2024

SUSTAINABILITY REPORT
可持續發展報告



www.cebenvironment.com