

CHINA EVERBRIGHT WATER LIMITED中國光大水務有限公司

(Incorporated in Bermuda with limited liability) (於百慕達註冊成立之有限公司)

(STOCK CODES 股份代號: U9E.SG & 1857.HK)

2023 Sustainability Report 可持續發展報告





CREATING

BETTER INVESTMENT VALUE

UNDERTAKING

GREATER SOCIAL RESPONSIBILITY

創 造 更好投資價值

承擔更多社會責任

Chairman's Statement 董事長致辭



n 2023, the external environment remained complex and challenging while the pressure of climate change around the world intensified. Under these difficult circumstances, the People's Republic of China ("China" or the "PRC") steadily pushed for a high-quality development, continuing to serve as a significant driver for global economic growth while also assuming an increasingly vital role in addressing climate change. With a focus on the environment, China also highlighted and promoted its strategic goals such as the construction of ecological civilisation, as well as "Peaking Carbon Dioxide Emissions" and "Achieving Carbon Neutrality" ("Dual Carbons"), motivating the local environmental protection industry to continue on the path of high-quality development and industry-wide upgrading.

零二三年,外部環境持續複雜嚴 峻,全球面臨的氣候變化壓力持續 加大。在如此複雜的形勢下,中華 人民共和國(以下簡稱「中國」)穩步推進高質 量發展,不僅持續擔當全球經濟增長重要引 擎,更在應對氣候變化等領域發揮著愈加 要的角色。聚焦環境領域,中國亦持續強 要的角色。聚焦環境領域,中國亦持續強 和推進生態文明建設、「碳達峰、碳中和」(簡 稱「雙碳」)目標等相關戰略部署,推動國內環 保行業繼續沿著高質量發展路徑,探索產業 升級之路。

Chairman's Statement 董事長致辭

Although 2023 was regarded by various industries and businesses as a "difficult" and "challenging" year, China Everbright Water Limited ("Everbright Water" or the "Company", together with its subsidiaries, the "Group") remained committed to its corporate mission of "Devoted to Ecology and Environment for Building a Beautiful China". Amid these circumstances, it steadily pursued a sustainable development model that aligned with its unique characteristics and met its needs in relation to "water-related" areas. It also pragmatically implemented the various aspects of its operations, maintaining a good development trajectory, achieving growth while preserving stability.

Outside the Group, the Group remained devoted to the development of its core business, forging forward against the negative trends. It actively pursued breakthroughs, achieving notable progress and results in areas such as business strategy development and strengthening market opportunities, thus creating more possibilities for its development. Both the volume and value of contract for the Group's asset-light businesses reached record highs, signifying initial success in its transformation from being capital-driven to capability-driven. The Group continued to enhance its advantages in traditional businesses, while proactively promoting the business model of "focusing on both asset-light and asset-heavy businesses". It expanded into the utilisation of livestock and poultry manure resource and achieved major breakthroughs in the application of different business models such as the asset-light model of design, procurement, construction and operation ("EPCO"). Furthermore, the Group has expanded its business to the Guangdong market and further enriched its "water-related" business pipeline. Additionally, the Group, grounded in its main responsibilities and core businesses, has embraced the responsibilities of a corporate citizen. The Group has committed to safeguarding water environment safety and public health through providing quality environmental protection services. Additionally, it has regularly organised various environmental protection welfare activities to integrate such awareness into local communities and advocate green and low-carbon concepts, thereby collaboratively building a beautiful homeland for mankind.

儘管二零二三年各行各業談及最多的主題是「不易」與「挑戰」,中國光大水務有限公司(「光大水務」或「本公司」,連同其附屬公司合稱「本集團」)在這樣的形勢之下,堅持「情系生態環境,築夢美麗中國」企業使命,圍繞「泛水」領域,紮實探索符合自身特點和需求的可持續發展模式,務實推進各項工作落地實施,保持了穩中向好、穩中有進的發展態勢。

在外,本集團聚焦主業,逆勢發力,積極突 破,在市場營銷策略、強化市場機遇等方 面取得良好進展和成果,為發展創造更多 可能。輕資產業務的合同數量與金額創下 歷史新高一資本輸出轉向能力輸出轉型初 見成效,「輕重並舉」業務發展模式積極推 進;傳統業務優勢持續加強,並於畜禽糞污 資源化利用領域拓展、設計-採購-建設-運營 (「EPCO」) 輕資產業務模式應用等方面取 得重要突破一打開廣東市場,進一步豐富本 集團的「泛水」業務佈局。此外,本集團立足 主責主業,肩負企業公民之責,不僅堅持以 優質環保服務保障各地水環境安全與居民健 康,亦持續通過開展形式多樣的環保科普公 益活動,深度融入各地社區,宣導綠色低碳 理念,共建人類美麗家園。

Chairman's Statement 董事長致辭

Within the Group, the Group boldly and proactively tackled oncoming challenges, prioritised refining management practices, tapped on potential to increase efficiency, as well as diversified income streams and reduced expenditure, thus improving its operating performance and laying a robust foundation for its ongoing development. The Group successfully implemented and trialed an intelligent water management platform, and initiated the construction and assessment of intelligent water plants, thus steadfastly championing digital transformation. It also made steady progress on its "in-plant solar energy" project, which generated over 10 million kWh of green electricity in 2023, enhancing the project's eco-friendly momentum. The Group made thorough and comprehensive efforts to recover all forms of receivables through pooling its resources and employing various strategies, achieving positive progress. It advocated and implemented the "Triple Three" as part of its safety and environment leadership system¹, maintaining a commitment to the highest standards of quality development.

對內,本集團勇於擔當,積極作為,攻堅難點,以精細化管理為抓手,挖潛增效、開源節流,促進經營效益全面提升,為發展奠定更牢基礎。完成智慧水務管理平台的搭建和試運行,啟動智慧水廠建設和評級工作,紮實推進數字化轉型;「廠內光伏」項目持續推進,並於二零二三年提供綠色電力逾1,000萬千瓦時,為項目增添更多綠色動能;集思,整益、多措並舉,全力清收各類應收賬款,整體進展良好;提出並踐行「三個三」安全與環境領導力體系1,守住高質量發展的底線和紅線。

Note:

The "Triple Three" leadership system for safety and environmental management includes three "Knows", three "Understands" and three "Efforts". Among them, the three "Knows" refer to knowing the individual responsibilities, corporate risks, and channels and measures relating to safety and environmental management; the three "Understands" refer to understanding harmfulness of relevant accidents and incidents, the dynamic nature of such risks, and the exemplary role of safety and environmental management; and the three "Efforts" refer to making effort to enhance the recognition and participation of safety and environmental management practices, to improve intrinsic safety and environmental management level, and to improve response capabilities under relevant emergency situations.

附註:

(i) 「三個三」安環領導力體系包含:統籌組織協調、三個「知道」、三個「明白」以及三個「用力」。其中,三個「知道」要求:知道自身安全與環境(「安環」)職責有哪些、知道公司安環風險有哪些、知道確保安環的途徑與措施;三個「明白」要求:明白事故事件的危害性、明白風險隱患的動態性、明白自身表率的重要性;三個「用力」要求:用力提升公司本質安環水平,用力提升公司安環應急突發處理能力。

Chairman's Statement 董事長致辭

Looking ahead to 2024, the external environment is anticipated to be even more complex, challenging, and uncertain. However, the fundamental trajectory of China's long-term economic growth remains steady, as it continues to uphold its commitment to the development strategy of constructing an ecological civilisation, while promoting a transformation into a green and low-carbon economy and society, as well as mandating that the environmental protection industry to enhance overall quality and efficiency. Despite the uncertainties lying ahead, the future is still rife with opportunities as the Company continues to forge ahead. Everbright Water will carefully analyse the situation to deploy its resources and make strategic plans and arrangements accordingly. With regard to strategic planning, the Company will focus on "water-related" areas, expanding its business scope, strengthening its core competencies and enhancing the operational level of its core business. In terms of operations management, the Company will improve its various systems and mechanisms, spur on internal driving forces, strengthen value creation and promote high-quality development through an elevated level of governance. As for team development, the Company will develop a team with committed, united and disciplined talents, generating strong synergies to pursue high-quality and sustainable development. The Company will further blend wisdom and strength, maintaining confidence and putting in hard work to open up new horizons for its highquality development. Through enhancing economic, social and environmental management efficiency, the Group will continue to foster a win-win situation, contributing to the construction of ecological civilisation and promoting a green and low-carbon development, not only within China, but also across the globe.

展望二零二四年,外部環境的複雜性、嚴峻 性與不確定性將持續上升。但中國經濟長期 向好的基本趨勢沒有改變,持續加強生態文 明建設的發展方略堅定不變,經濟社會綠色 低碳轉型、環保行業全面提質增效的要求保 持不變。面對機遇與挑戰交織的未來,光大 水務將認真研判形勢、統籌兼顧、謀劃部署: 戰略部署方面,圍繞「泛水」領域,豐富業務 內涵,增強核心競爭力,提升特色經營水平; 經營管理方面,完善各項體制機制,激發內 生動力,強化價值創造,以更高的管治水平 促進高質量發展;隊伍建設方面,打造一隻 有擔當、重團結、講規矩的人才隊伍、凝聚高 質量與可持續發展的強大合力。本集團將進 一步凝聚智慧和力量,堅定信心,拼搏奮鬥, 全力開創高質量發展新局面,持續促進經 濟、社會與環境效益共同提升的共贏局面, 助力中國乃至全球的生態文明建設與綠色低 碳發展進程。

MR. LUAN ZUSHENG

Non-Executive Director and Chairman

2 April 2024

欒祖盛先生

非執行董事兼董事長

二零二四年四月二日

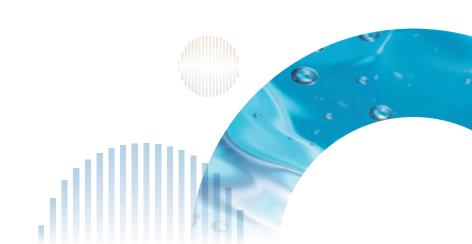


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ooking back on 2023, the global macro-environment has intensified. Amidst the tense and complicated global state of affairs, compounded by the domestic triple pressure from shrinking demand, supply shocks and weakening market expectations, China has navigated through the challenges, steadily developing its blueprint for China's modernisation. In the meantime, China has held steadfast to its commitments by continuously promoting its "Dual Carbons" goals and proactively commencing its green and low-carbon development with high quality. Simultaneously, China's environmental protection industry has gone through an indepth reform and embarked on a new journey of industrial upgrading.

進一步加劇。面對複雜緊張的國際 局勢,加以國內需求收縮、供給衝擊和市場預期減弱的三重壓力,中國成功應 對各類挑戰,穩健地發展中國現代化的宏偉 藍圖。與此同時,中國堅定遵守「雙碳」目標, 並積極開展高質量的綠色低碳發展。此外, 中國的環保產業經過深度整改,已踏上產業 升級的新征程。

顧二零二三年,全球宏觀環境形勢

Promoting Strategic Goals of "Dual Carbons"

"Carbon Emissions Reduction" is one of the most important missions raised in combatting pollution and climate change during the "14th Five-Year Plan" period. The Group actively pursues green and low-carbon models in sustainable development by working towards the "Dual Carbons" goals, and strives to take the lead in providing "service-oriented products" in the water environment management industry.

推動「雙碳」戰略目標

「碳減排」是「十四五」規劃期間應對污染和氣候變化最重要的任務之一。光大水務積極跟隨「雙碳」戰略目標,打造企業綠色低碳的可持續發展模式,並致力於成為水環境治理行業中「服務型產品」的引領者。

In the past year, the Group has taken the lead in promoting the digitalisation of project operation, and improving its greenhouse gases information disclosure framework, with an aim to further track and evaluate carbon footprints. These are steps taken towards identifying strategies to reduce carbon footprints and formulating solutions to enhance carbon management. The Group also focuses on the synergies of reducing pollution and carbon emissions, mainly in, but not limited to three aspects, quality and efficiency improvement, green facility development, and energy self-sufficiency. It also actively explores high-efficiency technologies and energy recovery processes for waste water treatment, such as the "in-plant solar energy" pilot project and the energy saving and consumption reduction in waste water treatment plants, so as to amplify the economic and environmental benefits of the project. In addition, the Group has formulated the Guidelines for Everbright Water's Low-Carbon Waste Water Treatment Plants and created "Low-Carbon Demonstration Projects" that integrate several carbon reduction and resource recovery measures. These efforts are made to promote green and lowcarbon development of the industry, and contribute to the Group's wisdom and capabilities with the aim of achieving the "Dual Carbons" goals.

回首過去一年,本集團積極推動旗下各項目的運營數字化轉型,改進溫室氣體信息披露的框架,以進一步追蹤和評估企業的碳等理方案等。本集團亦關注減碳戰略碳的完整。本集團亦關注減污降碳效益最大個方面。為使項目的說點項目和污水處理廠內的試點項目和污水處理廠內所與大水務低碳污水處理廠內定數,本集團遭到別人水大水務低碳污水處理廠工作指式的「能降耗管理工作。除此之外,本集團還制定,以代大水務低碳污水處理廠工作指式的「能降耗管理工作。除此之外,本集團還制定,以代表數與資源化方式的管理工作。除此之外,本集團還制定,以代表數與資源化方式的行業重推廣集合多種減碳與資源化方式的行業重推廣集合多種減碳與資源化方式的行業重推廣集合多種減碳與資源化方式的行業重推廣集合多種減碳與資源化方式的行業

Advancing Value Creation for the Water Industry Chain

During the period from 1 January 2023 to 31 December 2023 (the "Reporting Period"), while focusing on water industry as its core business, the Group deployed its resources across a "water-related" industry chain, and promoted the values of innovation and creativity.

With regards to business deployment, the Group took the initiative to break the boundaries of divisions and departments, and successively established several flexible industrial research teams. Through extensive research, new ideas and models were inspired, new technologies and processes were introduced and, multiple in-depth research reports were written, thereby leading to multiple collaboration opportunities. Simultaneously, with its advantages in the traditional water business such as waste water treatment at its core, the Group has expanded further and widened its scope with regards to the "water-related" business, promoting the value restructuring of the water industry chain.

推動「泛水」產業鏈價值創造

於二零二三年一月一日至二零二三年十二月 三十一日期間(「**報告期**」),本集團持續以水 為業務核心,聚焦「泛水」產業鏈佈局,推動 產業鏈的價值創新創造。

在業務部署方面,本集團主動打破部門和團隊的邊界,相繼建立了數個產業研究柔性團隊,通過廣泛研究啟發新思路與新模式,引進新技術與新工藝,撰寫多份深入的調研報告,從而達成多個合作意向。同時,本集團基於污水處理等傳統業務的優勢,進一步深入「泛水」行業並推廣業務範圍,促進了水產業鏈的價值重構。

Thanks to this, the Group has secured a number of new industrial waste water treatment projects during the Reporting Period, demonstrating the validity of its industrial research direction and effectiveness of its investments. In addition, the Group will continue to explore and investigate in research areas such as the national rural revitalisation strategy. It will closely monitor high-quality business opportunities, which will help to further enrich its future business model, and improve the water industry chain.

受益於此,本集團在報告期內新簽訂了多個 工業廢水處理項目,進一步證明了在產業研究方向的正確性與投資的效益。此外,本集 團將圍繞國家鄉村振興戰略等領域繼續拓 展研究領域,密切關注優質業務機會,助力 進一步豐富企業業態,完善「泛水」產業鏈佈 局。

Promoting Ecological Civilisation

During the Reporting Period, the Group continued to sharpen its efforts to enhance its stability of operations and energy conservation, ensuring the orderly and safe progress of project construction. It has also steadily expanded its high-quality water project pipelines, implemented high-quality development direction, and continued to solidify its market position. Leveraging its robust business strength, the Group promotes the sustainable development of the water environment in various regions, and assists in promoting the country's ecological development.

As of 31 December 2023, the Group has invested in and held 166 environmental protection projects, undertook 5 engineering, procurement and construction ("**EPC**") projects and 5 operation and management ("**O&M**") projects, with a total designed daily water treatment capacity of 7,468,100 m³.

Emphasising on Talent Development

With its "People-Oriented" management philosophy, the Group regards talent cultivation as one of the key driving forces for its business development. Therefore, it attaches great importance to the career planning of employees and their personal development needs, providing them with a path to advance their professional skills and a platform to realise their self-worth.

助力生態文明建設

報告期內,本集團進一步深化在增強項目穩定運營、節能增效方面的努力,確保項目工程有序安全地進行。與此同時,本集團穩步拓展優質水務項目,落實高質量發展思路,不斷鞏固市場地位。憑藉穩健的業務實力,本集團推動各地水環境的可持續發展,助力促進國家生態發展。

截至二零二三年十二月三十一日,本集團 投資並持有166個環保項目,承包5個工程總 包(「**EPC**」)與5個委託運營(「**委託運營**」)項 目,設計日水處理總規模達到7,468,100立 方米。

重視人才培養

秉持「以人為本」的管理理念,本集團視人才培養為公司發展的核心驅動力之一。因此,本集團高度重視員工的職業生涯規劃與個人發展需求,為員工提供增強專業技能的渠道以及實現自我價值的平台。

The Group strives to create a fair and high-quality working environment by improving the systems of recruitment and selection, training and assessment, performance evaluation, reward appraisal and promotion. During the Reporting Period, the Group has increased investment in training resources, and established a human resources management information system and a personnel quality evaluation model to further enhance its talent development, transforming its talent development strategy into specific measures that every employee can participate in.

本集團通過改善招聘選拔、培訓測試、績效評估、獎懲制度和晉升的體系,全方面打造一個公平優質的工作環境。在報告期內,本集團加大人才培訓的投入,建立人力資源信息系統與人員素質評價模型,將人才發展戰略落實到每位員工可參與其中的具體措施。

Fostering Technology Research and Development ("R&D") and Innovation

The Group adheres to the ethos of "Innovation-Driven Development", which encourages the R&D team to accelerate the development and deployment of new technologies and emphasises the practical application of these new technologies and innovations to real-world challenges, thus enhancing the Group's core technological competitiveness and creativity.

During the Reporting Period, the Group leveraged its technological advantages and vast experiences in water environment management, waste water and sludge treatment, and continued to expand its service capabilities across the entire industry chain, from early project design to final project operation and management. The Group has also improved existing technologies, pursuing a higher level of pollutant removal efficiency and environmental management. The Group has constructed a fully underground intelligent waste water treatment plant which only require minimal amount of operational manpower. The plant is integrated with the aboveground ecological park, which not only conserves precious land resources, but also serves as a citizens' recreational area. At the same time, in order to further upgrade the automation level of waste water treatment plants and strive for carbon emission reduction, the Group has strengthened its information technology and promoted the "Intelligent Water" information management system, to accurately control the operation and electricity consumption of waste water treatment plants.

促進科技研發與創新

本集團堅持「創新驅動發展」的理念,鼓勵研發團隊加快新技術的開發與部署,並強調新技術新創意的實際運用,從而提升本集團的核心科技競爭力與創造力。

Promoting Environmental Education

The Group is committed to its mission of environmental education, and actively supports relevant government initiatives by transforming its water treatment projects into public environmental education bases, which integrate physical visits, practical learning, and skills training. In addition to on-site visits, the Group also provides various environmental education in hybrid, online and offline forms, which help to expand the public's knowledge of environmental protection and water conservation. During the Reporting Period, Everbright Water (Ji'nan) Limited was successfully selected into the Ministry of Ecology and Environment's "Excellent Case Collection of Development of Environmental Protection Facilities to the Public", the Zhenjiang Sponge City Construction Public-Private Partnership ("PPP") Project ("Zhenjiang Sponge City Project") was selected as a Green Development Service Demonstration Case at the 2023 China International Fair for Trade in Services, while Everbright Water (Xianyang) Limited was awarded "Ideological and Political Education Coordinated Practical Education and Teaching Hub". In addition, the Group has been cooperating with various environmental protection organisations, technology associations and government departments to launch environmental protection education and publicity activities, including events such as "World Water Day", "China Water Week" and "World Earth Day".

開展環保宣傳與教育

本集團致力於環保教育使命,積極響應政府 號召,將旗下水務業務打造為集參觀、實踐 學習和技能培訓為一體的環保教育基地,面 向公眾開放。除了實地參觀,本集團也提供 線上線下相結合的環境教育模式,有助於提 升大眾對環保和水資源保護的認知。報告期 間內,光大水務(濟南)有限公司成功入選 生態環境部《環保設施向公眾開發優秀案例 集》、鎮江海綿城市建設政府和社會資本合作 (「PPP」)項目(「鎮江海綿城市項目」)獲選為 「二零二三年中國國際服務貿易交易會綠色 發展服務示範案例1、光大水務(咸陽)有限公 司榮獲「大思政課」共建實踐教育教學基地」 等稱號。除此之外,本集團持續與各類環保 機構、科技協會和政府部門開展合作,積極 投身於環保教育和宣傳工作,舉辦了「世界 水日」、「中國水週」和「世界地球日」等專題活



Summing Up

The Group continuously aligns its mission of environmental education with both global and national efforts to combat climate change and promote ecological development. In order to drive the sustainable development of its business to a new level, the Group shall continue to seize business opportunities arising from relevant policies, enhance its level of intelligence and digitalisation, and continue to advance its technological innovation and research.

TAO JUNJIE

Executive Director and Chief Executive Officer

2 April 2024

結語

本集團將不斷推進環境教育,與國際和國家層面應對氣候變化的目標保持一致。為促使業務的可持續發展更上一層樓,本集團將進一步把握政策發展帶來的商業機遇,提升智能化和數字化水平,並不斷推動技術創新和研究。

陶俊杰

執行董事兼總裁

二零二四年四月二日

Board Oversight of Environmental, Social and Governance ("ESG") and Climate Change Issues 董事會對環境、社會及管治 (「ESG」) 及氣候變化事宜的監督

In line with its long-term belief in sustainability, the board of directors of Everbright Water (the "Board", and each member, a "Director") is responsible for (i) formulating the Group's policies, strategies and objectives relating to ESG, climate change and responsible investment; (ii) overseeing the performance and effectiveness of the Group's ESG, climate change and responsible investment; and (iii) identifying and evaluating climate change-related issues and material ESG factors and their prioritisation in relation to the Group's business and/or other key stakeholders. The Board is also responsible for reviewing the Group's Sustainability Report.

秉持長期的可持續發展理念,光大水務的董事會(「**董事會」**,其中每位簡稱「**董事」**)的責任包括(i)制定本集團ESG、氣候變化和負責任投資相關的政策、戰略以及目標;(ii)監督本集團踐行ESG、氣候變化和負責任投資相關的表現與績效;以及(iii)識別並評估本集團業務及/或其他重要持份者的氣候變化相關重大議題和重要ESG因素及其優次排列。董事會亦同時負責審閱本集團的可持續發展報告。

The Board has reviewed the material ESG factors, and will manage and monitor these issues and take them into consideration in determining the Group's business directions and strategies. The Group will actively undertake social responsibility in pursuing a better water environment.

董事會已審閱重要ESG因素,並將管理和監督這些議題,將它們納入本集團經營方針和戰略的考量範圍之內。本集團將積極承擔社會責任,創造更優質的水環境。

Introduction

verbright Water is an environmental protection company focusing on water environment management. It is listed on the Mainboard of the Singapore Exchange Securities Trading Limited ("SGX" or "SGX-ST") and the Main Board of the Stock Exchange of Hong Kong Limited ("SEHK") (stock codes: U9E.SG and 1857.HK), with China Everbright Environment Group Limited (stock code: 257.HK, "Everbright Environment") as the controlling shareholder.

Everbright Water is committed to creating value through its various water-related businesses. At present, it has achieved a full-fledged business coverage in the water industry, which includes areas such as raw water protection, water supply, municipal waste water treatment, industrial waste water treatment, reusable water, river-basin ecological restoration, leachate treatment, and sludge treatment and disposal. Meanwhile, the Group has also established an extensive presence along the water related industry chain, covering project investment, planning and design, technological R&D, engineering and construction, operations management, etc. In addition, based on China's "Dual Carbons" strategic goals, Everbright Water proactively explores a path for pollution and carbon reduction, laying a solid foundation for achieving carbon neutrality in waste water treatment in the future. Furthermore, while actively focusing on "Intelligent Water", Everbright Water is fully utilising its years of industry experience to integrate intelligent transformation into business practices, complementing smart city development and promoting sustainability in China's water industry.

報告簡介

大水務是一家專注於水環境綜合治理的環保企業,為新加坡證券交易所有限公司(「新交所」)及香港聯合交易所有限公司(「聯交所」)主板上市公司(股份代號:U9E.SG及1857.HK),控股股東為中國光大環境(集團)有限公司(股份代號:257.HK,「光大環境」)。

光大水務致力於打造以水為源的產業價值創造,目前已實現原水保護、供水、市政污水處理、工業廢水處理、中水回用、流域生態治理、滲濾液處理及污泥處理處置等全業務範圍覆蓋。同時,本集團全面佈局水務行業結園產業鏈,精專於項目投資、規劃設計、科技研發、工程建設、運營管理等業務領域。和發、工程建設、運營管理等業務領域。所圍繞中國「雙碳」戰略目標,光大水務積極探索減污降碳的路徑,為未來實現污水務積極以「智慧水務」為重點,運用其多年的行業極以「智慧水務」為重點,運用其多年的行業經驗,將智能化轉型與業務實踐結合,以可持續發展。



The Sustainability Report 2023 (this "Report") covers the Group's main sustainable development initiatives and performance during the Reporting Period. This Report was prepared in accordance with Rule 13.91 and Appendix C2 (formerly known as Appendix 27) Environmental, Social and Governance Reporting Guide of the Rules Governing the Listing of Securities on the SEHK, the Listing Manual of SGX (Rules 711A, 711B and Practice Note 7.6 Sustainability Reporting Guide), as well as the GRI Sustainability Reporting Standards (1) (the "GRI Standards"). The GRI Standards is a globally recognised sustainability reporting standard framework for companies to disclose non-financial information, and is one of the sustainability reporting frameworks recognised by SGX and SEHK. This Report comprehensively covers material issues in line with most of its industry peers in China (including Hong Kong), Singapore and other countries around the world. In addition, Everbright Water follows the corporate mission of "Devoted to Ecology and Environment for a Beautiful China", by integrating the United Nations Sustainable Development Goals ("SDGs") into its environmental and social management strategies, and promoting global environmental protection and ecological civilisation development. In response to future climate risks and opportunities, Everbright Water follows the Recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD Recommendations") in disclosing its carbon emissions, climate management strategy, and identification and assessment of climate-related risks, etc., thereby enhancing the Group's ESG disclosure.

二零二三年可持續發展報告(「本報告」)涵 蓋了本集團於報告期內的主要可持續發展 策略和表現。其內容依循聯交所證券上市規 則第13.91條及附錄C2(前稱附錄二十七)所 載的《環境、社會及管治報告指引》、新交所 上市手冊(第711A條、第711B條和第7.6項應 用指引《可持續發展報告指引》),以及《GRI 可持續發展報告準則》(「GRI準則」)所編 寫。GRI準則是全球廣泛應用的可持續發展 報告標準,旨在協助企業披露非財務資訊, 並且為新交所和聯交所所認可的可持續發 展披露標準之一。本報告務求全面涵蓋實質 性議題,並與中國(含香港)、新加坡、及全 球其他國家的大部份同行企業保持一致。此 外,光大水務秉承「情繫生態環境,築夢美麗 中國」的企業使命,將聯合國可持續發展目標 (「SDGs」)全面融入到其環境及社會管治 戰略當中,推動全球環境保護和生態文明建 設。為應對本集團未來面臨的氣候變化風險 和機遇,光大水務根據《氣候相關財務揭露 建議》(「TCFD建議」),公開本集團的碳排 放量、氣候相關管理戰略、及氣候風險的辨 別和評估等信息,務求進一步加強本集團的 ESG披露。



The data and information disclosed in this Report are based on the materiality assessment, stakeholder engagement and relevant sustainability reporting guidelines and standards as mentioned above. This Report covers the sustainability performance of the Group's Shenzhen, Hong Kong and Singapore corporate offices, projects under construction (2) and operating projects that are under operational control of the Group during the Reporting Period (3),(4). During the Reporting Period, the issues that stakeholders were concerned about were similar to those of the previous year, and the reporting scope of this Report has not changed significantly from the previous year's report. The details of the Group's relevant entities can be found in Notes to the Financial Statements as included in the Company's annual report for the Reporting Period (the "Annual Report 2023").

本報告所披露的數據及信息是基於實質性評估、持份者參與和上文所述有關的可持續發展報告指引及準則釐訂。本報告涵蓋了本集團在報告期內於深圳、香港和新加坡企業鄉公室以及本集團擁有運營控制權的在建學與運營項目的可持續發展表現^{(3),(4)}。於報告期內,持份者關注的議題與上一年相若,本變。告期的匯報範圍較上一年報告並無重大改變。本集團的相關實體資料可參閱本公司關於報告期的年度報告(「二零二三年度報告」)中的財務報表附註。

To ensure that the calculations of greenhouse gas emissions and avoidance are as accurate as possible, they are carried out in accordance with relevant international standards and adopt localised emission factors where applicable. This entails the use of calculation methodologies approved by the Clean Development Mechanism ("CDM"), the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2019 Revision) from the Intergovernmental Panel on Climate Change ("IPCC"), and specification to ISO 14064-1:2018 Greenhouse Gases – Part 1: Specification with Guidance at the Organization Level for Quantification and Reporting of Greenhouse Gas Emissions and Removals ("ISO 14064-1"). All data included in this Report has been rounded⁽⁵⁾ except for integers and data disclosed in the Annual Report 2023.

為確保溫室氣體排放量的計算盡可能準確,本集團的計算依循相關國際標準,並在可應用的情況下採用本地化的排放因子。這包括使用清潔發展機制(「CDM」)核准、政府間氣候變化專門委員會(「IPCC」)《2006年IPCC國家溫室氣體清單指南2019年修訂版》核准的計算方法,以及ISO 14064-1:2018《溫室氣體一第一部分:組織層級溫室氣體排放和清除的量化和報告指南》(「ISO 14064-1」)之規範。除了整數數據及二零二三年度報告已公佈的數據外,本報告所載的所有數據均已作捨入調整(6)。

The Group commissioned the Hong Kong Quality Assurance Agency as the third-party verification institution to conduct an independent audit and verification on the content and data of this Report, as well as to perform an ISO 14064-1 verification. The corresponding verification statements are appended to the end of this Report. The Board has reviewed and approved the content and scope of this Report, and has considered sustainable development issues as part of its strategy formulation, identified material ESG issues, and overseen the management and monitoring of these issues.

本集團已委託香港品質保證局作為第三方核證審核機構,為本報告的內容及數據進行獨立審核及認證,並進行ISO 14064-1標準驗證。其相關審核聲明已附載於本報告末。董事會已審閱及批准本報告的內容及範圍,並已將可持續發展議題視為戰略制定的一部分,確定了重大ESG議題,並對該等議題的管理和監測進行了監督。

Reporting Principles

This Report is based on seven reporting principles: Materiality, Quantification, Balance, Consistency, Stakeholder Inclusiveness, Sustainability Context and Integrity:

報告原則

本報告以實質性、量化、平衡、一致性、持份者包容性、可持續的脈絡及完整性這七項匯報原則為編製基礎:



Materiality 實質性

The Group regularly conducts materiality assessments to identify material ESG factors which the Group and its stakeholders are concerned with, and ensures that these factors and related metrics are disclosed in this Report.

本集團定期進行實質性評估,以識別本集團及其持份者所關注 的重大ESG因素,並確保於本報告中披露該等因素及相關指標。



Quantification 量化

The Group attempts to present quantitative information with explanations where necessary. 本集團致力展示量化的資訊並在有需要時提供說明。



Balance 平衡

The Group presents the positive and negative impacts of its business in a transparent manner.

本集團以透明方式呈列其業務所帶來的正面及負面影響。



Consistency 一致性

This Report has been drafted in a manner as consistent as possible with previous years, to allow readers to make meaningful comparisons of the Group's ESG performance.

本報告盡可能採用與以往年一致的方式編製,讓讀者能對本集團 的ESG表現進行有意義的對比。



Stakeholder Inclusiveness 持份者包容性

The Group engages with a wide range of stakeholders, which include investors/shareholders, government, clients, business partners/suppliers, employees, local communities, non-governmental organisations ("NGOS"), investment analysts and media

本集團與持份者廣泛接觸,包括投資者/股東、政府、客戶、業務 夥伴/供應商、員工、當地社區、非政府組織、投資分析員及媒 體。



Sustainability Context 可持續的脈絡

The key sustainability factors of this Report not only include material ESG factors, but also sustainable development goals and climate-related financial risks.

本報告關鍵的可持續性因素除了有重大ESG因素,還有可持續發展目標和氣候相關的財務風險。



Integrity 完整性

The Group consistently incorporates material ESG factors, issue boundaries, relevant significant impacts and stakeholder views into this Report, and adheres to the above reporting principles to ensure complete disclosure.

本集團連貫地將重大ESG因素、議題邊界、相關顯著影響和持份者 意見融入本報告,並謹遵上列的報告原則以確保披露完整。

Accessibility of this Report

This Report is available in both Chinese and English languages and has been uploaded onto the SGXNet (www.sgx.com), the websites of the Hong Kong Exchanges and Clearing Limited (www.hkexnews.hk) and Everbright Water (www.ebwater.com). If there is any inconsistency or discrepancy between the Chinese and English versions, the English version shall prevail. In the event of any inconsistency or discrepancy between this Report and the Annual Report 2023, the Annual Report 2023 shall prevail unless otherwise stated.

本報告獲取

本報告備有中英文版本,並已上載至SGXNet (WWW.sgx.com)、香港交易及結算所有限公司網站(Www.hkexnews.hk)及光大水務網站(Www.ebwater.com)。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,若本報告和二零二三年度報告有任何抵觸或不相符之處,應以二零二三年度報告為準。

Contact Us

The Group welcomes all stakeholders and the public to share their valuable comments and suggestions on this Report's contents and reporting approach, and the Group's sustainability performance. Please email us at info@ebwater.com.

Notes:

- (1) GRI refers to the Global Reporting Initiative.
- For projects under construction, this Report only discloses environmental data on the consumption of fuels, electricity and water, and associated greenhouse gas ("GHG") emissions.
- Data of contractors and/or subcontractors are not disclosed in this Report, except for the fuel consumption of projects under construction or other data as specified.
- Over 99% of the Group's projects are located in China, hence this Report features the environmental and social performance of the projects located in China only. The environmental data of Qingdao Waste Water Treatment Project (Haibohe Plant) and the 5 projects under the EPC model, including electricity consumption, water consumption, etc., are owned by off-takers and are not accessible by Everbright Water. Therefore, their environmental performance is not covered in this Report.
- Due to rounding, the numbers in the tables of this Report may not sum up equally to the total.

Reporting Scope

The Group hires an external independent sustainability consultant every year to conduct a comprehensive materiality assessment. This helps the Group in identifying the economic, environmental and social issues that matter most to the Group and its stakeholders. The Group then prioritises and includes these material ESG factors in this Report to ensure alignment with its sustainable development efforts.

聯絡我們

本集團歡迎各持份者及公眾就本報告內容、報告方式和發展方面的表現分享寶貴意見及建議。請發送電郵至*info@ebwater.com*。

附註:

- (1) GRI是指全球報告倡議組織。
- (2) 有關在建項目,本報告僅披露其燃料、電力 及水消耗量以及相關的溫室氣體排放的環境 數據。
- (3) 除了有關在建項目的燃料消耗量或其他另有 註明的數據外,承包商及/或分包商的數據 不會於本報告中披露。
- (4) 本集團超過99%的項目位於中國,因此本報 告僅披露位於中國項目的環境及社會表現。 青島污水處理項目(海泊河廠)及以EPC模式 承接的5個項目的環境數據(包括電力消耗量 及水消耗量等)由承購方擁有,光大水務無權 存取。因此,本報告不會涵蓋這些項目的環 境表現。
- 由於四捨五入的關係,本報告表格所載的數值加起來可能不等於總和。

報告範圍

本集團每年均會從外部委聘獨立的可持續發展顧問以進行一次全面的實質性評估。這有助本集團識別對本集團及其持份者最為重要的經濟、環境和社會議題。本集團會對這些重要ESG因素的優次進行排序並納入本報告中,以確保本集團的可持續發展工作與之保持一致。



Communicate with Stakeholders

Stakeholder engagement is a key component of the Group's sustainable development strategy, as it helps the Group to identify and prioritise current and emerging risks and opportunities in the market. Through various stakeholder engagement channels, the Group seeks to understand their needs and expectations, thereby strengthening mutual trust. The stakeholder engagement exercise forms an integral part of the Group's development of corporate strategies.

As a leading enterprise in water environment management, Everbright Water's business is closely connected with a wide range of stakeholders, including investors/shareholders, government, clients, business partners/suppliers, employees, local communities, NGOs, investment analysts and the media. These stakeholders are identified based on the following five principles:

與持份者溝通

持份者的參與是本集團制定可持續發展策略 過程中的關鍵,有助本集團識別市場中現有 及新興的風險與機遇,並為其作優先排序。 透過不同的溝通渠道,本集團設法理解持份 者的需求和期望,從而加強相互信任。持份 者的參與是本集團制定企業戰略上不可或缺 的一部分。

作為水環境治理的領先企業,光大水務的 業務與廣大的持份者包括投資者/股東、 政府、客戶、業務夥伴/供應商、員工、當地 社區、非政府組織、投資分析員及媒體緊密 相連。這些持份者的識別是基於以下五個原 則:

Responsibility	Influential Power	Proximity	Dependency	Representativeness
責任	影響力	鄰近性	倚靠性	代表性
Stakeholders connected to the Group through legal, inancial, operational procedures, contracts and/or policies	Stakeholders with formal decision-making power or informal influence on the Group 對本集團具有正式決策權力或非正式影響力的持份者	Stakeholders who live near the Group's projects or whom the Group interacts closely with 居於本集團運營項目附近或與本集團日常運作關係密切的持份者	Stakeholders who are highly dependent on the Group's business operations 在很大程度上依靠本集團業務運營的 持份者	Stakeholders who are representing the sectors which 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

The Group regularly invites stakeholders to share their opinions on the Group's management and performance of its projects throughout their life cycle, so as to better understand the sustainability-related priorities and concerns. Thereafter, the Group formulates effective action plans and carries out improvement measures to meet stakeholders' expectations and improve its environmental protection performance.

在各項目的生命週期中,本集團定期邀請持份者就其項目管理和表現發表意見,藉此進一步了解與可持續發展相關的優次和關注事項。其後,本集團制定行之有效的行動計劃,並執行改進措施,從而達到持份者的期望,改善環保表現。

The following are the main channels and frequencies through which the Group communicates with its stakeholders:

以下表列出本集團與其持份者溝通的主要渠 道及其頻率:



Investors/Shareholders 投資者/股東

Annual/special general meeting 股東週年/特別大會

Annually/as needed 每年/根據需要

Press release/announcement/circular

新聞稿/公告/通函

Regularly/as needed 定期/根據需要

Results presentation 業績發佈

Semi-annually 每半年

Interim/annual report 中期/年度報告

Annually 每年

Roadshow 路演

Regularly/as needed 定期/根據需要

Meeting/telephone conference

會議/電話會談

Regularly/as needed/upon request 定期/根據需要/根據請求



Government 政府

Progress report 進度報告

Weekly/monthly/quarterly 每週/月/季度

Site visit 現場考察

Weekly/monthly/quarterly 每週/月/季度

Meeting 會議

Weekly/monthly/quarterly 每週/月/季度

WeChat and QQ 微信及QQ

As needed 根據需要

Phone/email 電話/電郵聯繫

Weekly/monthly/quarterly 每週/月/季度

Survey on client satisfaction 客戶滿意度調查

Annually每年



Clients 客戶

Meeting 會議

As needed 根據需要

Phone/email 電話/電郵聯繫

Weekly/monthly/quarterly 每週/月/季度

Survey on client satisfaction 客戶滿意度調查

Annually 每年



Pre-tender meeting 採購招標會

Every tender event 每次招標活動

Phone interview 電話回訪

As needed 根據需要

Questionnaire 意見調查

Ad hoc 不定期

WeChat and QQ 微信及QQ

As needed 根據需要



Employees 員工

Working meeting/thematic meeting

工作會議/專題會議

Regularly 定期

Performance assessment meeting 表現評估會議

Interim/year-end年中/年末

Internal publication 內部刊物

Bi-monthly 每兩個月

Charitable activity 公益活動

As needed 根據需要

Face-to-face meeting/ telephone conference 當面會談/電話會談

As needed/upon request 根據需要/根據請求

Email 電郵聯繋

Regularly/as needed 定期/根據需要



Local Communities 當地社區

Project visit/site visit 項目參觀/現場考察

Before construction/
public 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
請求

Survey 意見調查

Before construction/as needed工程施工前/根據需要

Public hearing 公聽會

Before construction/as needed 工程施工前/根據需要

Charitable activity 公益活動

As needed 根據需要



Charitable activity 公益活動

As needed 根據需要

Site visit 現場考察

Regularly/as needed 定期/根據需要

Meeting 會議

As needed 根據需要



Investment Analysts 投資分析員

Project visit/site visit 項目參觀/現場考察

As needed/upon request 根據需要/根據請求

Meeting 會議

Semi-annually/as needed 每半年/根據需要

Press release/announcement 新聞稿/公告

Regularly/as needed 定期/根據需要

Results presentation 業績發佈會

Semi-annually 每半年

Interim/annual report 中期/年度報告

Annually每年



Media 媒體

Project visit/site visit 項目參觀/現場考察

As needed/upon request 根據需要/根據請求

Press release/announcement 新聞稿/公告

Regularly/as needed 定期/根據需要

Management interview 管理層採訪

Regularly/as needed/upon request 定期/根據需要/根據請求

Results presentation 業績發佈會

Semi-annually 每半年

Materiality Assessment

The materiality assessment was conducted in four stages for this Report as follows:

Stage 1: Identification of Sustainability Issues

Everbright Water engaged an external independent sustainability consultant to identify and review more than 30 sustainability issues that were most relevant to the Group (please refer to the "**List of Sustainability Issues**"). These issues were identified through a wide range of sources, including the GRI Standards, SDGs, stakeholder engagement, suggestions from the Board and senior management, media search and analysis, etc. so as to ensure that the issues identified were fully aligned with the business characteristics of the Group and correlate to the findings of previous stakeholder engagement exercises.

實質性評估

本報告的實質性評估由以下四個階段組成:

第一階段:識別可持續發展議題

光大水務委聘了一家獨立的可持續發展顧問以全面識別及檢視超過30項與本集團業務最密切的可持續發展議題(請參考「可持續發展議題列表」)。這些議題乃透過廣泛來源所得,包括GRI準則、SDGS、持份者參與、董事會及高級管理層建議、媒體搜索及分析等,以確保已識別的議題符合本集團的業務性質,並與以往持份者參與活動的調研結果相關聯。



可持續發展議題列表





GRI 3-2

List of Sustainability Issues

omic Environ 濟 環

- Economic Performance 經濟績效
- Market Presence 市場地位
- Indirect Economic Impacts 間接經濟影響
- Procurement Practices 採購行為
- Anti-Corruption 反貪腐
- Anti-Competitive Behaviour 反競爭行為
- Technological R&D 技術研發

- 環境
- Materials Usage 物料使用
- Energy Efficiency 能源效益
- Usage of Water Resources 水資源使用
- Waste Water Treatment 污水處理
- Waste Management 廢物管理
- Biodiversity 生物多樣性
- Supplier Environmental Assessment 供應商環境評估
- Construction Management 在建項目施工管理
- Environmental Protection Education 環保教育

Social 社會

- Employee Welfare 員工福利
- Occupational Health and Safety 職業健康與安全
- Employee Training 員工培訓
- Diversity and Equal Opportunity
 多元化及平等機會
- Internal Communication 內部溝通
- Child Labour and Forced Labour 童工與強制勞工
- Rights of Indigenous Peoples 原住民權利
- Protection of Human Rights and Freedoms 保障人權及自由
- Poverty Alleviation 扶貧
- Supplier Social Assessment 供應商社會評估
- Community Health and Safety 社區健康及安全

- Client Privacy 客戶私隱
- Disaster and Emergency Planning and Response 災難及應急預案規劃
- Community Participation 計區參與

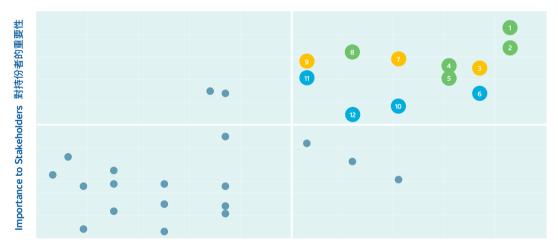
Stage 2: Collection of Stakeholders' Opinions and Establishment of Materiality Matrix

The independent sustainability consultant conducted a stakeholder engagement survey to obtain opinions from the nine key stakeholder groups, and prioritised the sustainable development issues identified in Stage 1 based on the survey results. The consultant then conducted a quantitative analysis to develop a materiality matrix based on the two parameters: perceived importance to stakeholders and significance to Everbright Water's sustainable development. This Report focuses on disclosing the top 12 issues as material ESG factors that are most relevant to the stakeholders and the Group. The Group's materiality assessment results are depicted in the matrix below.

第二階段:收集持份者意見,繪製實質性 矩陣

獨立可持續發展顧問對九個重點持份者組別進行持份者參與調查,並為已在第一階段識別出的可持續發展議題按照調查結果作優先排序。顧問隨後利用持份者對議題的重視程度和議題對光大水務可持續發展的重要性兩個參數,對這些議題的實質性作量化分析,並製定出實質性矩陣。本報告著重於披露排名前十二項議題,並視之為對本集團及其持份者最為相關的重要ESG因素。本集團的實質性評估結果如以下矩陣圖所示。

Materiality Matrix 實質性矩陣



Importance to Everbright Water 對光大水務的重要性

Stage 3: Verification of Material ESG Factors and Data Analysis

The Board verified the material ESG factors and their boundaries to ensure the reasonableness, balance and completeness of this Report. Subsequently, the independent sustainability consultant converted the material ESG factors into the corresponding GRI Standards for reporting. The Group's Operations and Information Management Department adopts a systematic data collection and monitoring mechanism to ensure that all project companies provide reliable and comprehensive sustainability data on a regular basis.

第三階段:驗證重要ESG因素及數據分析

董事會對重要ESG因素及其邊界進行驗證, 以確保本報告的合理性、平衡性及完整性。 隨後,獨立可持續發展顧問將重要ESG因素 轉換為相應的GRI準則,以便報告之用。本集 團運營與信息化管理部透過系統性的數據收 集和監測機制,確保所有項目公司定期提供 可靠及全面的可持續發展數據。

Not Applicable 不適用

GRI 404 Training and Education 訓練與教育

GRI 408 Child Labor 童工 GRI 409 Forced or Compulsory Labor 強迫或強制勞動

About This Report 關於本報告

The material ESG factors covered in this Report, their impacts and boundaries, and their corresponding GRI Standards and SDGs are tabulated as follows:

Material ESG Factors/ Stakeholder Concerns 重大ESG因素/持份者的關注

10

Disaster and Emergency Planning and Response 災難及應急預案規劃

Employee Training 員工培訓

Child Labour and Forced Labour 童工與強制勞工

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本報告涵蓋的重要ESG因素、其影響及範圍、 及其相應的GRI準則及SDGs表列如下:

o are tabarated ac	, 10110110						0	GRI 2-29		GRI 3-1	GRI 3-2
rial ESG Factors/ sholder Concerns SG因素/持份者的關注				Impa	act and Bound 影響及範圍	dary				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	Employees 員工	Government 政府	Local Communities 當地社區	Clients 客戶	Business Partners/ Suppliers 業務夥伴/ 供應商	Investment Analysts 投資分析員	Media 媒體	NGOs 非政府組織		
Usage of Water Resources 水資源使用	8	\otimes	\otimes	\otimes		\otimes	\otimes		\otimes	GRI 303 Water and Effluents 水資源與污水	6 state surreys 14 erce success TO SECOND STATE STAT
Waste Water Treatment 污水處理	8	\otimes	\otimes	\otimes	\otimes	\otimes		\otimes	\otimes	GRI 303 Water and Effluents 水資源與污水	6 MANUAL 14 ELECTRADS
Economic Performance 經濟績效		\otimes	\otimes	\otimes	⊗	\otimes		8	\otimes	GRI 201 Economic Performance 經濟績效	8 MONTH STREET,
Energy Efficiency 能源效益	\otimes	\otimes	\otimes		\otimes	\otimes				GRI 302 Energy 能源	12 HANGEL COGNITION AND PROJECTION
GHG Management and Climate Change Mitigation 溫室氣體管理及氣候變化的應對	8	\otimes	\otimes	\otimes	\otimes	\otimes	\otimes	\otimes	\otimes	GRI 305 Emissions 排放	13 dans
Occupational Health and Safety 職業健康與安全	\otimes	\otimes	\otimes			\otimes		⊗		GRI 403 Occupational Health and Safety 職業安全衛生	3 ACC NUMBER OF THE PROPERTY O
Anti-Competitive Behaviour 反競爭行為	\otimes		\otimes		⊗					GRI 206 Anti-competitive Behavior 反競爭行為	17 /Managers (10 to local)
Waste Management 廢物管理	\otimes	\otimes	\otimes	\otimes	\otimes	\otimes		\otimes	\otimes	GRI 306 Waste 廢棄物	15 orten
Anti-Corruption 反貪腐	\otimes	\otimes	\otimes	\otimes	\otimes			\otimes	\otimes	GRI 205 Anti-corruption 反貪腐	16 rose serve serv

Stage 4: Materiality Review

Prior to the preparation of this Report, the Group reviewed the material ESG factors of previous reports, and collected stakeholders' opinions on Everbright Water's sustainability performance during the Reporting Period through stakeholder surveys. All opinions and data collected were reported to the Board, and the Board reviewed and verified them for materiality. The materiality review fostered stakeholders' participation in the sustainable development management and disclosure process, which is essential to the Group in its journey towards its long-term sustainable development goals.

第四階段:檢視實質性

在準備本報告之前,本集團檢視了過往報告中的重要ESG因素,並通過意見調查收集了持份者對光大水務於報告期內可持續發展表現的意見。所有意見及數據均已向董事會匯報,並由董事會檢視及核實其實質性。檢視實質性有助提高持份者在可持續發展的管理和披露過程中的參與度,同時對本集團實踐長遠的可持續發展目標來說是不可缺少的。





Government

政府

"Everbright Water actively engages with the government to guarantee smooth and compliant operations, and is constantly seeking new opportunities for collaboration. We see Everbright Water as a valuable partner in providing public services." 「光大水務積極與政府合作,確保運營順暢合規,同時不斷尋求合作的新機會。我們視光大水務為提供公共服務上的重要合作夥伴。」



Local Communities

當地社區

"Everbright Water's operations provide clean water and create local employment opportunities, and is also committed to supporting local poverty alleviation and education."

「光大水務的業務為我們提供了清潔水源並創造本地就業機會,亦致力於支持本地的扶貧和教育工作。」



Investors

投資者 _

"Everbright Water's commitment to providing public services with high ESG standards makes it a profitable and valuable for long-term investment." 「光大水務致力於以高ESG標準提供公共服務,這使得它成為了可盈利和有長期投資價值的選擇。」



Environmental NGOs

非政府環保組織 』

"Everbright Water's involvement and support enhanced our ability to provide high quality environmental education to the general public."

「光大水務的參與及支援使我們能夠為公眾提供高質的環保教育。」



About Everbright Water 關於光大水務

verbright Water in an environmental protection enterprise focusing on water environment management. It is listed on the Mainboard of SGX and the Main Board of the SEHK (stock codes: U9E.SG & 1857.HK) with its controlling shareholder being Everbright Environment (stock code: 257.HK).



大小家,最是注境 大一家,環保的 一於新交所主板上市 (股份代號:U9E. SG和1857.HK),共 控股股東為光大 境(股份代號:257. HK)。



Business Overview

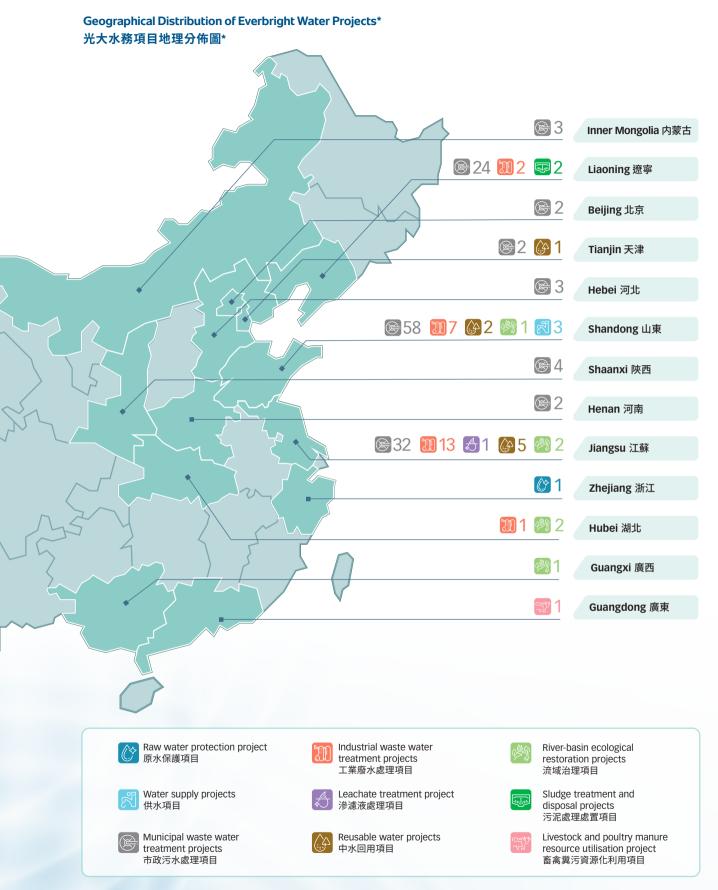
As a leading water environment management service provider in China, Everbright Water has established a comprehensive presence along the water industry supply chain, covering raw water protection and river-basin ecological restoration, municipal and industrial waste water treatment, reusable water, water supply, and sludge treatment and disposal. The Group has a diversified and extensive project pipeline in the water industry, which enables it to leverage its industrial expertise across different phases of a project, such as project investment, planning and design, technology R&D, engineering and construction, and operations management.

Everbright Water's geographical footprint spans across 13 provinces, municipalities and autonomous regions in China, namely Beijing, Tianjin, Hebei, Jiangsu, Zhejiang, Shandong, Shaanxi, Henan, Hubei, Liaoning, Guangdong, Guangxi Zhuang Autonomous Region and Inner Mongolia Autonomous Region, in addition to an overseas business presence in Mauritius.

業務概覽

作為中國領先的水環境綜合治理服務商,光大水務沿著水務行業供應鏈建立了全面的業務體系,包括原水保護和流域治理、市政和工業廢水處理、中水回用、供水以及污泥處理和處置。本集團在水務行業領域擁有多元化且廣泛的項目儲備,能夠在項目的不同階段充分發揮其產業專長,包括項目投資、規劃設計、技術研發、工程建設和運營管理等。

光大水務的業務分佈於中國的13個省市自治區,分別為北京、天津、河北、江蘇、浙江、山東、陝西、河南、湖北、遼寧、廣東、廣西壯族自治區和內蒙古自治區,海外業務佈局毛里求斯。



* Notes 附註:

As at 31 December 2023 截至二零二三年十二月三十一日

Total Designed Water Treatment Capacity 7,468,100

立方米/天

Project investment and asset-light projects and services

As at 31 December 2023, Everbright Water invested in and held a total of 166 environmental protection projects, with a total investment of approximately RMB30.780 billion. In addition, it undertook various asset-light projects and services, such as O&M, EPC, EPCO and equipment supply.

項目投資及輕資產項目與服務

截至二零二三年十二月三十一日,光大水 務投資並持有166個環保項目,涉及總投資 額約307.80億元人民幣;另承接委託運營、 EPC、EPCO及設備供貨等各類輕資產項目與 服務。



Notes 附註:

- Excluding EPC project(s)
 - 不含EPC項目
- (2) Including O&M project(s) 含委託運營項目
- (3) Including EPCO project(s) 含EPCO項目

About Everbright Water 關於光大水務

Intelligent Water

In recent years, Everbright Water has devoted itself to improving its information system, promoting the digitalisation of new urban water services, and has successfully implemented intelligent systems in its waste water treatment plants. The Group has published the *China Everbright Water Limited Intelligent Water Whitepaper* and implemented the *Standards for Everbright Water's Intelligent Waste Water Treatment Plants* to explore the application scenarios, technical options, and implementation approaches for "Intelligent Water", so as to further promote the technical development and enhance the project operations management among the Group and the industry as a whole.

智慧水務

近年來,光大水務致力於改善其信息系統,推廣數字化的新型城市水務服務,並於污水處理廠的智能化建設方面取得一定成效。本集團發布了《中國光大水務有限公司智慧水務白皮書》及實施了《光大水務智慧污水處理廠標準》,探討了「智慧水務」的應用場景、技術選擇和實施方法,以進一步促進本集團乃至行業的整體技術發展和賦能項目運營管理。

Business Highlights in 2023

As at 31 December 2023

二零二三年業務亮點 截至二零二三年十二月三十一日

 141 (1).(2)
 projects in operation 運營項目
 1 (1).(2)
 project completed construction 建成完工項目

 15
 projects under construction 在建項目
 9
 projects in preparatory stage 需建項目

- Revenue of approximately HK\$6.7 billion, with total assets of approximately HK\$34.22 billion
- Provided in-house developed technological processes to both internal and external clients, which amounted to a total contract value of approximately RMB192 million
- 28 patents granted (including 21 utility model patents,
 7 invention patents) and published 8 technical papers
- The Group's projects treated approximately 1.749 billion m³ of waste water, representing a reduction of 1% compared with 2022, and produced approximately 46 million m³ reusable water, representing an increase of 4% compared with 2022

- 收入約67億港元,總資產約342.2億港元
- 向內外部客戶提供各類自主創新技術 工藝包,涉及合同總金額約1.92億元 人民幣
- 獲得授權專利28項(包括實用新型專利21項、發明專利7項),發表技術論文 8篇
- 旗下各項目共處理污水約17.49億立方 米,較二零二二年減少1%,生產中水 約4,600萬立方米,較二零二二年增長 4%

Notes:

- Excluding EPC projects
- (2) Including O&M projects

- 附註:
- (1) 不含EPC項目
- ② 含委託運營項目

About Everbright Water 關於光大水務



During the Reporting Period, Everbright Water has invested in 6 new projects and signed a supplementary agreement for an existing project, with a total investment of approximately RMB1.213 billion, covering municipal waste water treatment, industrial waste water treatment, reusable water and livestock and poultry manure resource utilisation. Those newly-secured projects in aggregate have a daily waste water treatment capacity of 105,000 m³, and a daily reusable water supply capacity of 15,000 m³. In addition, it undertook various asset-light projects and services, involving a total contract value of approximately RMB 1.914 billion. Among them, the newly-undertaken O&M and EPCO projects contributed a designed daily waste water treatment capacity of 100,000 m³.

在報告期內,光大水務新投資了6個新項目並簽署1份現有項目的補充協議,涉及總投資額約12.13億元人民幣,涵蓋市政污水處理、工業廢水處理、中水回用和畜禽糞污資源化利用,新增設計規模為日處理污水105,000立方米、日供中水15,000立方米;另承接各類輕資產項目及服務,涉及合同總額約19.14億元人民幣;其中,新承接的委託運營及EPCO項目新增設計日處理污水規模100,000立方米。

Additionally, the securing of the Jiangsu Huai'an Lianshui Konggang Industrial Park Industrial Waste Water Treatment Plant Phase II EPCO Project, and the Jiangsu Jiangyin High-tech Zone Waste Water Treatment Plant Phase I Stage 1 EPCO Project, has further deepened the Group's practical experience in water environment management of industrial parks. The Group also established adaptive interdepartmental collaboration teams for implementing the Yixing Economic Development Zone Industrial Waste Water Treatment O&M Project and the Liaoning Anshan Municipal Sludge Disposal Project, which has demonstrated significant success in conducting relevant industrial research.

此外,公司更落實了江蘇淮安漣水縣空港產業園工業廢水處理廠二期EPCO項目和江蘇江陰高新區污水處理廠一期一階段EPCO項目,進一步深化了本集團在工業園區水環境管理方面的實踐經驗。本集團還成立了跨部門柔性團隊,實施了宜興經濟技術開發區工業廢水處理廠委託運營項目和遼寧鞍山市政污泥處置項目,取得了顯著的研究成果。

About Everbright Water 關於光大水務

The Group's Featured Environmental Protection Businesses本集團特色環保業務

Sponge City 海綿城市

The "Sponge City" is a novel concept in urban rainwater management, which enhances water infrastructure resilience against climate change by simulating the natural water cycle. Its key feature is the integrated flood control management based on six principles: infiltration, retention, storage, purification, reuse and discharge. The sponge city facilitates effective drainage and harvesting of rainwater, which resolves urban waterlogging issues and conserves water resources through restoring the natural water cycle in cities. Therefore, it alleviates the urban heat island effect, improves the quality of urban living, strengthens the urban ecosystem and promotes sustainable development.

「海綿城市」是城市雨洪管理中的一個新概念,通過模擬大自然水循環,增強水基礎設施對抗氣候變化的韌性。其主要特點是基於「滲、滯、蓄、淨、用、排」等六大原則的綜合防洪管理。通過恢復城市的大自然水循環來節約水資源,海綿城市有效促排水與雨水收集,從而解決內澇問題及保護水資源,同時緩解城市熱島效應,改善城市居住品質,增強城市生態系統,並推動可持續發展。

6 Main Functions of a Sponge City 海綿城市的六大水務功能

Water security construction 水安全建設

Water landscape planning 水景觀規劃

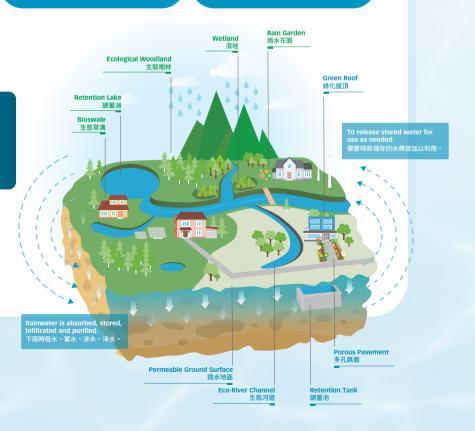
Water environment protection 水環境保護

Water ecological restoration 水生態恢復

Water culture inheritance 水文化傳承

Water economic development 水經濟發展

The concept of "Sponge City" 「海綿城市」概念圖



About Everbright Water 關於光大水務

Putting "Sponge City" Concept into Practice – Zhenjiang Sponge City Construction PPP Project 「海綿城市」概念實踐一鎮江海綿城市建設PPP項目



Zhenjiang Sponge City Project is the Group's key demonstration project to showcase the "Sponge City" concept. Located at the scenic belt of Jinshan Lake of Zhenjiang City, Jiangsu Province, the engineering design of Zhenjiang Sponge City Project emphasises the conservation and enhancement of the local ecosystem through measures such as natural embankments, gentle-sloped river banks, and vegetation-based landscaping. The ultimate goal is to create a scenic green corridor with a series of water retention tanks, rainwater pumping stations, rainwater pipeline networks and waste water treatment facilities, which will greatly improve Zhenjiang's ability in flood prevention and pollution reduction, and facilitate rainwater utilisation and ecological environment protection.

鎮江海綿城市項目為本集團旗下的「海綿城市」概念重點示範項目。鎮江海綿城市項目位於江蘇省鎮江市金山湖風光帶,工程設計重點強調通過自然駁岸、緩坡入水、植物造景等生態化手段,保育及美化當地生態環境,建設一條有機的風景綠廊。該項目建立了一系列調蓄池、雨水泵站、雨水管網和污水處理設施,將大幅提升鎮江市的內澇防治的能力並削減污染,促進雨水利用和生態環境保護。

The largest single sub-project under Zhenjiang Sponge City Project is the Waste Water Overflow Pollution Control Project along Jinshan Lake. This sub-project adopts the combined sewer overflow (CSO) management strategy, with a focus on the control of surface runoff and sewer overflow pollution. The construction mainly involves the installation of large-diameter pipelines at the bottom of Jinshan Lake to collect and convey rainwater to waste water treatment plants and wetlands for treatment. Through various measures, including water body transformation, river bank stabilisation, and wetland restoration, the project has played an important role in the infiltration, retention and purification of rainwater, which not only greatly improved the water quality in the city, but also beautified the landscape, making Zhenjiang a landmark sponge city that can store water and breathe.

鎮江海綿城市項目中的最大單體工程是沿金山湖合流污水溢流污染控制工程,該子項目採用合流制溢流污染綜合治理方案,針對控制地表徑流和溢流污染。工程主要在金山湖底部安裝大口徑管道,將雨水收集運送到污水處理廠和濕地處理。項目透過改造水體、整治岸坡、復原濕地等多項措施,發揮了滲透、儲蓄和淨化雨水的作用,大大改善城內水質和美化景觀,令鎮江成為能夠蓄水「呼吸」的標杆海綿城市。

About Everbright Water 關於光大水務

In addition, Zhenjiang Sponge City Project includes the Mengjiawan Wetland Park, which is a pilot model for building "Happy Lakes and Rivers" in Jingkou District. The park has accomplished a clear water quality and scenic environment by using treated rainwater and waste water to replenish the lake and the rivers downstream. This practice of water resource utilisation has received widespread recognition from various sectors in the society. The park is an ecological space that connects citizens with water, enhancing the city's ecology, the citizens' environmental protection awareness, and their quality of life. The park has become a green symbol of Jingkou District, attracting many tourists and photographers.

此外,鎮江海綿城市項目下的孟家灣濕地公園作為京口區「幸福河湖」建設試點,成效顯著,水質清澈、景觀優美。公園通過處理後的雨水和污水回補湖區和下游河道,在水資源利用方面的做法獲得社會各界多方肯定。作為市民的親水生態空間,這個項目不僅提高了城市的生態環境,也增強了市民的環保意識和生活品質。孟家灣濕地公園已經成為京口區的一張綠色名片,吸引了眾多遊客和攝影愛好者前來觀賞。

The Zhenjiang Sponge City Project was shortlisted in the Top 5 and received an Honourary Mention in the "Building Back Better Infrastructure Award" of the United Nations Economic Commission for Europe ("**UNECE**"). Additionally, it was regarded as one of the best "People-Oriented" PPP projects and presented at the 5th International PPP Forum of UNECE.

鎮江海綿城市項目在聯合國歐洲經濟委員會(「**聯合國歐經會**」)「更好重建」基礎設施獎項評選中躋身五強並榮獲「榮譽提名獎」,亦作為最佳「以人為本」PPP項目之一在聯合國歐經會第五屆國際PPP論壇上進行案例展示。

At the same time, Zhenjiang Sponge City Project has aligned with *the Urban Black and Odorous Water Bodies Management Measures of Jiangsu Province* to deeply integrate the black and odorous water body remediation systems into the sponge city design. The combined management approach is essential to the upgrading of the tributaries of Jinshan Lake within Zhenjiang City, with the goal of purifying the city's water resources.

與此同時,鎮江海綿城市項目亦配合《江蘇省城市黑臭水體整治行動方案》,將黑臭水體整治系統與海綿城市建設進行深度融合,對鎮江市內幾條流入金山湖的黑臭河流進行同步改造,淨化城市水資源。





About Everbright Water 關於光大水務

Project Goals 項目目標

Improve Water Quality 改善水質

Reduce 91% of pollutants (including ammonia, chemical oxygen demand ("COD"), & suspended solids, etc.) 削減91%的污染物 (包括氨氮、化學需氧量 (「COD」) 及懸浮物等)

Improve Drainage 加強排水能力

Prevent ponding under light rain and eliminate waterlogging during downpours 小雨不積水、大雨不內澇

Enhance Flood Prevention Capacity 提升防洪能力

Enable resilience against 1-in-30-year floods 可有效應對30年一遇洪水

Conservation & Revitalisation 活化保育

Enhance biodiversity and ecological value 增加生物多樣性和提升生態價值

Landscape Improvement 美化景觀

Transform Jinshan Lake into a new landmark in Zhenjiang with clearer water 更清澈的金山湖成為鎮江新地標

Underground Waste Water Treatment 地下污水處理

Waste water treatment plants tend to have negative perceived impacts on the surrounding land values and property prices, significantly affecting their development. In order to reduce the potential impacts on land development, many local governments are now more inclined to construct underground waste water treatment plants, despite its higher construction and operating costs. The Group is also actively keeping up with this trend in order to advocate and promote ecological conservation.

污水處理廠普遍會影響周邊土地和樓盤價格,對其開發有潛在的重大影響。現時有不少地方政府願意 支付較高的建設和運營開支,採用地下式污水處理廠設計,以減低對土地開發的影響。本集團亦積極 響應地下污水處理廠建設的趨勢,倡導和推廣生態保護。

One of the Group's prized underground projects is the Beijing Daxing Tiantanghe Waste Water Treatment Project ("**Tiantanghe Project**"), which is one of the Group's first semi-underground waste water treatment plants. It involves a total investment of approximately RMB338 million, a concession period of 29 years, and a designed daily waste water treatment capacity of 80,000 m³. It encompasses a land area of 50,420 m², which is covered with greenery aboveground, creating an eco-friendly environment for the neighbouring communities.

北京大興區天堂河污水處理項目(「**天堂河項目**」)為本集團旗下首個半地下污水處理廠之一,涉及總投資約3.38億元人民幣,特許經營期29年,設計日污水處理規模為80,000立方米。天堂河項目佔地50,420平方米,地表部分覆蓋有蔥蔥綠草,為周邊社區提供優良的生態環境。

About Everbright Water 關於光大水務

Tiantanghe Project's waste water treatment tanks are located underground, while the waste water treatment equipment is located aboveground, thereby striking a balance between a well-ventilated environment that enhances occupational health and safety and a vicinity that is less odorous. Furthermore, by relocating the waste water treatment tanks to the subsurface, the microbial water treatment process stabilises the temperature range that is less influenced by surface temperature fluctuations due to seasonal and diurnal cycles. This can result in lower energy consumption and carbon emissions for the equipment that is required to regulate the temperature within the optimal range for the microbial water treatment process.

天堂河項目的污水處理池體存放於地底,而污水處理設備則位於地表,從而實現了員工工作環境通風 與減少周邊氣味影響之間的平衡。此外,通過將污水處理池體移至地下,有助於穩定污水處理環節的 溫度範圍,令其更不易受季節和日夜變動所產生的表面溫度波動影響,從而減少為維持最佳污水處理 溫度所需的溫控設備能耗及相關碳排放。

Tiantanghe Project mainly treats domestic waste water in Daxing District. It utilises germicidal ultraviolet-C (UV-C) radiation and ozone (O₃) as alternative disinfectants to chlorination for inactivating microorganisms in waste water, which helps minimise the environmental impact of chlorine-based chemicals and their by-products. All of the water quality indicators of the treated effluent from this plant comply with the Grade B standard of *Beijing City Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant* (DB11/890-2012), which is the basic requirement for waste water plant effluent to be discharged into Class IV & V water bodies, and be suitable for general industrial water use and recreational water use without direct human contact.

天堂河項目主要處理大興新城片區生活污水,並採用殺菌紫外線(UV-C)與臭氧(O3)以取代含氯消毒劑,用以對排放污水中的微生物進行滅活。這有助於最大限度地降低氯基化學品及其副產品對環境的影響。該廠處理後出水水質執行《北京市城鎮污水處理廠水污染物排放標準》(DB11/890-2012)的B標準,可排入IV、V類水體,適用於一般工業用水及人體非直接接觸的娛樂用水。



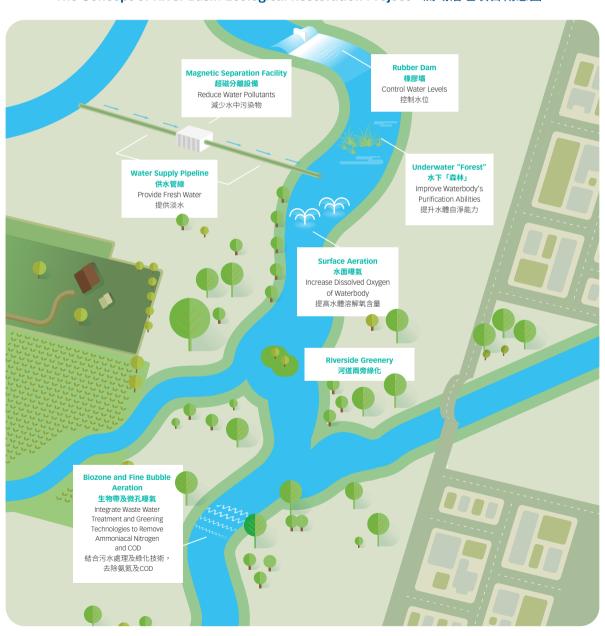
Beijing Daxing Tiantanghe Waste Water Treatment Project 北京大興區天堂河污水處理項目

River-Basin Ecological Restoration 流域治理

River-basin ecological restoration refers to the comprehensive restoration of the ecology within the river-basin protection control boundary through engineering measures. By providing an aesthetically pleasant, healthy and holistic river ecosystem, it can help the water ecology in the river basin to thrive, which improves its flood prevention and stormwater drainage capacity.

流域治理(或河道生態治理)是指通過治水工程措施對河流流域保護控制範圍內的生態進行全面修復。通過提供美觀、健康和整體的河流生態系統,流域治理可以幫助河流流域的水生態繁榮,從而提高其防洪排澇能力。

The Concept of River-Basin Ecological Restoration Project 流域治理項目概念圖



About Everbright Water 關於光大水務

River-Basin Ecological Restoration Project 流域治理項目

The Group has undertaken two river-basin ecological restoration projects, namely Nanjing Sheshui Municipal Water PPP Project, and Nanning Shuitang River Integrated Restoration PPP Project ("Nanning Shuitang River Project"). These projects include river dredging, river widening, sectional river restoration, riverbank greening, and the repair of effluent discharge outfalls. These measures have strengthened the urban flood control capacities of the two cities, improved local water quality, and enhanced the resilience of local river ecosystems.

本集團目前已有兩個流域治理項目,分別為南京涉水市政工程PPP項目及南寧水塘江綜合整治工程 PPP項目(「**南寧水塘江項目**」)。該等項目通過河道疏浚、河道拓寬、斷面修復、河岸綠化、河道排污點 修復等,加強兩城市防洪能力,改善當地水質,並提升當地河道生態的抗風險能力。

Nanning Shuitang River Project in Guangxi Zhuang Autonomous Region completed construction and commenced operation in 2022, with a total investment of approximately RMB1.466 billion. The project involves engineering for emergencies (including a waste water interception pipeline), ancillary facilities, river ecological restoration, environmental landscape, sponge city construction, river basin de-silting, information management engineering, and a waste water treatment plant with a daily treatment capacity of 40,000 m³.

位於廣西壯族自治區的南寧水塘江項目在二零二二年建成投運,涉及總投資約14.66億元人民幣。該項目包含應急工程(含截污管道工程)、配套設施、河道生態修復、環境景觀、海綿城市建設、流域清淤、信息化管理工程,以及一座設計規模為4萬立方米/日的污水處理廠。

Through a series of river basin management measures, Nanning Shuitang River Project has effectively transformed the Shuitang River from a black and odourous water body caused by various pollution sources into an urban garden with clear water and green banks. By strengthening water quality monitoring and river inspection, the project was able to detect and improve the river water quality in a timely manner. The project adopted the cutting-edge biological aerated filter technology at the waste water treatment plant as the main treatment process. This technology has offered several advantages compared with the conventional methods, such as: less space requirement, less hydraulic retention time, higher pollutant removal rate, as well as flexible and stable operation control. Therefore, it ensures that the effluent quality complies with the *Environmental Quality Standards for Surface Water* (GB3838-2002) Class IV standard. In addition, Nanning Shuitang River Project successfully transformed Shuitang River into a themed-riverside park that focuses on water management and science education by applying the internationally advanced construction concepts. The park is equipped with education, health and business facilities, allowing the neighbourhood to enjoy a close-to-nature journey that integrates environment, recreation, and science education.

通過一系列的流域治理措施,南寧水塘江項目切實地將水塘江由污染源複雜的黑臭水體狀態轉變為清水綠岸的城市後花園。該項目通過加強水質監測、河道巡查等措施,實現了對河道水質情況的及時發現和及時整治。該項目所包含的污水處理廠應用了國際先進的曝氣生物濾池工藝作為主工藝路線,與傳統工藝相比具備佔地少、水力停留時間短、污染物去除率高、運行控制靈活穩定等優勢,可確保出水水質基本達到《地表水環境質量標準》(GB3838-2002)的IV類標準。此外,南寧水塘江項目引入國際先進的建設理念,將水塘江打造成為濱河主題公園,以水治理和科普教育為主線,在滿足城市公園功能的基礎上,增加科普、健身、商業等活動場所,令周邊居民享受環境、康樂與科普為一體的親近自然之旅。

About Everbright Water 關於光大水務

Raw Water Protection 原水保護



The Group has expanded its business to raw water protection. Amidst the challenges of climate change and increasing water scarcity, the Group is committed to ensuring the quality and safety of water supply sources, as well as protecting precious ecological wetlands and drinking water resources.

本集團已將業務拓展至原水保護領域。面對氣候變化和水資源日趨缺乏的挑戰,本集團致力為供水水源的水質和供給安全提供保障,維護珍貴的水生態環境與飲用水資源。

Located in Zhejiang Province, Tongxiang West Area Drinking Water Sources Protection PPP Project ("**Zhejiang Tongxiang Project**") is the Group's first drinking water source wetland protection project, with a total investment of approximately RMB1.253 billion and a total construction area of approximately 5,400 mus. This project involves the construction and operation of water intake pumping stations, raw water pipelines and ecological wetland engineering, controlling infrastructures, water and soil conservation works, local water replenishment works and "Intelligent Water" system. Upon commencement of operation, the project will improve the water quality and optimise the source of water supply in Tongxiang City, strengthen the resilience of local water treatment plants, and ensure the security of drinking water for local residents.

桐鄉西部飲用水源保護建設工程PPP項目(「**浙江桐鄉項目**」)位於浙江省,是本集團首個飲用水源濕地保護項目,總投資額約12.53億元人民幣,佔地約5,400畝。該項目涉及建設和運營新建取水泵站、原水管線工程、生態濕地工程、控制性建築物、水土涵養工程、周邊水利補償工程和「智慧水務」系統。建成投運後,該項目將有效提升桐鄉市供水水質,優化取水水源,增強當地水廠的抗風險能力,並為居民用水安全提供可靠保障。

About Everbright Water 關於光大水務



Zhejiang Tongxiang Project 浙江桐鄉項目

Everbright Water (Tongxiang) Limited's "Intelligent Water" system uses a variety of information technologies to achieve comprehensive monitoring and management of water sources. The project is equipped with two DJI Matrice 300 RTK inspection drones, one DJI Matrice 600 Pro water quality monitoring drone, and OceanAlpha SE40 unmanned water quality monitoring boats, which can automatically sample, monitor water quality indicators, patrol the water area, and transmit data back to the control centre, thus achieving an intelligent and efficient operational model. This deep integration of technology and water management aligns with the theme of "Accelerating Change" for United Nations 2023 "World Water Day". It also demonstrates the advantages of Zhejiang Tongxiang Project's "Internet +" strategy, and contributes to the development of "lucid waters and lush mountains".

其中,光大水務(桐鄉)有限公司的「智慧水務」系統運用多種信息化技術,對水源地實現了全方位的監測管理。項目配備有兩台DJI Matrice 300 RTK巡檢無人機、一台DJI Matrice 600 Pro水質監測無人機及OceanAlpha SE40水質監測無人船,可以自動取樣、監測水質指標、巡視水域範圍,並將數據傳回中控中心,實現了智能化、高效化的運營模式。這種科技與水務的深度融合,符合聯合國的二零二三年「世界水日」主題「加速變革」,也展現了浙江桐鄉項目「互聯網+」的優勢,為「綠水青山」的建設做出了貢獻。

Business Outlook

With its rich experience in water management, Everbright Water has become the pioneer in China's environmental protection industry and is moving towards the goal of becoming a global leader in the water industry. Amidst the gradual saturation of China's domestic environmental protection market, coupled with the ever-evolving international landscape, the environmental industry is facing significant changes in terms of its operating environment.

業務前景

光大水務是一家在水務管理領域擁有豐富經驗的公司,是中國環保行業的先鋒,正向全球領先的水務公司邁進。在國內傳統環保市場逐漸飽和疊加國際形勢變化等因素影響下,環保行業的經營環境將面臨重大變革。

About Everbright Water 關於光大水務

Under the national "14th Five-Year Plan" for ecological environmental protection and carbon emission reduction, water environment management has elevated to an unprecedentedly high strategic level, and is regarded as one of the important objectives of national ecological civilisation and pollution prevention and control. In light of these developments, Everbright Water has adopted innovative strategies based on its proven business model, thereby enhancing its business value and creating more value to the company itself, the customers, and the water environment as a whole.

在國家「十四五」規劃對生態環境保護及減碳的明確要求下,水環境綜合治理作為國家生態文明建設及污染防控的重要任務之一,已被提升至前所未有的戰略高度。在這一背景下,光大水務在鞏固傳統業務領域的同時,引入創新戰略,從而進一步擴大業務價值,為企業自身、客戶和水環境創造更高價值。

Everbright Water also adheres to the national "Dual Carbons" goals, and demonstrates its full commitment based on the following three aspects: improvement in quality and efficiency, green infrastructure, and energy self-sufficiency. The Group has also formulated a series of business development guidelines that align with national strategies and policies in order to enhance its economic efficiency amid external volatility. These guidelines include: prioritising development in national strategic areas, further optimising the balance between asset-light and asset-heavy businesses, enabling innovative technology R&D, accelerating digitisation and "resource-based" construction, and promoting industrial integration by utilising its dual listing status in Singapore and Hong Kong. Through these guidelines, the Group is confident that it can overcome various challenges, further improving its business resilience, and seizing opportunities for high-quality development.

光大水務亦以國家「雙碳」目標為導向,在以下三個方面積極響應:提質增效、綠色設施和能源自給。本集團制定了一系列業務發展戰略,按照國家戰略和政策行動,不斷提高在不確定的外部環境下的經濟效益。這些攜導方針包括:強調開發國家戰略區域、繼傳他輕重資產配置、推動創新技術研發、加快數字化和「資源型」建設、利用新加坡和香港上市公司的優勢促進產業融合。通過這,本集團有信心克服各種挑戰,不斷提升本集團的業務實力,抓住走向高質量發展的機遇。

In addition, the Group is also determined to contribute to pollution and carbon emission reduction, and utilises it as an important starting point for promoting innovation in business models, technological processes and technological R&D. To achieve this, the Group is committed to reducing pollution by providing high-quality water projects and services, and reducing carbon through refined management and technological innovation. By achieving synergy between pollution reduction and carbon reduction, the Group aims to improve its synergistic efficiency, promote sustainable development, and share economic, environmental and social benefits with the general public.

同時,本集團也將積極以「減污降碳」為重要抓手,推動業務模式、技術工藝、科技研發等方面的創新工作。為此,本集團將依託高質量的水務項目和服務實現「減污」,並通過精細化管理及技術創新達成「降碳」;將「減污」與「降碳」相結合,實現「協同增效」,促進可持續發展,與公眾分享經濟、環境和社會的積極效益。

For details of the Group's business and prospects, please refer to the 2023 Annual Report.

有關本集團業務和展望的詳情,請參閱二零 二三年度報告。

BUILDING UP

GREEN OPERATING CONCEPTS, PRACTICING GREEN MANAGEMENT

ACHIEVING

MUTUALLY BENEFICIAL SITUATIONS FOR THE ECONOMY, SOCIETY AND ENVIRONMENT

構建綠色經營理念、踐行綠色管理

取得經濟、社會與環境的共贏局面



he Group is fully aware that strengthening its corporate governance is the key to ensure an effective, healthy, and sustainable development. Therefore, the Group has integrated an environment, safety, health, and social responsibility ("ESHS") management system ("ESHS Management System") and risk management system ("Risk Management System") into its day-to-day operations and management, while making timely and comprehensive information disclosure. Such systems help safeguard the Company's management structure, and ensure that the Group's operations are consistent with its core values in social responsibility and risk management, thereby providing longterm value for its stakeholders and establishing a sustainable future for the Group. In order to demonstrate its commitment in creating a fair and just society as well as a sustainable environment, the Group incorporates sustainable development and social responsibility into its governance structure, from the board level to each of the departments and business units.

Corporate Governance Structure for Sustainable Development

In order to ensure that the Group's sustainable development visions and missions are incorporated into its day-to-day management and operations, the Group has established a governance structure for sustainable development, and clearly stipulated the duties of the board committees (referred to as "Board Committees"), departments, and project companies under the supervision of the Board. The Group pays close attention on climate-related risks and opportunities, and continuously updates its agenda accordingly, in order to implement climate risk response goals and strategies with a united attitude from top to bottom.

可持續發展管治架構

本集團建立了可持續發展管治架構,明確了在董事會監督下各董事會轄屬委員會(「董事會委員會」)、部門以及項目公司的職責,以確保將可持續發展願景及使命融入本集團的日常管理和運營。本集團持續關注氣候變化的相關風險與機遇,同時不斷完善其議程,以上下一心的態度積極落實氣候風險的應對目標與策略。



LEGEND 圖例

Board Level 董事會層面 Management Level

Departmental Level 部門層面

Project Level 項目層面

Board of Directors

- Ultimately responsible for overseeing ESG and climate-related issues 負有監督ESG及氣候變化相關問題的最終責任
- Accountable for identifying key stakeholder groups, taking ESG (including climate change) consideration into strategic planning, business models, management approach and other decision-making processes 負責識別關鍵的持份者群體,在制定本集團戰略規劃、商業模式、管理方法和其他決策過程時將ESG (含氣候變化) 問題納入考量,承擔企業管治的責任等
- Monitoring of material ESG factors and matrices, overseeing goals and targets for addressing ESG and climate-related issues, and approving sustainability reports
 監察重要的ESG因素和指標,監督解決ESG及氣候變化相關問題的目標和指標,並批准可持續發展報告

Delegate and Manage 委派和管理 Report 羅蝠

匯報

Management Committee 管理委員會

- In charge of day-to-day assessment and management of ESG and climate-related issues and report to the Board 承擔ESG及氣候變化相關問題的日常評估與管理工作,並向董事會進行彙報
- Maintaining effective management systems for ESG and climate-related information, including physical and financial data where appropriate 保證ESG及氣候變化相關資訊管理體系行之有效,保存適用之實體及財務資料
- Coordinating different departments to facilitate their effective cooperation 協調各部門進行有效合作

Safety and Environmental Management Department 安全與環境管理部

- Reviewing and monitoring the implementation of ESG and climate policies and measures
 審視及監察 ESG及氣候變 化相關政策及措施的落實 情況
- Organising and coordinating ESG and climate matters 組織和協調 ESG及氣候變 化相關事宜

情況
• Organising and coordinating

Operations and Information Management Department 運營與信息化管理部

 Providing operational data and to record operational disruptions and facility damage as a result of extreme weather events, if any 提供運營數據,並記錄由 極端天氣事件所導致的運 營中斷及設施損壞,如有

Legal and Risk Management Department 法律及風險管理部

 Ensuring compliance with current and emerging regulations on ESG and climate change 確保遵守與ESG及氣候變 化的現行及新頒行的法律

Budget Management Department/Finance Management Department 預算管理部/財務管理部

- Tracking of expenditures and financial losses (if any) as a result of extreme weather events 追蹤由極端天氣事件導致 的支出和財務損失(如有)
- Determine the financial budget to cope with climate change 釐定應對氣候變化的財政 預算

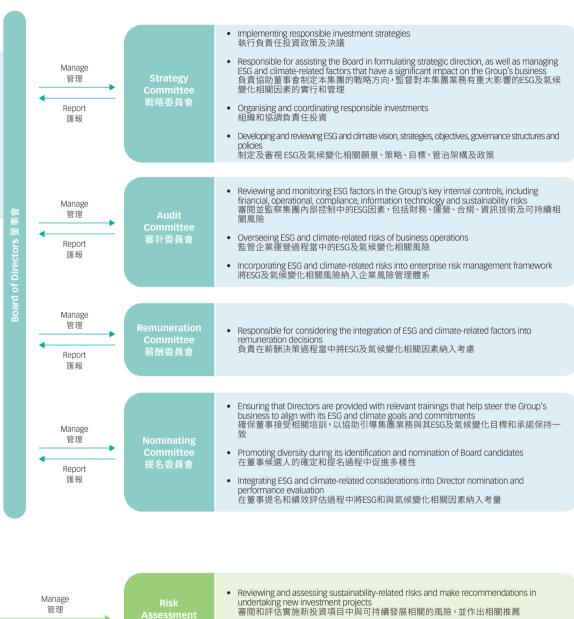
Manage 管理 管理 配報

Safety and Environmental Management Department/Specialis 安全與環境管理部/專員

- Every project that is currently under construction or in operation shall be equipped with either a Safety and Environmental Management Department, or a dedicated specialist who will be in charge of carrying out the plan for sustainable development and monitoring the project's performance
 - 所有在建及運營項目均設有/委任安全與環境管理部/專員,負責落實可持續發展計劃及監督項目的可持續發展表現

gement Committee 管理委員會

Sustainability Governance 可持續發展管治





Report 匯報 Assessment Committee 風險評審委員會

> Committee 技術委員會

- Assisting the Management Committee in decision-making process, and providing relevant recommendations to the Board 協助管理委員會進行決策,並向董事會作出相關推薦
- Evaluating and making recommendations regarding the incorporation of technology related to decarbonisation and/or any methods relevant to enhancing climate resilience 對有助於減少碳排放相關的技術和/或增強氣候應變能力的方法進行評估,並就其採用提出建議

Responsibilities of Board Committees

The Board serves as the highest governance body of the Group. Assisted by the Strategy Committee, the Board prudently evaluates the Group's core concerns such as climate change risks, water environment management, and corporate social responsibility. Based on the evaluations, the Board formulates relevant strategic guidelines, operational goals, and development directions, assuming the highest supervisory role to ensure that the Management can accurately accomplish these goals and achieve sustainable development.

The Board has established the Audit Committee (the "AC"), which oversees and monitors the implementation of the Group's climate change-related strategies. The AC is responsible for reviewing the adequacy and effectiveness of various systems within the Group, maintaining close communication with the Board, and implementing the Group's sustainable development management policies. Additionally, the AC helps maintain the Group's climate risk management by conducting annual reviews of two major governance systems, namely the Risk Management System and the ESHS Management System. These reviews evaluate operational effectiveness, compliance, and risk management efficiency.

In addition, the Board is supported by the Remuneration Committee and Nominating Committee in sustainability governance. The Remuneration Committee integrates ESG and climate-related factors into remuneration decisions, aligning incentives with sustainability goals. The Nominating Committee regularly invites external consultants to provide trainings on trending topics (such as the prevailing regulations, economic, environmental and social affairs) to the Directors in order to continuously improve their leadership in the area of sustainability. It also promotes Board diversity, and integrates ESG considerations into nomination and performance evaluation. These committees ensure the Group's business aligns with its ESG and climate commitments, fostering a diverse and knowledgeable Board capable of making informed decisions.

The Board and senior management of the Company (the "Senior Management") will review, approve and amend (as and when appropriate) the agendas and policies regarding sustainability on a regular basis, as well as reviewing and approving the sustainability report. Everbright Water held 5 board meetings during the Reporting Period. All relevant Board Committees and the Senior Management reported to the Board for approval on the agendas regarding economic, environmental, and social issues and the consequential impacts, risks, and opportunities to ensure that the Group's sustainable development strategy is carried out effectively.

董事會委員會職責

董事會為本集團最高領導單位。在戰略委員會的協助下,董事會審慎評估氣候變化風險、水環境治理、企業社會責任等本集團核心關注議題。基於以上評估,董事會制定相關的戰略方針、運營目標及發展方向,並擔當最高監督角色,務求管理層能夠確切實現目標,落實可持續發展。

董事會設立了審計委員會(「審計委員會」), 著意指導和監察本集團氣候變化相關策略的 落實狀況。審計委員會的主要職責是審閱本 集團內部的充分性和有效性,同時與董事會 保持緊密溝通,貫徹實踐本集團的可持續發 展管制理念。同時,為助力本集團的氣候風 險管理,審計委員會按年審閱風險管理體系 和ESHS管理體系兩大主要管治體系,以評估 其運營效能、合規性和風險管理效能。

與此同時,董事會在可持續發展管治上亦受薪酬委員會及提名委員會協助。薪酬委員會將ESG和與氣候相關的因素納入薪酬決策中,使激勵機制與可持續發展目標相一致。提名委員會定期邀請外部顧問就熱門話題(如相關法規、經濟、環境和社會事務)為董事們提供培訓,以不斷提升他們在可持續發展領域的領導能力。該委員會亦推動董事會組成多元化,並將ESG相關因素納入提名和績效評估考量中。這些委員會確保本集團的業務與其ESG和氣候變化承諾相一致,培養出具備多元化和知識豐富的董事會,能夠做出明智的決策。

董事會和本公司高級管理層(「高級管理層」)會定期檢視本集團的可持續發展議題及政策,適時作出修訂,並審閱及批准可持續發展報告。於報告期內,光大水務舉行了5次董事會會議。各相關董事會委員會及高級管理層就經濟、環境和社會議題向董事會作出匯報,並由董事會審議相關議題為本集團帶來的影響、風險和機遇,以確保本集團的可持續發展策略得以落實。

Responsibilities of Committees and Departments at Management Level

At the headquarter level, the Group has established a Management Committee (the "MC") as its decision-making body for daily operations. The MC oversees decision-making and managing significant issues related to the Group's social responsibility. The MC meets at least once a month to discuss the Group's operations and management practices, and to advance its efforts toward sustainable development.

Furthermore, the Group has established the Risk Assessment Committee to assist the MC in assessing the potential risks of new investment projects. The Risk Assessment Committee reviews new investment projects and provides recommendations based on risk assessment results for the MC to make final investment decisions. The MC is also supported by the Technology Committee, which evaluates and recommends technologies to enhance environmental management, decarbonisation and climate resilience.

Functional departments at the headquarter level also reports to and supports the MC in the implementation of sustainable governance:

Legal and Risk Management Department under Everbright Water

 Responsible for 1) summarising the risk management results of various departments and regional management centres; 2) assessing the potential major risks according to the metrics listed in the Group's risk management plan; and 3) formulating and implementing the updated risk management plans for coming years.

Operations and Information Management Department, the Safety & Environmental Management Department under Everbright Water

 Responsible for daily operations management to ensure that the project operations are in compliance with national regulations and the Group's requirements. Additionally, these departments are responsible for supervising project companies, ensuring that sustainable development strategy goals formulated by the Group can be effectively implemented.

管理委員會及部門職責

在總部層級,本集團設立有管理委員會(「管理委員會」)作為其日常經營管理的決策機構,負責決策和管理與本集團社會責任相關之重大議題。管理委員會每月至少召開一次會議,以便對當期運營和管理情況進行審議,完善本集團的可持續發展工作。

與此同時,本集團亦設立有風險評審委員會,協助管理委員會評估新投資項目的潛在風險。風險評審委員會負責審閱新投資項目,並及按風險評估結果提供建議,協助管理委員會作出最終投資決定。管理委員會同時也得到技術委員會支援,後者評估並推薦可用於增強環境管理、減碳和應對氣候變化的技術。

總部相關職能部門也向管理委員會匯報,並 支援其在可持續治理實施方面的工作:

光大水務轄下法律及風險管理部

 負責1)統整各部門和區域管理中心的 風險管理成果;2)按照本集團的風險管 理計劃進行比照,評估本集團面臨的重 大潛在風險;及3)更新、完善和制定來 年的風險管理計劃。

光大水務轄下運營與信息化管理部、安全與 環境管理部

負責日常業務運營管理,確保項目運營符合國家和本集團規定。此外,這些部門也負責監督工作,確保項目公司能有效落實本集團所定製可持續發展策略目標。

Budget Management Department/Finance Management Department under Everbright Water

 Responsible for monitoring and recording expenses as well as financial losses incurred due to extreme weather events. Additionally, these departments assume the responsibility of evaluating the financial budget required to address the challenges posed by climate change.

Other Functional Departments

 Responsible for overseeing the sustainability performance of the Group and its project companies.

Responsibilities of Project Managers

In order to implement comprehensive internal management and risk control, the Group strictly manages all levels of the business units in accordance with the Risk Management System and ESHS Management System. Each construction and operation project of the Group is supervised by its respective safety and environmental management specialists ensuring highest efficiency and professionalism while complying with the safety and environmental requirements.

These specialists possess a deep understanding of the Group's sustainable development concepts and implementation strategies, while the front-line staff possess extensive experience in supervising and managing projects and are fully aware of the safety and environmental conditions of each project. These qualities enable them to optimise the processes of different water resource projects. Furthermore, the organisational structure is designed to promote a two-way communication between the Management and implementation teams, allowing the Group to promote green, low-carbon, and efficient operations at the project level to address potential climate risks.

光大水務轄下預算管理部、財務管理部

負責監控和記錄開支,以及因極端天氣事件而產生的財務損失。此外,這些部門還負責評估應對氣候變化所需的財務預算。

其他職能部門

• 負責監督本集團及旗下項目公司的可 持續發展績效。

項目管理人員之職責

為進行全面而完善的內部管理和風險管控,本集團嚴格按照風險管理體系和ESHS管理體系管理各個層級的工作。本集團的所有建設和運營項目均由對應的安全與環境管理專員負責,確保每個項目都能夠在乎合安全及環境要求的前提下達到最大效率和專業性。

這些專業人員明瞭本集團的可持續發展理念 及執行戰略,而一線人員亦有豐富的負責監 督項目的經驗,充分了解各項目的安全及環 境的實際情況。這些素質使他們能夠優化各 個水資源項目的處理流程。同時,有賴於管 理層和執行層雙向溝通的管治架構,本集團 得以從項目層面推動綠色低碳的高效運營, 以應對氣候變化帶來的潛在風險。

Business Principles

The Group has formulated prudent policies and procedures to support and maintain an ethical culture. The Group's *Code of Conduct* outlines clear guidelines for all employees' behaviour, covering issues such as equal opportunities, anti-discrimination, bribery and corruption prevention, extortion prevention, anti-fraud and anti-money laundering, and employees' benefits. All employees must comply with the stringent requirements under such code, act ethically, and uphold honesty and integrity in business operations.

Prevention of Corruption and Anti-Competitive Behaviour

Everbright Water has formulated *the Guidelines for Management of Conflicts of Interest*, which clearly sets out the possible scenarios for business-related conflict of interest, and delineated the division of labour, prevention techniques and accountability mechanisms under such scenarios. It strictly prohibits all forms of bribery and all other unethical inducements and payments, particularly facilitation payments. All employees must also refrain from activities that might put their personal interests in conflict with the Group's business interests.

In order to strengthen the Group's anti-corruption practices and enhance its employees' awareness of conflict of interest and integrity issues, the Group provided a total of 747 hours of anti-corruption training to its Directors, executives and other employees during the Reporting Period. The training materials were prepared based on various topics, such as *Bringing Integrity to the Door* and *20 Guidelines for Anti-Corruption*. The Group actively implements anti-corruption governance at all levels, aims to lower corruption risks, and fosters a culture of integrity among its employees. It also communicates its anti-corruption policy to all business partners, requiring business partners to comply with the relevant laws and conduct business ethically.

The Group prohibits any arrangement which prevents, restricts or distorts fair competition. This includes preventing collusion between competitors on key competitive factors (e.g. price, output, or bidding methods) which would affect industry competition. The Group also forbids any abuse of authority to harm competition, so as to protect customers' freedom of choice.

營商原則

本集團制定了審慎的政策和措施,推廣及維持誠信文化。本集團的《行為守則》為員工的行為提供清晰指引,包括平等機會、反歧視、防止賄賂、防止勒索、反欺詐及反洗錢,以及保障員工待遇和福利等議題。本集團要求所有員工嚴格遵守該守則,在業務運作中秉承誠信與務實的管理方針並堅持道德操守。

防止貪腐及反競爭行為

光大水務制定了《利益衝突管理指引》,除了 清晰列出業務相關的潛在利益衝突情況,還 釐定了利益衝突的管理分工、防範策略和問 責制度,尤其禁止疏通款項。本集團禁止賄 賂或任何形式的不道德誘因或付款,包括疏 通費。所有員工亦須避免任何可能導致與本 集團業務產生利益衝突的活動。

為加強反貪腐實踐與員工對利益衝突及誠信 事宜的警覺性,本集團於報告期內為董事及 員工提供合共747小時防止貪腐的培訓,參 與培訓的人員包括本集團高管、中層及其 各層級員工,培訓內容基於《送廉上門》及《康 政建設二十條規定》等學習材料,切實履 應政建設的責任。本集團積極培養和促養 信文化,在各業務層面貫徹反貪腐的管治, 致力減低貪腐風險。除了向所有光大團, 員工推廣反貪腐及廉潔文化外,本集團 所有商業夥伴溝通本集團的反貪腐政策,要 求商業夥伴謹遵相關法規,誠信經營。

本集團禁止訂立任何妨礙、限制或扭曲競爭的安排,包括阻止競爭對手就關鍵的競爭元素(例如價格、產量或投標的方式)進行串通而損害行業競爭。同時,本集團禁止任何濫用權勢損害競爭的行為,確保不會限制客戶的選擇。

Protection of Third-Party Privacy and Intellectual Property

The Group is devoted to protecting the privacy of third parties. The Group's Privacy Policy outlines the scope, standards and procedures for employees and suppliers for handling the privacy and data of third parties. Employees must also adhere to all relevant laws and rules regarding the collection, storing, processing, disclosure, and use of personal data, as required by the Group. The Group regularly evaluates the privacy risks associated with its operations and evaluates whether the current measures to safeguard personal information are sufficient. In case of any threat to personal privacy and data security, the Group will respond swiftly by following the data security incident procedures to protect personal data against any unauthorised access or use. In addition, to ensure that all parties respect intellectual property rights, the policy also contains mechanisms to prevent copyright infringement. The Group's Legal and Risk Management Department will examine any instances of copyright infringement and offer legal advice.

Regular Review System and Whistleblowing Policy

The Group has set up a review system to examine its hidden ethical and professional risks every year. It conducts internal investigations on any ethical and professional integrity violations, holds those violators accountable, and evaluates the effectiveness of the system's implementation. It will also offer rectifying actions, thereby steadily improving the level of its corporate management.

The Group has provided the email addresses of the Chairman of the Audit Committee and the Company's Chief Executive Officer ("CEO") on its website as a formal channel, which operates 24/7, directly accessible by employees. The Group will not reveal the identity of the whistleblower without the whistleblower's consent or a court order, allowing employees to report their concerns anonymously, anytime and anywhere, without fear of retaliation. The Group will conduct a fair and independent inquiry and ensure that any complaints or violations brought up by workers are treated as confidential information. The Group did not receive any verified reports through the reporting channel during the Reporting Period.

保護第三方私隱及知識產權

本集團矢志保護第三方的個人私隱。本集團的《私隱政策》清楚列明員工及供應商在處理第三方私隱及資料時的範圍、標準及程序。此外,該政策亦包含了防止侵犯版權的要亦包含了防止侵犯版權的要重知識產權。本集團亦建立之資料的適用法律規定。本集團定課務的私隱風險,並衡量保障個人私隱知時,並衡量保障個人私隱知時,並衡量保障個人私隱知時,並衡量保存的風險,本集團將迅速按照可的。如時,如是犯版權的事故,本集團的法律及風險管理部將審視事故並提供法律意見。

定期檢討制度及舉報政策

本集團建立了定期檢討制度,每年檢視違反 道德和職業操守行為的隱患,對各種違規行 為進行內部調查並予以追責;分析評估制度 執行的有效性並提出整改意見,穩步提升企 業管理水平。

本集團在其網站上已公佈審計委員會主席及本公司總裁的電子郵箱,為員工提供直接舉報、全天候運作的正式管道。在未經舉報者同意或無法律要求下,本集團不會透露舉報者身份,讓員工在毋須畏懼報復的情況保虧時隨地進行匿名舉報。本集團將確保妥善等對公平獨立的調查並作出適當跟進,並將員工提出的所有關注事項或違規行為視保密信息。於報告期內,本集團未通過舉報渠道收到任何查證屬實的報告。

ESHS Management

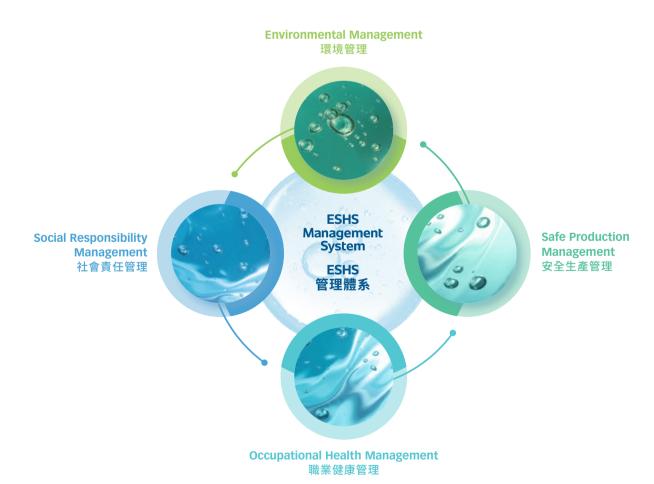
As a leader in China's water environment management industry, the Group is steadfast in its undertaking of social responsibility to maintain smooth and stable operations. Additionally, the Group has fully implemented the ESHS Management System since 2016 to ensure that its products and services meet the local, national and international environmental, health, and safety standards. The system is implemented based on the domestic and international best practices, and focuses on four areas, namely environmental management, safe production management, occupational health management and social responsibility management.

This system regulates the internal management and risk control of all processes within the Group, promotes sustainable environmental development, and implements safety culture and policies. It covers all its employees, onsite third-party contractors and subcontractors. Moreover, it reduces the impact of the Group's projects on the surrounding communities, the local environment, public safety, and society.

ESHS管理

本集團作為中國水環境綜合治理的龍頭環保企業,通過致力履行其社會責任,維持良好和穩定的運營。同時,本集團自二零一六年起全面實施ESHS管理體系,以確保旗下產品和服務符合相關國際、國家和地方的環境、健康與安全標準及法規。該體系實施基於國際、國內相關的管理體系和經驗,針對社會責任管理、環境管理、安全生產管理、職業健康管理四個部分。

該體系規範各個環節的內部管理及風險管控,促進可持續的環境發展,並推動安全文化和政策的實施。其適用範圍包括旗下所有員工及駐場第三方承包商及分包商。同時,該體系亦致力降低本集團項目對所在地原住民以及當地環境、安全、健康和社會方面的影響。



In order to identify and eliminate occupational hazards and risks at an early stage, the Group has developed an *ESHS Audit Management Standard*. This standard applies the ESHS Management System at the Group's project companies, audits their ESHS performance, and determines whether it is necessary to perform on-site corrective and preventative actions on the project company. The Group conducts an internal on-site ESHS audit for all its projects that are currently under construction or in operation on an annual basis.

Everbright Water (Ji'nan) Co., Ltd. ("Everbright Water Ji'nan") has consolidated its ESHS Management System, Standard Operating Procedures Risk Management System ("SOP Risk Management System"), and Version I Quality, Environment, Occupational Health and Safety Integrated Management System together, to improve safety and productivity. This innovative integrated management method focuses on three primary aspects, namely safety work implementation, equipment maintenance acceptance, and operation record inspection, thereby ensuring compliance with all applicable standards and practices.

Biodiversity and Land Use Policy

Everbright Water acknowledges that the development of new projects may impact the biodiversity and habitats of animals and plants, and has devised an environmental management strategy to reduce such impacts. The Group is dedicated to fostering biodiversity and conducts careful assessments of nearby natural habitats and sensitive ecological areas, with the objective of avoiding being in the proximity of such sensitive areas as far as possible during site selection, in order to fully protect the area's ecological environment.

Prior to commencing construction on a project, the Group strictly abides by relevant legal processes for obtaining all the necessary documentations, including environmental impact assessment report and approval, land use certificate, construction permit, and other required papers. The Group also conducts a preliminary assessment on the social impacts of the project as early as possible, to identify and evaluate the needs of the various groups affected by the project, including affected households, indigenous people, vulnerable groups, etc. The assessment can help the Group to implement appropriate measures to protect the rights and interests of the groups affected by the project. The Group also provides supplementary support to those affected by the project, complementing the compensation provided by the local government, subject to government approval.

為盡早識別和消除職業危害及風險,本集團制定了《ESHS審核管理標準》。該標準於項目公司實施ESHS管理體系,審核項目公司在ESHS方面的表現,並確認是否需要對項目公司現場的ESHS表現採取預防及整改措施。本集團旗下所有在建及運營項目每年均會進行一次內部ESHS現場審核。

光大水務(濟南)有限公司(「光大水務濟南」)更將ESHS管理體系、通過標準化操作流程(「SOP」)的風險管理體系(「SOP風險管理體系」)及I版質量、環境、職業健康安全一體化管理體系結合,務求提高安全性和生產力。該創新合併管理方式,針對安全工作落實、設備保養驗收和生產台賬記錄檢查三個主要方面,符合相關的標準和規範。

生物多樣性與土地利用政策

光大水務知悉興建新項目會對土地及野生動植物棲息地造成干擾,因此本集團的環境管理方針亦重點包含減輕對生物多樣性的影響。本集團致力推廣生物多樣性,謹慎評估項目附近的自然棲息地及高度生態敏感地區,務求在選址過程當中盡力避免靠近此類敏感地區,以充分保護項目鄰近區域的生態環境。

本集團在動工興建新項目設施前,均會按照法定程序,確保已取得環境影響評估報告及批覆、土地使用證、施工許可證等文件後才開始施工。此外,為保障及識別受項目影響的群體,本集團會在項目初期盡早對開發項目進行初步社會評價,評估各群體如受影響戶、原住民、弱勢群體等的需要,實施相應措拖。亦會在當地政府同意的調價下,於當地政府提供的補償以外,為受項目影響的群體提供額外支援。

The Group has created a *Biodiversity and Land Use Policy* in order to ensure that the following protection measures and design principles are adopted during project development:

本集團已制定《生物多樣性與土地利用政 策》,確保於項目發展時採取以下保護措施 及設計原則:

Ecological Environmental Protection Measures 生態環境保護措施



- Devise sensible plans for the permanent land occupation of water supply and waste water pipeline networks, so as to minimise soil disturbance and impact on surface vegetation. 對供水及污水管網永久佔地進行合理規劃,以減少土壤擾動和破壞地表植被。
- Clearly define and strictly monitor the range of activities for on-site construction operation equipment, and forbid driving and operation anywhere outside of the designated areas, so as to prevent damage to the roadside vegetation. 清晰劃定施工作業活動範圍,嚴格管理現場施工作業設備,不得在道路站場以外的地方行駛和 作業,保障路外植被不被破壞。
- Increase employees' environmental awareness, and ensure that protection for designated endangered and protected species is of top priority. 加強工作人員的環保意識,對國家重點保護的物種列入工程建設中的重要工作事項。
- In case of construction activities, restore the pre-existing land use pattern upon completion as much as possible, and implement greening measures such as planting native or adaptive trees and grass

如有施工作業,盡量於施工結束後恢復原有土地利用格局,並根據氣候條件採取種樹種草等綠 化措施。

Biodiversity Conservation 生物多樣性保護

Wild plants protection

保護野生植物

Avoid excessive logging of wild plants (especially in national nature reserves) so as to avoid damage to the ecological environment along the route.

避免對野生植物濫砍濫伐 (尤其要高度重視自然保護區段) 而造成沿線地區的生態環境破壞。

Wild animals protection

保護野生動物

To promote the protection of wild animals, disseminate information about the role of amphibians, reptiles and birds in the ecosystem, and prohibit construction workers from harming any wild animals. 推廣保護野生動物,大力宣傳兩棲、爬行動物、鳥類對生態系統的作用,禁止施工人員危害任何野生動物。

Environmental protection

環境保護

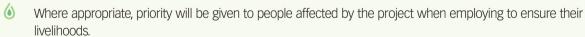
⑥ To strengthen the protection of the water environment, avoid pollution or eutrophication of local waters along the construction line, and minimise the impact on aquatic organisms and their habitats. 加強水環境保護,避免施工作業沿線局部水域發生污染或富營養化,把對水生生物及其棲息環境的影響減至最低。

Education on protection

保護意識教育

⑥ To strengthen public education on wildlife protection and ecological environmental protection. 強化教育公眾的野生動物保護意識和生態環境保護意識。

Indigenous Peoples Resettlement 原住民安置



在合適情況下,優先聘請受項目影響的人士,使其生計得到保障。

To incorporate social management clauses into construction contracts to ensure full compliance by contractors.

將社會管理條款納入施工合同,確保承包商完全遵守。

- To avoid bidding on projects located in socially sensitive areas. 避免投標位於社會敏感區域的項目。
- To provide adequate compensation to indigenous peoples whose rights and interests are adversely affected by the implementation of projects, in accordance with relevant national and local policies. 根據國家及當地有關政策要求,對因項目實施權益受到傷害的原住民,進行相應補償(賠償)。

Risk Management

The Group attaches great importance to risk management, and has established a systematic, standardised and efficient Risk Management System, to continuously improve and strengthens its internal control. The Group adopts preventive measures against ESG risks, to actively reduce their business impact on its investment and operation.

The Group has established an efficient risk management structure to mitigate risks at its source, consisting of three layers of defense: project companies, functional departments at the headquarter, and the Internal Audit Department. The Group has also formed special committees that provide focused and rigorous reviews on critical issues, including the Risk Assessment Committee, the Technology Committee, and the Procurement Management Committee.

In addition, the Group carries out annual risk assessments to identify, control and regulate various types of risks. As an environmental enterprise that depends on the water cycle, the Group recognises that climate change could bring significant risks and opportunities to its business, and conducts regular reviews and updates to identify such risks and opportunities at all levels, including extreme weather, policy changes, environmental compliance, technology and innovation. The Group is committed to mitigating, adapting to and combating the negative impacts of climate change on its business.

For details of the Group's corporate governance, risk management and internal control, please refer to the 2023 Annual Report.

Supply Chain Management

Everbright Water views local suppliers as its important partners and cooperates with them in a fair and open manner, facilitating local development in all provinces, municipalities, and autonomous regions (the "**Provinces**") in China. The Group prioritises suppliers in the same Province when developing businesses nationwide, creating employment opportunities for local communities and fulfilling corporate social responsibility. Preference is also given to environmentally and socially responsible suppliers, such as contractors that prioritise purchasing reusable and renewable products or adopt low-emission construction processes, etc. This is to encourage suppliers to put sustainability into practice.

風險管理

本集團高度重視風險管理,積極建立系統、 規範、高效的風險管理體系和內部監控系統,不斷完善與提升其內部控制。本集團將 風險管控框架納入預防原則,基於環境、社 會和管治因素對本集團投資及運營帶來的風 險採取預防性措施,以減低風險對業務造成 的潛在衝擊。

本集團建立了高效的風險管理架構,並透過項目公司、總部各職能部門、內審部的三道風險控制防線,致力從源頭防範風險。本集團亦設立了風險評審委員會、技術委員會、採購委員會等專項委員會,強化了對於重點事項的專業審核及有效推進。

此外,本集團堅持每年進行風險評估,以便 識別及管控本集團所面臨的各類風險。另 外,作為與水循環密切相關的環境從業者, 本集團深知氣候變化可能對業務構成重大風 險。因此,本集團致力於在所有業務層面識 別相關的氣候變化風險與機遇(其中包括極 端天氣、政策改變、環境合規、科技與創新等 範疇),並會定期作出檢視與更新。本集團承 諾以行動減緩,適應及抗禦氣候變化對業務 所帶來的負面影響。

有關本集團的企業管治、風險管理及內部控制的詳情,請參閱二零二三年度報告。

供應鏈管理

光大水務視本地供應商為重要夥伴,堅持以公平、開放的方式與各供應商合作,促進中國各省、直轄市及自治區(「**省份**」)的當地發展。本集團於全國各地發展業務時,會優先選用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;亦會盡可能選擇承擔環境及社會責任的供應商,例如優先選購可重用或再生產品、聘任採用低排放建設過程的承包商等,以鼓勵供應商支持可持續發展。

As at 31 December 2023, the Group has engaged a total of 4,929⁽¹⁾ suppliers for its projects, most of which were based in mainland China. The principal services provided by these suppliers include equipment fitting, installation and construction. The Group has outsourced services such as environmental monitoring, equipment maintenance, cleaning, security, and landscaping, involving 4,045 on-site outsourced workers.

截至二零二三年十二月三十一日,與本集團 建立合作關係的項目供應商共有4,929印家, 大部分供應商均位於中國內地,主要服務包 括設備配置、安裝與工程建設。本集團的外 判服務包括環境監測、設備維修、清潔、保安 和綠化等,共涉及4,045名駐場外判工人。

As of 31 December 2023



附註: Note:

- The suppliers of Mauritius St. Martin Waste Water Treatment Plant (1) O&M Project were excluded.
- 不包括毛里求斯聖馬丁污水處理廠委託運營 項目的供應商。

Number of On-site Outsourced Workers in 2023 二零二三年駐場外判工人數目

Environmental monitoring workers 環境監測工人

11%

Emergency maintenance workers 緊急維修工人

9%

Annual/quarterly equipment maintenance worker 年度/季度性設備維護工人

4%

Long-term on-site outsourced workers (e.g. cleaners, security guards, property management staff, and canteen 長期駐場外判工人 (如保潔、安保、物業和食堂工人)

20%

Construction workers

23%

Equipment maintenance service workers (e.g. repair, installation, cleaning, maintenance workers) 設備維護工人 (如維修、安裝、清潔、保養工人)

33%

Total 總數

4,045

Supplier Management Measures

The Group is devoted to exerting a positive influence on the supply chain, and does so by regularly communicating with suppliers and stakeholders regarding sustainability, to ensure that sustainable development values are integrated into the supply chain. To identify and minimise environmental and social risks in the supply chain, the Group has formulated and implemented the following supplier management guidelines:

供應商管理準則

本集團持續與供應商進行溝通,向供應鏈中各持份者傳達可持續發展的信息,以確保本集團將可持續發展宗旨融入到供應鏈中,促進供應鏈發揮正面影響。為了識別並降低供應鏈中的環境與社會風險,本集團特別制定並落實以下供應商管理準則,在供應鏈的各個流程中落實環境與社會管理:

Code of Conduct for Suppliers 《供應商行為準則》

The purpose of this *Code of Conduct* is to systematically regulate the suppliers in the economic, environmental and social aspects, and encourage suppliers to fulfil and jointly improve the sustainability performance of the supply chain. It also encourages the Group's suppliers to treat their subordinate suppliers with the same standards, therefore enhancing the sustainability of the entire supply chain.

該行為準則旨在系統性規範供應商在經濟、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。該行為準則更鼓勵本集團的供應商以相同的標準對待他們的從屬供應商,以提升供應鏈的整體可持續發展水平。

The Code outlines the expectations for suppliers in terms of ESG performance. Suppliers are required to carry out and operate businesses with ethics and integrity, and to comply with relevant local, national and international laws and regulations. Suppliers must also minimise their environmental impact and monitor their environmental issues regularly.

該行為準則概述了對供應商在ESG表現方面的期望。供應商進行商業活動時需要從道德角度出發,誠信經營,並遵守當地及國際的相關法律。供應商亦應盡量減少對環境造成的影響,並定期 監控環境問題。

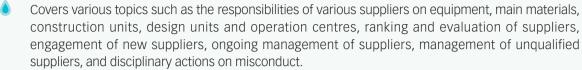
Suppliers are required to comply with the relevant national labour policies and legislations, which include prevention of slavery, forced and bonded labour, child labour and abusive employment practices. Suppliers are also obliged to safeguard human rights of their employees and take due considerations of their welfare, e.g. provide employees with a suitable living environment, set a minimum living wage and maximum working hours to protect the well-being of employees. Moreover, suppliers must also establish a good working environment for employees, protect employees from discrimination, and ensure that the health and safety of employees are fully guaranteed.

供應商應當遵守該國家的勞工政策和法規,當中包括禁止任何奴役、強迫勞動、抵押勞工、使用 童工或虐待行為。供應商亦應當為維護員工的基本人權,並考慮其利益,包括:為員工提供適宜 居住環境,設立最低生活工資及最高工時以保障員工福祉。同時,供應商亦須為員工建立良好的 工作環境,保護員工免受歧視,並確保員工的健康和安全得到全面保障。

All suppliers shall comply with such *Code of Conduct* during their course of business with the Group, as well as when participating in any events 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該行為準則。

Supplier Management Measures 《供應商管理辦法》



涵蓋裝備、主材料、施工單位、設計單位、運營中心等供應商之職責分工、供應商等級及評價、新供應商的顧用、供應商動態管理、不合格供應商的管理和違規處罰等事宜的詳細規定和要求。

Suppliers are assigned to one of the four grades, A, B, C, and D, based on the evaluation of their professional level, financial status and compliance records. The Group may terminate business relationships with suppliers of the lowest grade, if they cannot demonstrate their capability to fulfil the Group's requirements.

按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,將供應商劃分為 A、B、C、D四個等級,最低等級的供應商若無法證明其能夠達到本集團的要求,本集團或會終止與其合作。

Contractor's ESHS Management Measures 《承包商ESHS管理標準》

Aims to identify and control the environmental, social and safety risks during outsourcing, by examining contractors' background, qualifications, construction operation and environmental protection performances.

旨在透過審視承包商的公司背景、資質、業績、安全生產及環保等各方面的綜合表現,藉此辨識、監督並有效管控其環境、社會和安全相關的風險。

Contractors need to fill in the *Contractor ESHS Questionnaire*, and provide relevant ESHS information to assist the Group in compiling the list of qualified contractors. This can help ensure that the suppliers and contractors comply with environmental and social responsibility management regulations, as well as any applicable national and local government regulations.

承包商需要填寫「承包商ESHS問卷調查表」,提供ESHS相關資料,以協助本集團整理合格承包商名單,並確保供應商和承包商遵守環境和社會責任的管理條例和法規,以及適用的國家和地方政府規定。

Contractors are required to submit the following: certificate for international environmental management standard certification such as ISO 14001, proof of ESHS training and assessment, and proof of appropriate protective equipment for employees.

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、是否進行ESHS培訓與考核、是否為員工提供適當的保護裝備等。

The Group provides further guidance to its business partners to enhance their sustainability performance by issuing various policies and guidelines, including *Tender Management Measures* and *Management Measures for Appraisal Expert Database of Project Construction Procurement*.

本集團的《招標管理辦法》及《工程建設採購 評審專家庫管理辦法》等相關制度亦進一步 引領業務夥伴提升其可持續發展表現。

Supplier Sustainability Risk Assessment

In line with the global trend of sustainable development, the Group emphasises its fulfilment of corporate social responsibility as well as the extension of its strategy of sustainable development to its supply chain. In order to deepen the understanding of risks in the supply chain, the Group commissioned an independent consultant to carry out an assessment of its suppliers' sustainability risks and ESHS performance. In 2023, a total of approximately 211 suppliers, whose businesses cover electrical equipment, pumping equipment and water treatment equipment, etc., participated in the survey and assessment. The scope of the assessment includes the qualifications of suppliers in terms of production, operation, and safety, etc., as well as their management systems related to quality, environment and society, etc.

The Group's effectiveness in sustainable supply chain management has been fully reflected in the results of the sustainability risk assessment. None of the assessed suppliers indicated that they were involved in any ongoing commercial litigation, nor were they being prosecuted or fined by the relevant authorities on environmental and social issues. Most assessed suppliers were applying for or had already obtained international certification for management standards including ISO 9001, ISO 14001, and ISO 45001, etc.; 89% of surveyed suppliers had formulated occupational health and safety policies and provided relevant training for employees. None of the surveyed suppliers indicated that they had any safety accidents in the past three years. The Group has not identified any risks related to child labour or forced labour in the supply chain in the recent risk assessment.

供應商可持續風險評估

在目前全球可持續發展的大趨勢下,本集團不僅強調企業自身不懈履行社會責任,更重視將可持續發展的策略擴展至企業的供應鏈。為加深了解供應鏈內的風險,本集團委託了獨立顧問為本集團的供應商評估其可持續性風險及ESHS方面的表現。於二零年,本集團邀請了約211家主要供應商接不知。供應商的業務範圍包括電力設備、泵額設備及水處理設備等。評估涵蓋了供應商生產、經營及安全方面的資質,以及質量、環境和社會方面的管理體系等。

本次的可持續風險評估結果充分反映本集團 在可持續供應鏈管理中的成效。被評估的所 有供應商均表示企業現時沒有因環境和社會 問題引發的商業訴訟正在進行中,也未被有 關部門就環境和社會問題作出檢控或罰款。 另外,大部分被評估的供應商均正在申請或 已擁有了ISO 9001、ISO 14001及ISO 45001等 國際認證;當中89%的受訪供應商訂立了職 業健康及安全政策,並為員工提供相關培訓 活動;所有受訪供應商均表示在過去三年 沒有發生過任何安全事故。在該次風險評估 中,本集團未有辨識到在供應鏈中任何與童 工或強制勞動相關的風險。

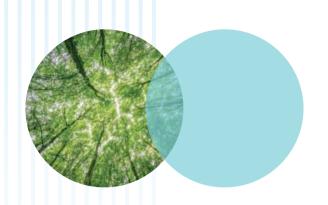
The Group has commissioned an independent consultant and its internal ESHS management team to identify and assess the environmental and social risks of its suppliers through conducting a materiality assessment to determine the sustainability risks at each stage of the supply chain. The team identified and reviewed each supplier's sustainability risk factors and issues, including environmental performance, quality management, occupational health and safety, employee training, human rights policies, etc. Through collection and analysis of the data provided by the suppliers, the Group identified the most significant risk factors and issues.

The Group categorised the suppliers' risks into low, medium, and high levels according to the assessment results to determine their ESG performance. In this assessment, 77% of surveyed suppliers were classified into low-risk category, and the rest were in medium-risk category. No suppliers fell into high-risk category. In order to assist the suppliers with handling relatively higher risks to improve their management, the Group actively investigated their situations and provided recommendations to ensure their risks could be effectively controlled. In the future, the Group will continue to monitor the performance of suppliers and keep close communications with them to maintain the sustainability of the supply chain.

本集團委託獨立顧問及內部的ESHS管理團隊,透過實質性評估來識別及評定供應商的環境及社會風險,以識別供應鏈每個環節的可持續風險。團隊識別及檢視本集團各個供應商的可持續發展風險因素及議題,如環境表現、質量管理、職業健康與安全、員工培訓、人權政策等。本集團收集並分析供應商所提供的資料數據,從而識別最具重要性的風險因素及議題。

本集團參考評估結果,將供應商的風險分為低、中、高三個等級,以檢視供應商在環境、社會及管治的績效。在是次評估中,77%的受訪供應商屬於低風險,其餘均屬於中風險,沒有供應商落入高風險的類別。為了協助較高風險供應商改善其管理,本集團積極探討情況並提出建議,確保其風險可被有效控制。本集團未來將會持續監察供應商的表現,與各方保持緊密溝通,確保供應鏈的可持續性。







Ith a keen global vision, the Group consistently embraces the objective of "Creating Better Investment Value and Undertaking More Social Responsibilities" and pays close attention to the sustainable development of stakeholders and society. Climate change is the primary risk threatening the world today and is also the most important sustainable development issue for the Group and its stakeholders. To assist in addressing climate change, the Group enhances the transparency and accuracy of its climate-related disclosure to stakeholders, including investors and fund providers, by preparing this Report in accordance with the framework as set out in the TCFD Recommendations. This also better facilitates stakeholder engagement in tackling climate change.

集團秉持敏銳的全球視野,時刻謹守「創造更好投資價值、承擔更多社會責任」的企業追求,密切關注各持份者及社會整體的可持續發展。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重視的可持續發展議題。為應對氣候變化,本集團務求加強在向包括投資者及資金提供者在內的持份者披露氣候相關風險資訊時的透明度及確實性,並按照TCFD建議編寫本報告,以協助各界應對氣候變化。

About TCFD Recommendations

The TCFD Recommendations cover four key areas for disclosure: governance, strategy, risk management, metrics and targets.

關於TCFD建議

TCFD建議涵蓋四個資訊披露重點,包括:管治、策略、風險管理、指標和目標。



The Group's approach to governance of climate-related risks and opportunities 本集團就氣候相關風險與機遇而擬訂之本集團 管治方針

Risks and opportunities associated with climate change that may impact the Group's business operations and strategies, and other related objectives 氣候變化為本集團之業務與規劃所帶來的相關風險和機遇以及相關目標

The Group's process for identifying, assessing and managing climate-related risks 本集團識別、評估和管理氣候相關風險的流程

Metrics and targets for assessing and managing climate-related risks and opportunities 用以評估和管理氣候相關風險與機遇的指標和目標

Governance

Everbright Water has integrated sustainable development into its corporate governance structure, focusing on climate-related risks and opportunities. The Board, supported by the Strategy Committee, evaluates core concerns such as climate change risks and water environment governance to establish strategic guidelines and operational goals, and delegates implementation responsibilities to the Management Committee. The Audit Committee oversees the implementation of climate change-related strategies, maintaining effective systems and conducting annual reviews. The Remuneration Committee takes into account ESG factors when determining compensation, while the Nominating Committee facilitates sustainable governance through the composition of the Board and relevant training.

On the management level, the Risk Assessment Committee assists the Management Committee in decision-making, and assesses potential risks of new investment projects, providing recommendations for investment decisions. The Technology Committee evaluates and makes recommendations on green technology to the Management Committee. Functional departments, including the Legal and Risk Management Department, Operations and Information Management Department, Safety & Environmental Management Department, as well as the Budget Management Department and Finance Management Department ensure sustainability performance and compliance with regulations within their respective purview.

Project managers, under the management of the respective functional departments, enforce comprehensive internal management and risk control, supervised by safety and environmental management specialists. This organisational governance structure fosters two-way communication between management and implementation teams, enabling green, low-carbon, and efficient operations at the project level.

Please refer to the "Sustainability Governance" chapter of this Report on additional details of the Group's sustainability governance.

治理

光大水務將可持續發展融入進其公司治理架構之中,持續關注氣候變化的相關風險與機遇。在戰略委員會的協助下,董事會審慎評估氣候變化風險、水環境治理等本集團核營目標,並將其實施責任委派予管理委員會監察氣候變化相關策略的落對。審計委員會監察氣候變化相關策略的落實數況,維持系統有效性,同時進行年度考核。薪酬委員會在決定薪酬時將ESG因素納入考量,而提名委員會通過董事會的組成和相關培訓來促進可持續治理。

在管理層層面,風險評審委員會協助本集團的管理委員會進行決策,評估新投資項目的潛在風險,按風險評估結果提供建議。技術委員會評估並向管理委員會推薦綠色技術。包括法律及風險管理部、運營與資訊化管理部、安全與環境管理部、以及預算管理部和財務管理部在內的各職能部門則確保其各自職責範圍內的可持續性表現和合規性。

項目管理人員在各職能部門的管理及安全 與環境管理專員的監督之下,進行全面的 內部管理和風險管控。這種組織治理結構 有助於促進管理層和執行團隊之間的雙向 溝通,從而在項目層面上實現綠色、低碳和 高效運營。

有關本集團可持續發展管治的詳情,請參閱本報告的「可持續發展管治」章節。

Strategy

Everbright Water acknowledges the risks that climate change poses to its business, and has been taking active and prudent steps to formulate strategies to address them. The Group mainly faces physical risks in water resources management, including water stress, natural disasters such as floods and droughts, and other extreme weather, including but not limited to extreme precipitation events and extreme temperatures. Other potential variabilities are mostly transition risks, such as policy changes, reputation shifts, technological expansion, phase-out, etc. These risks may negatively affect the Group's assets and supply chains, leading to a potential financial impact. Thus, the Group is committed to reducing and avoiding greenhouse gas emissions, and enhancing the resilience of the Group and its projects in response to climate change, with the goal of building a cleaner water environment.

At the same time, Everbright Water embraces the opportunities brought by climate change, and is determined to promote sustainable urban development through its climate change response. Therefore, Everbright Water has established and implemented a series of strategies to cope with climate risks, thereby repositioning the Group in the ever-changing world. The Group has adopted the following three strategies to actively strive for carbon neutrality:

策略

光大水務深明氣候變化所帶來的多種風險,因此一直採取審慎積極的態度制定應對策略。本集團業務所面臨的實體風險主要與水資源治理相關,包括:水資源壓力、洪水乾旱等天然災害、其他極端天氣如極端降水乾旱件、極端氣溫等;其他變因則與轉型風險相關,包括:政策改動、聲譽轉移、科技擴展人淘汰等。這些風險或對資產及供應鏈造成與面壓力,構成潛在的財務影響。因此,本集團及其旗下項目對氣候變化的應變能力,以建設更清潔的水環境。

與此同時,光大水務亦充分認知氣候變化所帶來的機遇,銳意藉著氣候變化的應對工作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,旨在身處持續變化的世界中仍能保持清晰定位。本集團採取了以下三大策略,並致力以更進取的姿態實現碳中和的目標:



Understanding Climate Risks Through Climate Scenario Analysis

Climate scenarios are projections of future climate conditions at different levels of greenhouse gas emissions. To align with the global climate change governance and gain a better understanding of the significant climate risks the Group is facing, the Group has conducted climate scenario analysis based on the internationally recognised guidelines. In accordance with the TCFD Recommendations, the Group divided its climate risks into two categories, namely physical risks and transition risks. Climate scenario analysis helps the Group evaluate the business impact of future climate change trends, and accurately assess the potential climate risks faced by its assets, including projects under preparation, construction, commissioning, and operation. The Group's scenario analyses employ both quantitative and qualitative methods to evaluate impacts across a timeline extending from the present through to the assessment years 2030 and 2050. By calculating these risks, the Group is able to make more informed decisions, reduce business vulnerabilities, and capitalise on emerging climate-related opportunities.

Physical Scenarios

In accordance with the Sixth Assessment Report ("AR6") on climate change published by IPCC and the TCFD Recommendations, the Group evaluate chronic and acute physical risks by using "Shared Socioeconomic Pathways" ("SSP") with "Representative Concentration Pathways" ("RCP"). This approach enables the assessment of physical risks across most relevant climate change scenarios within the selected timeframe (i.e. 2030 and 2050) in comparison to baseline conditions. In addition, a long-term assessment by 2100 was not conducted due to the uncertainties associated with forecasting over such an extended period, and the fact that most of the projects would have reached the end of their concession periods and be retired by that time.

透過「氣候情境分析」管理氣候相關風險

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,同時考量「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」)評估急性和慢性氣候風險。這一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物理風險。此外,鑒於長期氣候預測的高度不確定性,而且大多數項目將在二一零零年前達到特許經營期限,所以本集團沒有對直至二一零零年的長期實體氣候風險評估。

Scenario 情境	Scenario Simulation 模擬情境
Current trend 當前趨勢情境	The current trend scenario pathway represents a world similar to current socio-economic 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)相似的世界,導致二十一世紀末全球平均表面溫度升高約2度。
Pessimistic 悲觀情境	The pessimistic scenario pathway represents a world with unequal and unstable socio-economic 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。

Transition Scenarios

To analyse the various transitional climate risks that the Group is facing and to formulate and implement the corresponding management policies, the Group has adopted the climate change scenarios in the *World Energy Outlook 2023* report released by the International Energy Agency for the purpose of the Group's development. In addition, the Group's analysis adopts the recommendations of TCFD's *Guidance on Scenario Analysis for Non-Financial Companies* and adopts a 1.5°C scenario, which is in line with IPCC's latest scientific research, and the growing momentum of pledges to ensure net-zero emissions by 2050.

轉型情境

為了分析本集團正面臨的各種轉型氣候風險 及該實施的管理方針,本集團的評估參考並 採用了國際能源署發佈的《二零二三年世界 能源展望》報告中的氣候變化情境,以促進 本集團發展。此外,本集團的分析採納TCFD 《非金融公司情境分析指南》的建議,採用 一個攝氏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。

Transition Scenarios

Scenario 情境	Scenario Simulation 模擬情境
Stated Policies Scenario 既定政策情境	The Stated Policies Scenario ("STEPS") is an energy system projection that assesses the prevailing direction of progress based on current policies and measures, without assuming that governments will achieve all its stated goals. It evaluates sector-specific policies, industry actions and implementation measures adopted as of August 2023, including Nationally Determined Contributions under the <i>Paris Agreement</i> , and considers detailed sectoral information such as pricing policies, efficiency standards, electrification programmes, 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,它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。它評估了截至二零二三年八月採用的具體部門政策、行業行動和實施措施,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,以確定它們對能源目標的影響。
Net Zero Emissions by 2050 Scenario 二零五零年 淨零排放情境	The Net Zero Emissions by 2050 Scenario ("NZE Scenario") is a normative scenario that shows a pathway for the global energy sector to achieve net zero CO_2 emissions by 2050, with advanced economies reaching net zero emissions in advance of others. This scenario also meets key energy-related SDGs, in particular universal energy access by 2030 and major improvements in air quality. It is consistent with limiting the global temperature rise to $1.5^{\circ}C$ (with at least a 50% probability), in line with emissions reductions assessed in the IPCC's AR6. 二零五零年淨零排放情境是一種規範情景,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,其中已開發經濟體比其他經濟體更早實現淨零排放。該情境也實現了與能源相關的主要SDGs,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,將全球氣溫上升限制在1.5°C(至少50%以上機率)。

Promoting the Development of Renewable Energy

The "Dual Carbons" goals in the "14th Five-Year Plan" have prompted the Group to remain committed to the sustainable development of the water-environment treatment industry. In addition to responsible water resources management, the Group places great importance on energy conservation and emission reduction. Therefore, the Group has integrated "Promotion of Renewable Energy" as part of its corporate governance strategy, so as to reduce greenhouse gas emissions at the source and across all aspects of its operations.

The Group advocates for green operation concepts such as energy efficiency, resource reutilisation, and localisation. Everbright Water has installed photovoltaic power generation facilities in its plants, recognising the complementary nature between solar power and water treatment. Moreover, the flexible reuse of waste water treatment by-products such as sludge demonstrates the Group's commitment to circular economy. These measures are mutually supportive, with some generating electricity for internal usage, thereby reducing the consumption of non-renewable energy.

The Group has also established a dedicated team to explore the potential of in-plant photovoltaic power generation. This specialised team bolsters its professional capabilities in the field through policy studies, research exchanges, and pilot projects. By promoting the implementation of photovoltaic projects in waste water treatment plants and optimising their operations based on experiences from other industry players, Everbright Water maximises the use of renewable energy and minimises unnecessary consumption of non-renewable resources during the construction and operation phases. Additionally, Everbright Water consistently explores innovative and effective energy-saving solutions in alignment with societal needs and national policies.

推動發展可再生能源

在「十四五」規劃中的「雙碳」目標的激勵下,本集團持續關注水環境治理行業的可持續發展。在負責任管理水資源之餘,本集團亦十分重視節能減排。因此,本集團已將「推動可再生能源」加入本集團治理策略,希望從各個經營環節入手,並從源頭減少溫室氣體排放。

本集團倡導綠色運營的理念,貫徹了能源效率、物盡其用、因地制宜等理念。在「光水互補」的理念下,光大水務在廠內設置了光伏發電設施,亦靈活運用了污水處理過程產生的污泥等副產物,展現了本集團致力循環經濟的決心。這些措施多元互補,有的更能直接為廠內供電,減少消耗非再生能源。

除此以外,本集團亦成立了專項小組探究開發廠內光伏的潛力。該小組通過政策學習、調研交流、項目試點等務求強化這一方面的專業實力。通過推進光伏項目在污水處理廠的落地實施,並結合同業經驗進行持續的運營優化反思評估,光大水務得以在建設和運營期間盡可能利用可再生能源,減少不必轉營期間盡可能利用可再生能源,減少不必轉濟不可再生資源消耗。同時,光大水務持會探索更多創新有效的節能方案,以貼合社會需求和國家政策。

In-plant Solar Photovoltaic

The waste water treatment industry consumes large amounts of energy. To address this issue, the installation of photovoltaic power generation facilities at waste water treatment plants can effectively reduce pollution and carbon emissions. These facilities not only fully utilise the vast space available at water treatment plants, but also provide a physical covering that inhibits the growth of algae, helping to meet the operational need for proper covering. In addition, photovoltaic power generation facilities have various intrinsic advantages, such as a long service life, low chance of operation interruptions, and good investment stability.

The Group has been actively promoting flexible-stand photovoltaic power generation at the Dezhou Nanyunhe Waste Water Treatment Project, which has achieved a key milestone in 2023. This includes the installation of rigid roof photovoltaic modules that can generate electricity from sunlight even on cloudy or rainy days. The Group also finished the construction of the distributed photovoltaic power generation project in the Group's Shandong Zibo Waste Water Treatment Project ("Zibo Project Plant") in Shandong Province during 2023. It is expected to generate an additional annual power of 3.72 million kWh, a total of 93 million kWh of electricity in 25 years.

Immediately thereafter, the Group also carried out an in-plant photovoltaic pilot project at its Beitang Waste Water Treatment Project ("Beitang Project") in Tianjin. Beitang Project has an installed capacity of 6 MW, and an annual power generation capacity of 7 million kWh, which can satisfy about 10-20% of the power consumption of the plant. Additionally, Beitang Project implemented green technologies, such as water-sourced air-conditioning systems, to enhance emission reduction efforts.

廠內光伏

污水處理屬於高耗能產業。作為應對,光伏 發電設施有助配合污水處理廠實現「減污降 碳」。這些設施一方面妥善利用大面積的水 處理池安裝光伏發電設施,另一方面藉著光 伏的物理覆蓋功能抑制藻類生長,符合設施 本身的加蓋需求。另外,光伏發電設施具備 多重優點,如土地使用年限長之餘、停運機 會低和投資穩定性良好等。

本集團在德州南運河污水處理項目積極推進 柔性支架光伏發電,於二零二三年取得階段 性關鍵成果。其中包括完成剛性屋面光伏組 件安裝,可風雨無阻地進行發電。二零二三 年,本集團亦完成位於山東淄博污水處理項 目的分佈式光伏發電項目施工,預計新增年 均發電量372萬千瓦時,25年新增總發電量 可達9,300萬千瓦時。

緊隨其後,本集團亦於旗下天津北塘污水處理項目(「**北塘項目**」)開展廠內光伏試點工作。北塘項目機裝容量達6兆瓦,年發電量為700萬千瓦時,可滿足約10-20%的廠區用電。北塘項目亦引入了水源空調系統等綠色技術,進一步優化減排成效。

Looking ahead, Everbright Water will continue to actively pursue opportunities for carbon reduction and implement more pilot projects.

展望將來,光大水務會繼續尋求更多減碳空間,積極推行更多試點項目。



In-plant solar photovoltaic facilities in Zibo Waste Water Treatment Project (Plant 1)

淄博污水處理項目(一廠)的廠內光伏發電設施

Power Generation Through Anaerobic Digestion of Sludge

Sludge treatment encompasses three major procedures: thickening, digestion and dewatering. During the "digestion" period, anaerobic bacteria will perform anaerobic digestion by decomposing, metabolising, and digesting organic matter in sludge. This process generates biogas, which can then be used to replace fossil fuels for power generation.

Promoting Innovative Technologies to Reduce Pollution and Carbon Emissions

In addition to utilising a variety of renewable energy sources, Everbright Water continues to adhere to its corporate philosophy of "Innovation-Driven Development" and uphold integrity and innovation. Hence, with a strong foundation in its commitment to work safety, the Group invests in the development of highly efficient and innovative technologies. By fostering cross-sector cooperation between academia and industry, promoting effective internal communication, and enhancing policy-oriented agility, the Group aims to strengthen digital transformation and maintain its leading position in the water resources management industry, making significant progress towards green development.

污泥厭氧消化發電

污泥處理包括「濃縮、消化和脫水」三大程序。在「消化」期間, 厭氧細菌會進行厭氧消化一即分解、代謝、消化污泥之中的有機物, 從而產生沼氣取代化石燃料用作電力生產。

推動創新技術達致減污降碳

除了沿用多元再生能源,光大水務亦秉承「創新引領發展」的企業理念,堅持「守正創新」。因此,在確保安全工作的基礎上,本集團致力投資開發高效能及創新科技。本集團期望透過企業學院跨界合作、緊密內部溝通及面向政策的敏捷觸覺,加強數字化轉型,引領並支撐水資源治理行業大步邁向綠色發展。

Scientific R&D

The Group places high value on technological innovation research, and has set phased reform goals for its "Intelligent Water" platform. The journey of technological innovation R&D presents various challenges, ranging from in-depth theoretical research, hardware installment, software configuration to the cultivation of a green corporate culture. Nonetheless, it has substantially improved the Group's work efficiency and potential for sustainable development.

During the Reporting Period, the Group invested more than RMB52.5 million in technological innovation and was newly granted 28 patents (including 21 utility models, 7 invention patents) and published 8 technical papers. Additionally, the Group collaborated with local tertiary and educational institutions, fostering a culture of scientific production through "Industrial-Academic" collaboration. By integrating the technological expertise of external professionals with the valuable experiences of internal structure, the research capabilities of the Group's R&D team have been greatly enhanced.

科研發展

本集團高度重視技術創新研究,亦特地設立 了階段性的智慧水務為本集團進行改革。從 理論深研、硬裝架構、到軟件配置及塑造綠 色企業文化,科研創新之路充滿挑戰。然而, 本集團的工作效能與可持續發展的潛力卻因 此得到提升,成效卓著。

報告期內,本集團投入創新技術的金額超過5,250萬元人民幣,獲得授權專利28項(包括實用新型專利21項、發明專利7項),發表技術論文8篇。另外,本集團亦與國內高等院校合作,以「產學研」的方式建立科學化生產的良好傳統,融合外部專業的先進科技及提煉內部架構的寶貴經驗,提升研發團隊的科研水平。

Precision Aeration System 精確曝氣系統

In Zibo Project Plant 1, the Group has adopted a high-standard precision aeration system that includes 5 corridors, each equipped with 4 controls – a total of 20 valves. Considering that different types of valves have different aeration performance and prices, the Group has introduced three types of valves (i.e. rhombic valve, jet streamlined valve, and hexagonal aperture valve) in the past three years, to treat waste water with the highest economical and energy efficiency. At the same time, in order to optimise the use of economic resources and save the cost of purchasing software services externally, the Group's specially trained internal software experts developed the "Enterprise WeChat Work Platform" and "Technology Centre Supervision Project Management Platform". These platforms serve as valuable tools for the Group, enabling efficient communication among its employees and are tailored to the Group's needs. For instance, the platforms could record employee feedback and progress of key projects accurately and effectively. Although the relevant projects are still in the exploratory stage, the Group will continue its innovative endeavours, and actively call on project companies in the industry to invest in advanced aeration systems to achieve a mutually beneficial situation.

在淄博污水處理項目(一廠)內,本集團採用了高規格精確曝氣系統,當中包括5個廊道,每個廊道設有4個控制-共計20個閥門。考慮到不同種類的閥門各有其不同的空氣調節效能和價格,近三年內,本集團以綜合互補的研發思路同時引入了三種閥門(菱形閥、Jet流線型閥、六邊形光圈閥),以最具實惠及最高能源效益的方式處理污水。同時,為了能有效使用經濟資源、節省購買軟件服務的成本,本集團特意培養了內部軟件專家負責搭建「企業微信工作平台」及「技術中心督辦項目管理平台」,旨在打造一個可以貼近本集團需求的高效溝通模式,精確及時地紀錄員工反饋和重點督辦項目進度。雖然相關項目仍然處於探索階段,但是本集團會持續尋求更多創新嘗試,並踴躍號召業內的項目公司參與投資先進曝氣系統,創造雙贏局面。

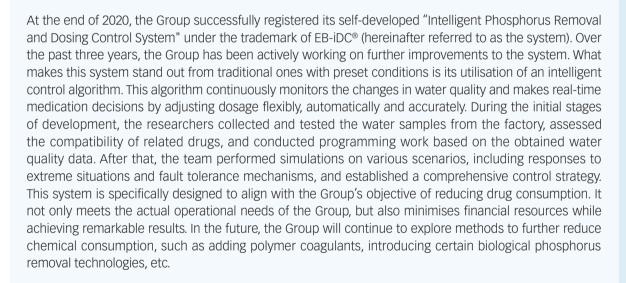
Intelligent Operation

The Group firmly believes that advanced technology serves as the driving force for production, and intelligent development plays a crucial role in enhancing the accuracy and effectiveness of its work outcomes. To be precise, "intelligent development" refers to the utilisation of computer modelling algorithms and machine learning to identify target objects. On the journey of design and development, with the active support from engineers and employees, the Group has made significant improvements in the accuracy, precision, and recall rate of its systems, marking collaborative efforts towards achieving a green vision.

智慧運營

本集團深信先進科技是引領生產的動力,而智慧化發展將為本集團帶來更精準有效的工作成果。所謂「智慧」,其實是結合了機器學習技術,通過計算機模型的算法來辨識目標事物。在設計研發的道路上,本集團借助工程師和員工的積極回饋,持續提升各個系統的準確率、精確率及降低召回率,為達成綠色願景而通力合作。

Intelligent Chemicals Dosing System for Phosphorous Removal 智能除磷加藥控制系統



二零二零年底,本集團為自行研發的「智能除磷加藥控制系統」註冊商標EB-iDC®(下稱本系統),並在過往三年間進行後續完善工作。有別於傳統的(預設條件)自動控制系統,本系統運用了智能控制算法,在嚴密監測水質變化之餘,作出即時用藥決定,務求靈活、自動、精確地調整藥量。在開發初期,研究人員先收集化驗了廠內水樣本,再實驗檢查相關藥品之匹配性,然後根據所獲得的水質特徵數據開展程式編製工作。其後,團隊亦著手模擬各種情境、極端情況處理方式、容錯機制等,建立出完整的控制策略。本著降低藥品消耗的目標,本系統為本集團量身訂製,不單貼合本集團的實際運營需要,亦同時耗費較少的財政資源,一石多鳥,綜合成效斐然。未來,本集團亦會繼續探索減低藥耗的方法,例如添加高分子凝固劑、引入少部份生物除磷工藝等。

Waste Water Treatment Plant New High-Efficiency Micro-Sand Charcoal Sedimentation Tank 污水處理廠新型高效微砂加炭沉澱池

As China's water resource treatment regulations become increasingly stringent, the Group continues to look for breakthroughs in delivering a more refined water resource management service solution to the general public. Towards this end, the Group introduced the high-density sedimentation tank technology at Dalian Malanhe Waste Water Treatment Project, as a pilot project. The application of this technology in the project has attracted wide attention from fellow industrial peers. The Group also carried out independent innovation R&D, and successfully developed the "High-Density Sedimentation Tank Process" (hereinafter referred to as the process) which is based on the "micro-sand aggravated flocculation highefficiency sedimentation tank process" technology developed in the early 1990s. The Group's researchers refined this process by increasing the filtration efficiency of micro-sand and powder carbon, such that the waste water treated by the plant can meet the national Environmental Quality Standards for Surface Water (GB3838-2002) Class IV standard. This process improves the flocculation of micro-sand and enhances the ability of powdered carbon to absorb non-biodegradable organic matter. Compared with the old high-density sedimentation tank, it is more suitable for the composition of the particular types of waste water treated in the Group's plants, especially high-TDS (Total Dissolved Solids) and high-chroma industrial waste water, algal waste water, low-turbidity river water and rainwater. It also reduces civil construction investment for the same amount of the total installed power, requiring only an additional centrifugal separator, making it an investment with obvious and significant advantages. This process has been successfully registered as EBHES® High-Density Sedimentation Tank. It has since been successfully applied to more than 20 projects, and has won the second prize for the transformation and application of scientific and technological achievements.

隨著國內的水資源處理要求日趨嚴格,本集團持續尋求突破,致力於為大眾帶來更完善的水資源治理服務方案。因此,本集團以大連馬欄河污水處理項目為試點,引入高密度沉澱池技術,並樂見業界夥伴更多關注這項技術。在此基礎上,本集團進一步開展自主創新工作,成功研發出「高密度沉澱池工藝」(下稱本工藝)。研究人員首先回顧了90年代初開發的微砂加重絮凝高效沉澱池工藝,然後再精細化微砂和粉碳的過濾功效,使得經該廠處理的污水可以達到國家《地表水環境質量標準》(GB3838-2002)IV類標準。詳細來講,本工藝強化了微砂的絮凝作用,也提升了粉碳吸附不可生物降解之有機物的能力。相比舊式的高密度沉澱池,本工藝更加適合本廠的污水特徵,尤其能幫助處理高鹽高色度工業廢水、含藻類污水、和低濁河道水及雨水。在節約土建投資的基礎上,總裝機功率不變,額外增加的設備只有旋流分離器。項目整體投資優勢明顯,果效突出。本工藝已註冊商標為EBHES®高密度沉澱池,成功應用於20多個項目,並喜獲科技成果轉化應用二等獎。

Promote the Application of Advanced Technology, Unlock the Potential of Energy-Saving and Carbon Reduction

As a leading enterprise in the water environment treatment industry, Everbright Water adheres to the mission of "Dual Carbons", and implements the policies relating to "Reducing Pollution and Carbon Emissions" and "Boosting Synergy and Efficiency". In order to better fulfil the core function of optimising water governance, the Group has carried out a series of external exchange activities, including policy studies, research exchanges, and pilot projects. Through integrating the experiences and views of various parties, the Group hopes to delineate an innovative path for carbon reduction, and in due course, move towards the vision of zero-carbon water treatment.

推廣先進技術應用 深挖節能降碳潛力

作為水環境治理行業的領先企業,光大水務 肩負「雙碳」的使命,落實「減污降碳」、「協同 增效」的方針。為了優化水務治理的核心工 作,本集團開展了一系列政策學習、調研交 流、項目試點等對外交流活動,期望結合多 方經驗和思維描繪創新減碳路徑,逐步邁向 零碳水務的願景。

Goals for Low-carbon and Sustainable Operation 低碳及可持續運營目標

Everbright Water's Achievements in Application of Advanced Technology 光大水務應用先進技術的成果

Sustainable Water Use 可持續的水資源利用

The Group endeavours to meet the demands of sustainable water use in accordance with national standards. Due to the diverse nature of the Group's projects, the effluent quality of most projects that employ advanced technologies either complies with or exceeds the Grade 1A standard of *Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant* (GB18918-2002) or *Environmental Quality Standards for Surface Water* (GB3838-2002) Class IV standard. This indicates that these effluents are suitable for usage as urban landscaping water and general reusable water (recycled water). Relevant technologies include the Group's self-developed waste water treatment processes (such as EBHES® High-Density Sedimentation Tanks), as well as other cutting-edge technology applications (such as EBAF® Third-Generation Biological Aerated Filters).

本集團以國家所訂之標準為方向,努力滿足水資源可持續循環利用的需要。由於本集團項目性質多樣,現時大部分有應用先進科研成果項目的出水水質皆符合或優於《城鎮污水處理廠污染物排放標準》(GB18918-2002)一級A標準或《地表水環境質量標準》(GB3838-2002)IV類標準,適合作為城鎮景觀用水、一般循環再用用水(回用水)等。相關技術包括自主研發的污水處理工藝(如EBHES®高密度沉澱池)、前沿科技應用(如EBAF®第三代曝氣生物濾池)等。

In addition, the Group also endeavours to boost sustainable water use through the use of information technology in its operations. For instance, Jiangyin Waste Water Treatment Project (Binjiang Plant 2) and Ancillary Pipeline Project aims to become a benchmark for the use of information technology in water treatment plants. It has deployed the BIM construction model and applied automatic data collection modules, aiming to connect the project with the engineering information management system.

同時,本集團還致力於通過在其業務中運用信息技術,提升對水資源的可持續利用。 例如,江陰市濱江第二污水處理廠(濱江二廠)以打造信息化建設標杆水廠為目標,完 成廠區BIM建設、自控標準化數據採集摸塊開發應用,期望與工程信息管理系統對接。

Goals for Low-carbon and Sustainable Operation 低碳及可持續運營目標

Everbright Water's Achievements in Application of Advanced Technology 光大水務應用先進技術的成果

Energy Use 能源利用

Through the introduction of solar power generation, as well as waste water source heat pumps, the Group has successfully increased the proportion of renewable energy and reduced aggregate electricity demand. Shandong Zibo Waste Water Treatment Project and Tianjin Beitang Waste Water Treatment Project have effectively leveraged their local advantages to simultaneously reduce pollution and carbon emissions. Notably, Phase I of the Zibo photovoltaic project is expected to have an annual power generation capacity of 1.93 million kWh, while Phase II is expected to generate 3.72 million kWh of electricity annually. Assuming an average standard coal consumption of 305g per kWh of electricity generated, these two phases will be able to save a combined 43,081 tonnes of standard coal over an operation cycle of 25 years. In 2023, both Phase I and Phase II of the Zibo photovoltaic project generated a total of 6.87 million kWh of electricity, which fulfilled approximately 19% of Zibo Waste Water Treatment Project's power consumption.

本集團現以廠內光伏提升可再生能源比率,並借助污水源熱泵減少用電需求。山東淄博污水處理項目及天津北塘污水處理廠都各自發揮其地域性優勢,減污降碳並行。其中,淄博光伏項目一期每年發電量為193萬千瓦時,項目二期每年發電量為372萬千瓦時。若計算25年的運行週期,假設每千瓦時電耗相等於305克標準煤,兩期共計可節省約43,081噸標準煤。二零二三年,淄博光伏項目一、二期共計光伏實際總發電量為687萬千瓦時,占淄博污水處理項目總用電量百分比為19%。

Low-carbon Operation 低碳運營

Through R&D and the introduction of cutting-edge technologies, the Group continues to optimise its technological processes and develop "intelligent" operation. By integrating machine learning, electronic information management and experiences from external partners, the Group actively contributes to the advancement of innovation in water management frameworks. The Group effectively reduces energy and material consumption through its precision aeration systems, intelligent dosing systems, and renewable energy projects. These initiatives not only enhance operational efficiency but also enable the Group to continuously export green energy and avoid carbon emissions through grid-connected power generation. Consequently, the Group operates its water treatment projects in a low-carbon manner, aligning with its commitment to environmental sustainability.

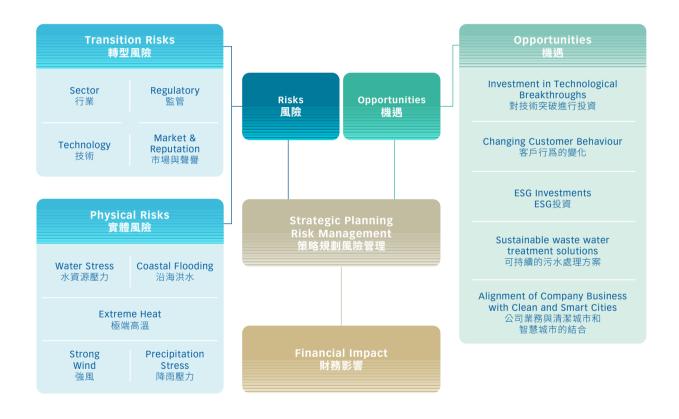
通過研發工作和引入前沿科技,本集團持續進行工藝優化和運營「智慧化」建設。透過集合機械學習、電子化信息管理和外部夥伴的經驗,本集團積極推動水治理模式創新。通過精確控制曝氣及加藥系統、可再生能源項目等,本集團得以有效降低能源及物料消耗。這些措施不僅提升了運營效率,而且允許本集團持續輸出綠色能源,並透過併網發電避免碳排放。因此,本集團以低碳方式運營其水處理項目,實踐與其對環境可持續發展的承諾。

Risk Management

The Group has adhered to the TCFD Recommendations by disclosing and explaining to stakeholders the process of identifying, assessing and managing climate-related risks. Each segment of the Group has undergone the assessment of potential climate-related risks and opportunities, with corresponding actions and mitigation measures implemented based on the assessment results. Additionally, the Group has analysed the effectiveness and implementation risks of these measures to enhance overall operational efficiency. To facilitate reporting, the diagram below provides an overview of the Group's key climate-related risks and opportunities.

風險管理

本集團根據TCFD建議,向持份者披露並闡述了本集團辨識、評估和管理氣候相關風險的流程。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分析結果作出行動,制定實施氣候風險控制措施。同時,本集團亦分析了各個措施的有效性以及執行風險,期望提升整體運營的效率。為方便報告,下圖概述了有關本集團之主要氣候相關風險和機遇。



Risk Management Process

In accordance with the risk management plan, the Group has formulated and implemented a risk management process that ensures potential risks are identified effectively through clear contingency instructions. This enables timely formulation and implementation of relevant measures for each project. By employing systematic measures and references, the Group ensures the availability of a comprehensive and dependable framework of decision-making principles and steps. This approach guarantees the Group's continued operation and steady development even amidst a 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。系統化的措施參據能夠提供一套完整可靠的決策原則與步驟,確保本集團在變動環境之下繼續穩健經營和發展。

Process of Climate Change Risk Management 氣候變化風險管理流程



The Group has fully implemented the first four stages, which include the identification of climate change risks, risk assessment and analysis, risk management and control measures, and analysis and reporting of control results. Moving forward, the Group is committed to refining the risk management process through the implementation of the fifth stage, so as to develop appropriate mitigation measures based on the qualitative risk assessment and quantitative analysis. In accordance with the TCFD Recommendations, the Group has categorised climate risks into two types, physical risks and transition risks. Through scenario analysis, the Group takes a proactive approach to climate risk management, striving to ensure the long-term sustainability of its operations.

本集團已經全面落實第一至四階段的工作 (氣候風險辨識、評估與情境分析、制定與 報告管控成果),並持續借助第五階段細化 風險管理流程,針對風險質化評估和量化分 析結果制定相應的緩解措施。按照TCFD建 議,本集團把氣候相關風險劃分為兩類,包 括實體風險和轉型風險,並以情境分析評估 重大風險,致力把本集團所面臨的氣候風險 減至最低。

Physical Risks

Climate change has led to various global impacts, including the destabilisation of climate systems and an increase in extreme weather events. These effects can directly harm corporate assets and supply chains, leading to financial losses and damage to physical assets or asset groups. Everbright Water's business covers a diverse range of services, including raw water protection, water supply, and waste water treatment, and many of its projects are situated in coastal areas or along the riverine area, where they serve a retention purpose. The Group therefore strives to implement source control that encompasses the entire water environment management cycle. However, the Group faces two major climate risks, namely water resource shortage and coastal flooding. To effectively assess and address these physical risks, the Group has conducted scientific scenario analysis based on the World Wide Fund for Nature ("WWF") Risk Filter Suite, as well as the Coastal Risk Screening Tool released by Climate Central.

實體風險

氣候變化帶來了全球性影響。當中,不穩定 氣候的系統和極端氣候事件或會直接破壞 企業資產及供應鏈,造成財務損失,影響實 體資產/資產組。就本集團而言,光大水務 的業務龐大,在種類上涵蓋了原水保護、供 水及污水處理等,而在地理上亦涵蓋大量 沿海項目或沿河項目,其可發揮保水作用。 因此,本集團憑藉完整涵蓋水環境治理的各 個環節,實施源頭管控,卻亦因而面對水資 源短缺與沿海洪水兩大主要氣候變化相關 問題。為有效評估並應對這些實體風險對本 集團帶來的影響,本集團參考世界自然基金 會(「WWF」)的風險篩檢工具庫(WWF Risk Filter Suite)及氣候中心(Climate Central)發佈 的沿海洪水風險篩檢工具,進行科學化的情 境分析。

China Everbright Water Limited 中國光大水務有限公司

Sustainable Development Strategies to Address Climate Change Risks 應對氣候變化風險的可持續發展策略

Water Stress Risks 水資源壓力風險

Why Assess Water Stress? 為什麼要評估水資源壓力 程度?

The Group's core business focuses on water environment management. Water resources therefore form the foundation of the Group's business. As such, prolonged drought or insufficient water supply will directly affect the Group's operations.

本集團業務聚焦水環境綜合治理,因此水資源是本集團的業務根基。因此,長期乾旱或 供水不足將直接影響本集團的運營。

Methodology 評估方法

The Group evaluates water stress using the "Water Scarcity" metrics in WWF's Water Risk Filter, which integrates datasets and modelling approaches covering 7 aspects of water scarcity: aridity index, water depletion, baseline water stress, blue water scarcity, available water remaining, drought frequency probability, and projected change in drought occurrence.

本集團使用WWF的水風險篩檢工具來評估水資源壓力,該工具整合了涵蓋水資源壓力 七個方面的數據集和建模方法,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 Group's assessment covers the water stress risk levels of all projects currently under preparation, construction, commissioning or operation under the baseline condition, as well as under current trend scenario (2°C scenario) and pessimistic scenario (3.5-4.0°C scenario) in 2030 and 2050, expressed as a percentage of capital investment and the percentage of number of projects.

評估涵蓋了所有正在籌備、建設、投產和運營中的項目在基準線情境及在二零三零年和二零五零年下當前趨勢情境(2℃情境)和悲觀情境(3.5-4.0℃情境)的水資源壓力風險水平,並按資本投資和項目數目百分比表示。

Findings 調查結果



By Percentage of Capital Investment in Projects 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 50% of the Group's capital investment for projects at planning, construction, commissioning or operational phases are exposed to high water stress levels or above, while the number is expected to rise to around 68% under 2030 & 2050 current trend scenario (2°C scenario) and 2030 & 2050 pessimistic scenario (3.5-4°C scenario).

根據本集團的分析,水資源壓力是本集團項目的主要氣候相關風險。在基準線情境下,本集團在在籌劃、建設、投產和運營中的項目投資,有約50%屬於水資源壓力程度高或以上級別,而二零三零年和二零五年在當前趨勢情境(2°C情境)和悲觀情境(3.5-4°C情境)下,該數字將上升至68%左右。



By Percentage of Number of Projects 按項目數目百分比

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 54% of the Group's projects at planning, construction, commissioning or operational phases are exposed to high water stress levels or above, while the number is expected to rise to around 67% under 2030 & 2050 current trend scenario (2°C scenario) and 2030 & 2050 pessimistic scenario (3.5-4°C scenario).

根據本集團的分析,水資源壓力是本集團項目的主要氣候相關風險。在基準線情境下,本集團在在籌劃、建設、投產和運營中的項目投資,有約54%屬於水資源壓力程度高或以上級別,而二零三零年和二零五年在當前趨勢情境(2°C情境)和悲觀情境(3.5-4°C情境)下,該數字將上升至67%左右。

Very low risk

極低風險

Low risk

低風險

Sustainable Development Strategies to Address Climate Change Risks 應對氣候變化風險的可持續發展策略



Medium risk

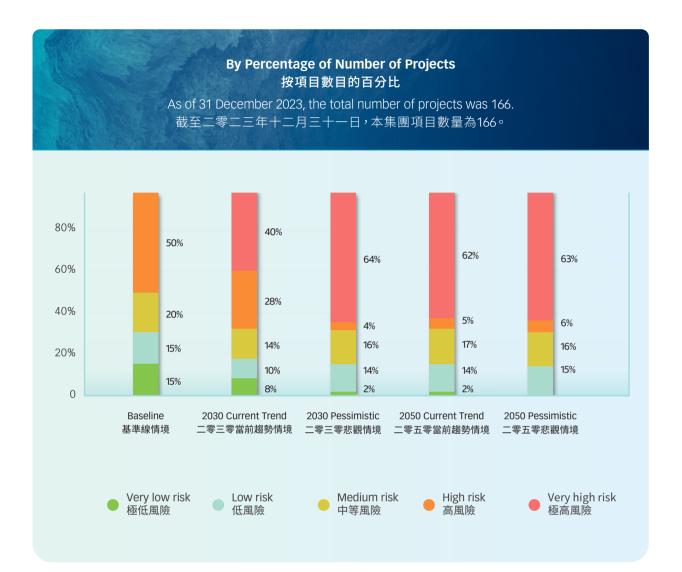
中等風險

High risk

高風險

Very high risk

極高風險



Water Stress Risks 水資源壓力風險

Mitigation Measures for Water Stress Risk 針對水資源壓力風 險的緩減措施 By improving the technological levels of water reuse, the Group is able to manage water resources more effectively, and alleviate the pressure of resource shortage. The Group employs various treatment measures (such as ultrafiltration, nanofiltration, reverse osmosis, etc.) to treat different types of effluent, so that the treated effluent can meet the standards for usage as cooling water. Advanced waste water treatment technology can help the Group achieve a water recovery rate of 80%, and gradually realise the Group's vision of "full reuse, zero discharge".

通過提升回收用水的科技水平,本集團可更加有效管理水資源並緩解資源短缺的壓力。本集團會根據各種類廢水作出相應的處理措施(如超濾、納濾、反滲透等),使得經處理的出水達到冷卻水的使用標準。先進的廢水處理工藝可幫助本集團達到80%的水回收率,逐步實現「全回用、零排放」的願景。

Reclaimed Water 再用水

Although waste water is not immediately usable, it can become a reusable resource and satisfy certain water quality safety standards after effective treatment. Reclaimed waste water can be used for general industrial purposes or for non-potable uses, such as street cleaning, vehicle washing, landscaping, toilet flushing and firefighting.

排放水並非立即可用的資源。但經過高效處理後,它可以達到一定的水質安全標準,成為再用水。再用水可作一般工業用途或非飲用水用途(如清潔街道、清洗車輛、美化園林、沖廁、救火等)。

Reusable Water 中水回用

The Group's reusable water projects purify effluent from waste water treatment plants in accordance with The *Reuse of Urban Recycling Water – Water Quality Standard for Industrial Uses* (GB/T19923-2005) or equivalent standards. This treatment process enables the water to be reused and applied to power plants and general industrial uses, thereby reducing the demand for freshwater in cities.

本集團的中水回用項目根據《城市污水再生利用工業用水水質》 (GB/T19923-2005)或相等標準處理污水處理廠的廢水,使其能夠被再次利用。通過本項目產生的回用水可用於發電廠或作一般工業用途,幫助節省城市淡水用量。

Coastal Flood Risks 沿海洪水風險

Why Assess Coastal Flood Risk? 為什麼要評估沿海 洪水風險? Coastal flood risks will pose a direct threat to the safety of the Group's assets and employees.

沿海洪水風險將對本集團資產及員工安全構成直接威脅。

Methodology 評估方法

The Group evaluates coastal flood risk using Coastal Risk Screening Tool developed by Climate Central. For coastal areas' projects, coastal flood risk will be measured through projects that will be below the combined level of projected sea level rise and local annual flood height by 2030 and 2050.

本集團使用氣候中心(Climate Central)發佈的沿海洪水風險篩檢工具進行風險評估。針對沿海地區項目,沿海洪水風險是通過計算將在二零三零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之下的項目來確定的。

The Group's assessment covers the coastal flood risk levels of all projects currently under preparation, construction, commissioning or operation in 2030 and 2050 under 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.

評估涵蓋了所有正在籌備、建設、投產和運營中的項目在二零三零年和二零五零年下當前趨勢情境(2℃情境)和悲觀情境(3.5-4.0℃情境)的沿海洪水風險水平,並按資本投資和項目數目百分比表示。

Findings 調查結果



By Percentage of Capital Investment in Projects 按項目資本投資的百分比

According to the analysis of the Group, 43% of the investments of the Group's projects under preparation, construction, commissioning and operation are in coastal areas.

根據本集團的分析,在所有正在籌備、建設、投產和運營的項目之中,有43%的投資是位於沿海地區。

The risk calculations for 2030 & 2050 current trend scenario (2°C scenario) and 2030 & 2050 pessimistic scenario (3.5-4°C scenario) in are similar: around 17% of the investment will be below the combined level of projected sea level rise and local annual flood height.

當前趨勢情境(2°C情境) 和悲觀情境(3.5-4°C情境) 分別在在二零三零年和二零五年的風險計算結果相似:約17%的投資將在二零三零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。



By Percentage of Number of Projects 按項目數量的百分比

According to the analysis of the Group, 38% of the number of the Group's projects under preparation, construction, commissioning and operation are in coastal areas.

根據本集團的分析,在所有正在籌備、建設、投產和運營的項目之中,有38%的項目是位於沿海地區。

The risk calculations for 2030 & 2050 current trend scenario (2°C scenario) and 2030 & 2050 pessimistic scenario (3.5-4°C scenario) in are similar: around 24% of the projects will be below the combined level of projected sea level rise and local annual flood height.

當前趨勢情境(2°C情境) 和悲觀情境(3.5-4°C情境) 分別在在二零三零年和二零五年的風險計算結果相似:約24%的項目將在二零三零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。

Coastal Flood Risks 沿海洪水風險

Mitigation Measures for Coastal Flood Risk 針對沿海洪水風險 的緩解措施

Sponge City 海綿城市

The Group's Zhenjiang Sponge City Project is constructed based on the concept of "blue-green infrastructure".

本集團的鎮江海綿城市項目依照「藍綠建設」的概念而建。

By constructing flood control systems and controlling surface runoff, it helps to enhance a city's capabilities in handling rainwater (such as: absorption, infiltration, retention, release and purification) and strengthen the urban ecosystem. Zhenjiang Sponge City Project includes a series of constructions, including rainwater storage tanks, rainwater pumping stations, drainage pipelines, waste water treatment facilities, and ecological restoration projects.

透過建設防洪排澇系統及加強控制表面徑流,該項目可幫助提升城市處理雨水的能力(如吸納、蓄滲、緩釋和淨化等),並完善城市生態系統功能。鎮江海綿城市項目有一系列建設,包括:雨水調蓄池、雨水泵站、排澇管道、廢水處理設施以及生態修復工程。



(Zhenjiang Sponge City Project) (鎮江海綿城市項目)

Coastal Flood Risks 沿海洪水風險

Mitigation Measures for Coastal Flood Risk 針對沿海 洪水風險的 緩解措施

River-Basin Ecological Restoration 流域綜合治理

In addition to implementing measures such as flood control, drainage, and water diversion to address the surface problems, the Group also undertakes comprehensive water environment remediation work to eradicate the underlying issues, such as waste water interception, pollution source treatment and ecological restoration. One notable example is the Group's Nanning Shuitang River Integrated Restoration PPP Project. Through active communication with relevant government authorities, this project has successfully accomplished various tasks, such as treatment of black and odourous water bodies in urban inland rivers, upgrading and construction of municipal waste water pipeline networks, construction and operation of water quality purification plants, implementation of automatic monitoring of river water quality, development of sponge cities, creation of landscape parks along rivers, and implementation of paid access to wetlands. By addressing pollution reduction, flood control, river ecological restoration and maintenance in a comprehensive manner, this project has successfully achieved a more holistic management of the river-basin.

在防洪、排澇、引水等「治標」措施之餘,本集團亦開展了全面的水環境綜合治理,期望深化控源截污、內源治理、生態修復等「治本」工作。其中一個顯著例子是本集團的南寧市水塘江綜合整治工程PPP項目。仰賴一系列企業政府溝通工作,該項目最終達成了城市內河黑臭水體治理、市政污水管網改造建設、水質淨化廠建設運營、河道水質自動監測、海綿城市、沿河景觀公園、濕地付費項目等。該項目全方位兼顧減污、防洪以及河道水生態修復維護,達致更具整全觀的流域治理。



(Nanning Shuitang River Integrated Restoration PPP Project) (南寧水塘江綜合整治工程PPP項目)

Coastal Flood Risks 沿海洪水風險

Mitigation Measures for Coastal Flood Risk 針對沿海 洪水風險的 緩解措施

Projects with Built-in Flood Protection Measures 內置防洪措施的項目

The greening of the plant areas not only enhances the aesthetic value of the projects, but also increases their flood prevention capabilities.

廠區綠化不單能夠提升項目的美觀和可賞性,亦增加了防洪功能。

Highlights of selected projects: 部份亮點項目:



Jiangyin Waste Water Treatment Project 江陰污水處理項目 (Overall site greenery area: approximately 98,000 m²) (整體廠區綠化面積:約98,000平方米)



Ji'nan Waste Water Treatment Project 濟南污水處理項目 (Overall site greenery area: approximately 94,000 m²) (整體廠區綠化面積:約94,000平方米)

Elevation of Core Equipment/Machinery 提高核心設備/機械的高度

To the extent practicable, key equipment and machinery are elevated to avoid damage due to flooding.

在切實可行的範圍內盡可能把核心設備和機器放置於較高的位置,避免洪水侵蝕。

Climate-Related Physical Risk Matrix 與氣候相關的實體風險矩陣

Based on the baseline and different climate scenarios projected in 2030 and 2050, the Group analysed the relevant physical risks and developed a physical risk matrix.

基於基準線情境及二零三零及二零五零年的不同氣候變化情境,本集團分析了相關實體風險,並創建了實體風險矩陣。

Key findings:

主要發現:

- ♦ Water stress had a medium impact on the Group's projects under baseline and climate scenarios for 2030 and 2050. 在基準線和二零三零及二零五零年不同氣候情境下,水資源壓力對本集團項目產生了中度影響。
- ♦ Under both the current trend and pessimistic scenarios, coastal floods are expected to have a low impact on the Group's projects for both 2030 and 2050.
 在常前趨勢情境以及悲觀情境下,沿海洪水於二零三零年及二零五零年均對本集團的項目產生較低影響。



M

Medium impact 中度影響:



High impact 高度影響:

<25%

of total project investments are under high risk or above⁽¹⁾ 的項目投資受到高風險或以上影響⁽¹⁾

≥25% and <75%

of total project investments are under high risk or above⁽¹⁾ 的項目投資受到高風險或以上影響⁽¹⁾

≥75%

of total project investments are under high risk or above⁽¹⁾ 的項目投資受到高風險或以上影響(1)

Consequences of Climate Change on Everbright Water's Projects under Different Scenarios 光大水務項目在不同情境中的氣候變化後果

	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

Note:

附註:

For coastal flood risk, the Group's projects that would be below the combined level of projected sea level rise and local annual flood height by both 2030 and 2050 were categorised as high risk.

在沿海洪水風險方面,本集團所有將在二零三零年及二零五零年均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將被評價為高風險。

Other Physical Risks

In addition to climate scenario analysis, the Group has also utilise WWF Risk Filter Suite to assess the baseline risk levels associated with extreme heat and strong wind. According to the analysis of the Group, around 40% of the Group's projects are situated in regions with a very high extreme heat risk, experiencing a daily maximum Wet Bulb Globe Temperature (WBGT) of 32°C within a 5-year return period. Additionally, more than 80% of the projects are located in areas with very high strong wind risk, and are expected to encounter maximum wind speeds exceeding 120 mph in a 50-year return period.

Therefore, as part of its enhanced risk assessment strategy, the Group has recently expanded its focus to conduct a deeper analysis of other climate-related risks.

其他實體風險

除氣候情境分析外,本集團還運用WWF的風險篩檢工具來評估與極端高溫和強風相關的基準線風險水平。根據本集團的分析,約有40%的項目位於存在極高極端高溫風險的區域,可能在5年重現期內遭遇每日最高達到32°C的濕黑球溫度(Wet Bulb Globe Temperature,WBGT)。此外,超過80%的項目位於極高強風風險的區域,預計在50年重現期內會遇到最大風速超過120英里/小時的強風。

因此,作為其增強風險評估策略的一部分,該群體最近擴大了其關注範圍,進行了對其 他與氣候有關的風險的深入分析。

Physical Risks 實體風險	Direct Impacts on the Group's Operations and Finances 對本集團營運及財務的直接影響	Indirect Impacts on Value Chain 對供應鏈的間接影響	Strategic and Financial Planning Responses 策略和財務規劃回應
Extreme Heat 極端高溫	 Health risks to employees due to heat stress at workplaces. 員工在工作場所因高溫而面臨的健康風險。 Negative impacts from unpleasant odours and increased cooling demands caused by increased temperatures. 氣溫上升所導致的異味及冷卻需求增加所帶來的負面影響。 Breeding of mosquitoes and bacteria. 蚊蟲和細菌滋生。 	 Accelerate the decay of organic matter and affect waste water collection systems. 加速有機物分解,干擾污水收集系統。 Higher material performance and heat resistance requirements for waste water treatment chemicals, filtration media, pipes, and equipment. 對用於污水處理的化學品、過濾介質、管道及設備的材料性能和耐熱要求提高。 	 Infrastructure upgrades for heat resilience. 提高基礎設施的耐熱韌性。 Promote water conservation and efficiency. 促進水資源保護及提高用水效率。 Diversify water sources for sustainability. 實現水源多元化以保證可持續發展。 Collaborate with upstream suppliers to improve resilience. 與上游供應商合作以提高韌性。

Physical Risks 實體風險	Direct Impacts on the Group's Operations and Finances 對本集團營運及財務的直接影響	Indirect Impacts on Value Chain 對供應鏈的間接影響	Strategic and Financial Planning Responses 策略和財務規劃回應
Strong Winds 強風	 Buildings and facilities (including photovoltaic panels) damaged by strong winds. 建築物和設施 (包括光伏電池板) 受強風損壞。 Materials stored outdoors being blown away by wind, causing damage and polluting the surroundings. 戶外存放的材料被風吹走導致破壞,並污染周圍環境。 Increased health and safety risks to employees, particularly when working at height. 員工面臨的健康和安全風險增加,尤其在高空作業時。 Project revenue affected due to operational disruptions or delays (e.g. unscheduled shutdown of facilities). 由於運營中斷或延誤 (例如設施的非計劃性關閉),項目收入受到影響。 Power outage due to damage of power supply facilities (including both on-site and/or grid infrastructures). 由於電力供應設施損壞 (包括現場和/或電網基礎設施)導致停電。 	across water distribution, waste water collection, and sludge management processes. 供水、污水收集及污泥管理等的運輸過程受到影響。 Strong wind can overwhelm waste water systems, causing infrastructure damage. 強風可能導致污水系統不堪重負,引發基礎設施損壞。	 Resilience-focused planning to mitigate the impact of transportation disruption and infrastructure damage. 針對交通中斷和基礎設施損壞的問題,制定相應的韌性規劃。 Allocating funds for repairs, maintenance, and infrastructure upgrades. 分配資金用於修復、維護和基礎設施升級。 Developing emergency response protocols and allocating resources accordingly. 制定應急反應機制,並分配相應資源。
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(由於季節降兩人主要的學也,專致冬更加潮濕、降雪與少,更要更更的較早)	 Changes to the hydrological conditions of project sites. 項目所在地水文條件的變化。 Additional environmental stress on site vegetation. 對場地植被造成額外環境壓力。 Increase in extreme rainfall events, leading to higher risks of waste water bypasses. 極端降雨事件增加,導致污水繞流排放的風險加劇。 Decrease in total rainfall amount will lead to an increase in pollutant concentrations in waste water, which would lead to influent quality exceeding designed values. 總降雨量的減少將導致污水濃度上升,為污水處理系統帶來沉重負擔導致進水水質超過設計值。 	 Reduction in water supply during dry seasons. 旱季供水減少。 Disruption to transportation across water distribution, waste water collection, and sludge management processes. 供水、污水收集及污泥管理等的運輸過程受到影響。 Affect sludge processing for bricks and fertilisers due to moisture content and waste water volumes. 由於水分合量和污水總量變化,將污泥轉化為磚塊和肥料的過程受到影響。 	 Assess and monitor water availability and quality to adapt to changing precipitation patterns. iff Am Export Am Ex

Note: 附註:

- (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.
- 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。

Mitigation Measures for Physical Risks

As mentioned above, the Group has implemented a series of targeted measures in response to the major physical risks. In order to further enhance its flexibility and resilience against climate change, Everbright Water has launched a series of additional policies and plans to prevent, preempt, and prepare for such risks.

1. Emergency Response

The Group has formulated countermeasures for various extreme weather events such as rainstorms. floods, typhoons, thunderstorms and sandstorms. These measures are designed to improve the mobility, flexibility and resilience of its team. In response to flood seasons, the Group has released several notices, including Notice on Strengthening Work Safety in Labour Day Holiday, Notice on Commencing "Safety Production" Month", Notice on Safe Management of Production Safety during Flood Seasons and under Catastrophic Weather Conditions, Notice on Management of Production Safety during Adverse Weather, Notice on Work Measures to Prepare for Strong Wind, Rainstorm, Thunderstorm and Lightning, Crisis Management Plan, Contingency Plans for Work Safety and Accidents (Comprehensive), Contingency Plans for Floods, among others. The Group actively implements necessary measures in advance, so as to ensure the health and safety of its employees, protect the Group's assets, and minimise losses.

At the project level, in order to ensure safe operation at all times, all project companies are required to conduct regular reviews on their protection measures against adverse weather, and implement measures to safeguard their communication, logistics support, and emergency supplies. A few days prior to the arrival of an anticipated extreme weather event, all relevant projects' companies shall deploy their contingency plans in advance, including stocking up on emergency supplies, strengthening backup power systems, and enhancing information exchange and communication between the frontline emergency response teams.

實體風險的緩解措施

如上文所述,本集團已就個別重大實體風險 作出針對性的應對措施。為了進一步提升本 集團於氣候變化下的靈活應變和抗禦能力, 光大水務推出了一系列輔助性政策與計劃, 協助本集團未雨綢繆、防患於未然。

1. 應急反應

面對極端天氣事件(如暴雨、洪水、颱 風、雷暴、沙塵暴等) 的多變多樣性, 本集團為各類突發事件制定了應對 措施,期望提高團隊機動性、靈活性 及抗逆力。針對汛期間的極端天氣事 件,本集團制定並發佈了如下措施: 《關於加強「五一」假期安全生產工作 的通知》、《關於展開「安全生產月」活 動的通知》、《關於認真做好汛期及災 害性天氣安全生產管理工作的通知》、 《關於加強災害性天氣期間安全生產 管理工作的通知》、《關於做好暴雨雷 電大風等惡劣天氣防範應對工作的通 知》、《危機管理計劃》、《安全生產事故 (綜合)應急預案》、《防汛應急預案》 等。本集團積極提前部署,全力確保 員工身體健康、資產安全無恙,盡可 能減少損失。

在項目層面,所有項目公司定期檢測針對惡劣天氣的保護措施及實行通信、物流、應急物資保障工作,以確保時刻安全運行。所有相關的項目公司在預計發生極端天氣事件前幾天,已額外提早部署應急準備工作,包括儲備應急物資、加強後備電源、進一步加強前線應急成員單位的資訊交流工作聯繫等。

The Group also carried out specific investigations and assessments on potential hazards to ensure that adequate precautionary measures are in place. Furthermore, it has conducted various emergency preparedness drills to improve staff capabilities in accident prevention and response. The Group also conducted on-site contingency planning and emergency drills for holders of key positions and at certain key locations, as well as preliminary practical and operational emergency response drills especially for frontliners. In particular, the Group conducts emergency drills for chemical leakage accidents and sets up emergency rescue teams to improve employees' vigilance and safety awareness of hazardous chemicals and ensure safe production.

本集團亦專門調查和評估潛在危害,以確保充分採取預防措施。此外,本集團展開了應急準備演習以此提高對重點場所和重點崗位,展開現場處對重點場所和重點崗位應急處置演練活式。 特別是車間班組一線員工操作式、實戰化的初期應急處置演練,提高應急處置能力。

2. Robust Preventive Maintenance Programme

To ensure the uninterrupted operation of infrastructures in the face of climate change, the Group has implemented a robust preventive maintenance plan. Regular and frequent maintenance is performed on key systems to reduce the variation of failures and extend uptime. In particular, to enhance the power generation efficiency and ensure safe operation in photovoltaic management, the Group conducts regular maintenance and cleansing of photovoltaic systems. As a result, the programme allows project companies to address issues before they arise.

3. Climate-Related Risk Insurance

In preparation for climate-related natural disasters, the Group has procured insurance for itself and its employees against damages incurred to projects, interruption in operations, health impact to workers, etc. Corresponding climate-related natural hazards include lightning, rainstorms, floods, storms, tornadoes, hail, typhoons, hurricanes, dust storms, blizzards, landslides, mudslides and other natural disasters.

Exploring Climate Change Risk Adaptation Measures for Project Lifecycle

The long-term challenges posed by climate change are dynamic and complex. In response, the Group maintains a proactive stance in preparing for uncertainties, and to actively mitigate both physical and transition risks. To achieve this, the Group has introduced a comprehensive process for exploratory work by using the life cycle concept to examine each project in its entirety in all stages, in order to fully identify potential risks, and to develop and implement strategies in response to climate change. Focus areas include: early planning, design, construction and operation and management.

2. 健全的預防性維修計劃

為確保在氣候變化的影響下基礎設施的操作性能維持在相同範圍內,本集團實施了健全的預防性維修計劃,針 對關鍵系統進行定期、頻繁的維修活動,以減少故障的變化並延長正常運行時間。該程序使項目公司可以在問題出現之前即有所應對。

3. 氣候相關風險的保險

應對氣候相關的自然災害,本集團已為項目損害、運營中斷、員工健康受損等潛在問題購入保險,確保意外事件發生後,本集團及員工可以獲得相應賠償和保障。氣候相關的自然災害包括: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、泥石流和其他自然災害。

探索項目生命週期的氣候變化風險應對措施

氣候變化帶來的長期挑戰多變而複雜。因此,本集團會繼續以積極的態度未雨綢繆,全力減輕實體和轉型風險。本集團引入了探索工作的整套流程,以生命週期的概念完整審視每個項目的各個階段,務求充分識別潛在風險,從而主動採取策略,從容應對氣候變化。關注重點包括:早期規劃、設計、施工和運營及管理。



Renewing Site-Selection

更新選址考量

- To incorporate climate factors when selecting project sites.
 將氣候因素納入項目選址過程。
- To take the hydrometeorological parameters and the risk of extreme weather into account when selecting potential site locations, and avoid choosing locations with unfavourable conditions wherever possible

參照該地水文氣象參數與極端天氣風險,盡可能避免選擇條件不利的地點。

Green Building/Infrastructure Development 綠色建築/基礎設施開發

- To consider the building life cycle and estimate climate-related impacts.
 把建築物生命週期納入考量,並預估氣候相關的影響。
- To comply with green building certification regulations during planning.
 以符合綠色建築物認證為規劃目標。
- To adopt advanced technology (such as intelligent real-time energy monitoring system) to control the energy performance of existing buildings, so as to control and reduce greenhouse gas emissions.

採用先進技術 (如智能實時能源監控系統) 管控現有建築物的能源績效,掌握並減少溫室氣體排放。



Drainage and Flood Prevention

防洪及排水設計

- To adopt a drainage design with high climate adaptability to enhance project flexibility and cope with different rainfall amounts and frequencies.
 採用氣候適應度高的排水設計,增強項目靈活性,協助應對不同的降雨量和降雨頻率。
- To install floodgates in flood-prone areas.
 在容易發生水災的區域安裝水閘。

Improve Performance of Equipment under High Temperatures 提高設備在高溫下的性能

• To introduce a thermodynamic research model to understand the long-term impact of high temperature and high humidity on project performance.
引入熱力學模型作出研究,了解高溫和高濕對於項目性能的長期影響。

Rainwater Harvesting

雨水收集

To increase rainwater-harvesting channels.
 增加可收集雨水的渠道。

Transportation Route

運輸路線

To reduce climate-related impacts on delivery of sludge and raw materials by emphasising "efficiency" in the transportation route planning.
 以效率為運輸路線規劃的大原則,盡可能減少氣候相關影響,避免其妨礙原材料與污泥的運輸需要。



Sustainable Construction

可持續施工

- To select suitable low-carbon materials for construction.
 選擇合適的低碳材料進行施工。
- To use biodiesel or electronic equipment in construction projects and equipment to reduce carbon emissions.

在建項目及設備中使用生物柴油或電動設備,減少碳排放。



Improve Flood Resilience of Operating Assets 提高運營資產的抗洪能力

 To review existing asset designs and operating models to identify and improve the flood prevention capability of buildings.
 審查現有的資產設計和運營模式,辨別並改善建築物的防洪能力。

Assessing Climate Resilience of Utilities 評估公用行業的氣候適應能力

- To maintain close communication with policy makers, reflect industry suggestions, and implement policy directions and indicators in a timely manner, so as to improve the climate adaptability of the public utilities.
 - 要提升公用行業的氣候適應能力,企業必須與政策管理者保持緊密溝通,適時反映業內建議及落實政策之方向與指標。
- To evaluate the Group's projects accordingly, eg. to seek for an adequate distribution and use of underground pipelines, and evaluate the legality and compliance of existing water control measures/projects.
 - 據此,本集團會為其項目作出評估,例如,探索地下管道的合理分佈與使用、衡量現行治水措施/項目的合法合規性。

Capacity Building 能力建設

 To conduct professional training for all employees to increase their environmental awareness and their understanding on potential climate impacts.
 為所有員工提供專業培訓,提升他們的環境意識,同時確保他們了解氣候的潛 在影響。

Supply Chain: Implementing Climatic Guidance for Procurement 供應鏈:實施以氣候變化為依據的採購指引

- Where feasible, to procure equipment or assets that are more in line with sustainable development according to standardised procurement guidelines and by considering the current and future climate conditions.
 - 在可行的情況下,把當前和將來的氣候條件納入考量,根據規範的採購指引選購更符合可持續發展的設備或資產。

Transition Risks

As the global green economic reform accelerates, governments and regulatory agencies around the world are progressively introducing policy measures to promote green and low-carbon transformation of different industries. While the Group is committed to achieving its carbon reduction target, it also faces new transition risks. For example, when introducing innovative green technology, these technologies may still lack a long track record of reliability and performance, creating uncertainties in business operations. In the meantime, investors and industrial peers are paying greater attention to climate change, carbon and pollution reduction, which creates transitional pressure to the Group. In light of these changes, the Group will actively formulate low-carbon transformation strategies and conduct greenhouse gas auditing and disclosure, so as to enhance its operational capabilities, bolster its green reputation, and seize climate opportunities.

Regarding the "Stated Policies Scenario" and the "Net Zero Emissions by 2050 Scenario", the following presents the Group's transition climate scenario analysis, including potential impacts and management approaches.

轉型風險

隨著全球綠色經濟改革步伐加快,各國政府 及監管機構都相繼推出更多政策措施,推動 各行業進行綠色低碳轉型。為實現減碳目 標,本集團亦因此面臨了新的轉型風險。例 如,在引入創新綠色科技時,該技術的續加 力和有效性或未經長時間驗證會相繼增加 力和有效性或未經長時間驗證會相繼增加 重視氣候變化議題,投資方以及業內競爭 重視氣候變化議題,投資方以及業內競爭 重視氣候變也 重視氣候變之 重視氣候轉型壓力。有鑒於此,本集團會繼續和 披露,鞏固本集團運營能力、提升綠色聲譽, 把握氣候機遇。

針對「既定政策情境」及「二零五零淨零排放 情境」,以下為本集團的轉型氣候情境風險 分析結果,包括潛在影響及管理方針。

Aspect 方面	Factor 因素	Rationale 原則	Stated Policies Scenario (STEPS) 既定政策情境 (STEPS)	Net Zero Emissions by 2050 Scenario (NZE) 二零五零淨零排放情境 (NZE)	Management Approaches 管理方針
Sector 行業	Underlying Sector Risk and Stigmatisation of Sector 潛在的產業風險與產業污名化	Carbon-intensive industries are at risk of being stigmatised due to its perceived negative impacts on the environment. 碳密集型產業由於對環境的負面影響而面臨污名化的風險。	Everbright Water primarily lies in the municipal water utilities sector, with minimal exposure to carbonintensive activities. 光大水務主要業務為市政水務,對碳密集型活動涉入較少。	Despite being an indispensable public utility company, the waste water treatment sector might still face some stigma due to its environmental discharge and sludge digestion processes. This is particularly relevant as environmental consciousness increases and the public's standards for identifying and scrutinising non-carbon-reducing industries may become more stringent. 儘管污水管理是不可或缺的可足是不可能是一定的方法。但是此时,但是可能是一定的方法。但是可能是一定的方法。但是一个人的一个人的一个人的一个人的一个人的一个人的一个人的一个人的一个人的一个人的	Enhance public education campaigns and boost transparency and accountability. 加強科普教育,提升透明度及完善問責機制。

Aspect 方面	Factor 因素	Rationale 原則	Stated Policies Scenario (STEPS) 既定政策情境 (STEPS)	Net Zero Emissions by 2050 Scenario (NZE) 二零五零淨零排放情境 (NZE)	Management Approaches 管理方針
Regulatory 監管	Carbon Pricing Mechanisms 碳定價機制	The Paris Agreement 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. 《巴黎協定》中的國家自主 貢獻 (NDC) 標誌著相關國 家致力於實施減少碳排放 的措施,這將使得碳定價 或碳稅等法規更為嚴格。	China's national emissions trading scheme (ETS) currently only covers coaland gas-fired power plants, and will gradually expand to other industrial sectors and aviation. Water utilities are not on the agenda to be listed into the ETS. However, under Implementation Opinions on Promoting the Synergistic Effects of Pollution Reduction and Carbon Emissions during Waste Water Treatment, waste water treatment companies are encouraged to purchase green electricity certificates to offset their carbon emissions. 中國的國家排放交易計畫 (ETS) 目前僅涵蓋燃煤和燃氣發電廠,並將逐步擴展到其他工業部門和航空業。目前水務公司並未對入碳排放交易計畫(ETS) 目前使强弱性多步擴展到其他工業部門和航空業。目前水務局所的議程。不過,《關於推進方水處理違污降破協同增效的實施意見》鼓勵污水處理企業購買綠證以抵銷碳排放。	Transformation of the entire electricity sector is central to achieving netzero emissions in 2050. Although NZE does not rely on offsetting of carbon credits as a means to decarbonise, the carbon pricing mechanism would still be active to encourage investment for decarbonisation. It is foreseeable that Everbright Water will have to gradually purchase carbon credits and/or green electricity certificates to offset its entire GHG emissions portfolio in the long term. 推動全電力產業轉型對於至關重要。儘管NZE不依賴碳信用額抵資機制依然將積極鼓勵脫碳投資。可以預見的是,沒長遠來看,光大水務解逐时減緩緩緩,可以預見的是,沒長遠來看,光大水務解和減緩緩緩,	Ensure adequate financial allocation for potential relevant expenses during the budget planning process. 確保在預算規劃過程中為潛在的相關費用分配足額的財務撥款。
Regulatory 監管	Enhanced Emissions-Reporting Obligations 排放報告義務日益強化	With applicable mandatory GHG emissions and climate reporting regulations, companies will face higher operating costs such as higher compliance costs. 根據護用的強制性溫室氣體排放和氣候報告法規,公司將面臨更高的營運成本,例如更高的合規成本。	Everbright Water is subject to HKEX and SGX climate reporting obligations. Apart from the need to report climate strategies and assessment results, the tightened GHG emissions reporting requirements would be extended to cover all scope 3 emissions, covering both upstream and downstream activities. Everbright Water would have to allocate additional resources in data collection and estimating GHG emissions with verification by qualified third parties. 光大水務須養守港交所和新交所的氣候報略和室氣體排放報告範圍三排放,涵素務必須分配置三排放,涵素務必須分配置一點,必可能與數據並估算不可能可能可能可能可能可能可能可能可能可能可能可能可能可能可能可能可能可能可能	Anticipated advancements in the methodology for calculating scope 3 emissions and stricter climate reporting requirements are expected to apply throughout the entire value chain, demanding Everbright Water to allocate additional human and financial resources to develop and maintain a more robust system and subscribe to proxies for collecting higher quality data for calculation and compliance. 预期中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須分配額外的人力和財力資源來開發和維護更強大的體系,並訂閱代理以收集更高質量的排放數據,用於計算與合規。	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 other expenses in line with long-term market trends. 分配足額預算以聘用覆蓋範圍更廣的ESG諮詢服務,將購買代理數據、安裝處測器/儀表、進行實驗室測試以及符合長期市場趨勢的其他費用的潛在需要納入考慮。

Aspect 方面	Factor 因素	Rationale 原則	Stated Policies Scenario (STEPS) 既定政策情境 (STEPS)	Net Zero Emissions by 2050 Scenario (NZE) 二零五零淨零排放情境 (NZE)	Management Approaches 管理方針
Regulatory 監管	Exposure to Litigation 訴訟風險	Climate-related litigation (due to ever tightened standards and evolving claim attitude of stakeholders) can expose a company to potential fines and liabilities. 氣候相關訴訟 (由於標準不斷收緊,及利益相關者變化中的索賠態度)可能會使公司面臨潛在的罰款和責任。	There is no ongoing or previous climate-related litigation cases on the project companies of Everbright Water. Under the current prevailing policies in China, waste water management is not deemed as a carbon-intensive sector and is not under close regulatory scrutiny. Nevertheless, Everbright Water will upkeep a high standard of integrity and professionalism in disclosing its carbon emissions and avoidance in a transparent manner. 目前,光大水務下屬項目公司並無進行中國現行中國現行中國現行中國現行中國現行中國現行中國現行中國現行中國現行中國現	Everbright Water's project companies have not been involved in any climate-related litigation cases, neither currently nor in the past. However, under NZE, there is a chance that waste water treatment plants, being energy-consuming public utilities infrastructures, may be subject to greater regulatory and public oversight. 目前:光大水務下屬項目公司並無進行中或過往的氣候相關訴訟案件。不過,在NZE下,廢水處理廠作為耗能的公共市政設施,可能會受到更嚴格的監管和公眾監督。	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。
Regulatory 監管	Mandates on and Regulation of Existing Products and Services 對現有產品和服務的授權及監管	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. 對於業務受現行監管措施高度影響的碳密集型企業而言,鑒於國內集人變化監管發展的流變,其可能面臨成本增加或收入減少的情況。	While there is no current climate-related mandates specific to the water industry in China, waste water discharge standards in China are quite volatile, with different provinces enacting and constantly tightening their own discharge standards, which also leads to higher energy consumption and more operational carbon for Everbright Water. 雖然中國目前沒有專門針對水務產業的氣候變化相關法規,但中國的污水排放標準尚在制定並持續收累本省的排放標準,這也可能導致光大水多更適的能源消耗和更多的營運時的碳排放。	Under NZE, 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, full coverage of waste water treatment tanks to curb fugitive GHG emissions, mandate to use low-carbon materials and chemical supplies, and mandatory usage of renewable energy sources such as solar and wind. 在NZE下,國際能源總署預計到二零五将由應。由于中華的能源供應將自用的的能源供應所可能會到的能源供應所可能會到的碳排放上限、全面覆蓋污水處理池以遏制無組織的或排放上限、全面覆蓋污水處理池以遏制無組織的企業和,以多數的企業,以多數的企業,以多數的企業,以多數的企業,以多數的企業,以表现的企業,以表现的企業,以表现的企業,以表现的企業,以表现的企業,以表现的企業,以表现的企業,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以表现的企业,以及企业,以及企业,以及企业,以及企业,以及企业,以及企业,以及企业,以及	Explore and implement initiatives to install photovoltaics and utilise biogas released from sludge digestion, as well as exploring the possibility of increasingly converting to green electricity consumption. 探索並實施安裝廠內光伏發電和利用污泥消化釋放的沼氣等學措,並探索增加綠色電力消耗的可能性。

Aspect 方面	Factor 因素	Rationale 原則	Stated Policies Scenario (STEPS) 既定政策情境 (STEPS)	Net Zero Emissions by 2050 Scenario (NZE) 二零五零淨零排放情境 (NZE)	Management Approaches 管理方針
Technology 技術	Transitioning to Lower Emissions Technology 向低排放技術過渡	Companies are experiencing the market trend towards green production and transportation where various lower emissions options are available. These include low-carbon operation mode, improved energy efficiency, use of renewable energy, switch to cleaner fuels, adoption of electric vehicles, etc. If a company fails to transition to lower emissions options to meet their decarbonisation target (if such a target exists), its market competitiveness will inevitably be affected under the realm of climate change. 公司面對綠色生產和運輸的市場趨勢,有多種較低排放的選擇,包括低碳率、使用再生能源效率、使用再生能源效率(使用再生能源),如果全業未能過渡到軟低排放方案以實現其脫碳目標(若該目標存,其市場競爭力將不可避免地受到影響。	Recent policy guidelines have been issued to encourage water utilities companies to adopt lower emissions technologies, and Everbright Water 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励、水务公司採用低排放技術。光大水務也與同行一道,率先試驗和實施這些措施和技術,展現了積極主動的態度。	Under the ambition to transition towards net zero emissions, Everbright Water 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. However, the energy-consuming nature of the waste water treatment business might require extra decarbonisation efforts in construction and operation, even though the effectiveness of such efforts may be limited. 在向淨零排放轉型的雄心壯志下,光大水務將相和空,需要對碳減排回經濟。不可以表现,更頻繁,更嚴格學光才水務在理過稅的發發力,儘管學光水素在建設和運營可以發展的發發力,儘管學光水素在建設和運營可以發展的發發力,	Enhance adoption of lower emissions technologies in company projects, such as solar panels and other intelligent water management systems. 在公司項目中加強採用較低排放技術,例如太陽能光伏發電及其他智慧水管理系統。

Aspect 方面	Factor 因素	Rationale 原則	Stated Policies Scenario (STEPS) 既定政策情境 (STEPS)	Net Zero Emissions by 2050 Scenario (NZE) 二零五零淨零排放情境 (NZE)	Management Approaches 管理方針
Technology 技術	Investment in Technological Breakthroughs 投資技術突破	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. 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不成功的風險。	For Everbright Water, the upcoming transformative factor would be the adoption of biological treatment approaches, allowing for a reduced reliance on chemicals and consequently decreasing upstream greenhouse gas (GHG) emissions. Another potential game changer could be the implementation of artificial intelligence (AI), enabling 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. 對於光大水務來說,即將對來的變更方質的氣氣將用生物處理方質的氣氣將用生物處理方質的氣氣操脈形則將到來的變更方數。如果你就是一個可能,但是一個一個一個一個一個一個一個一個一個一個一個一個一個一個一個一個一個一個一個	Under the rapid change of regulatory and market landscapes under the realm of NZE, Everbright Water 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 microbial fuel cells and carbon capture, utilisation and storage (CCUS) will have to be adopted prior to their maturation. 在NZE下,監管和市場格局快速變化,光大水務可能需要涉足新興技術,盡全力抑制碳排放。依備獲、利用和儲存(CCUS)等獲擇有限的領域尤為如此,須在新技術成熟前採用。	Enhance investment in relevant R&D as well as industry-academia collaboration, leading to the adoption of big-data based intelligent water management systems, as well as the usage of drones for water monitoring. 加強相關研發投入及產學合作,推廣基於大數據的智慧水務系統,及使用無人機進行水務監測。
Market & Reputation 市場及聲譽	Increased Cost of Raw Materials 原料成本增加	The fluctuations in the price of raw materials and fuel can be caused by climate change. Projects that depend significantly on such materials will therefore be exposed to risks of higher production costs in the future. 氣候變遷可能導致原料和燃料價格波動。因此,嚴重依賴此類材料的項目未來將面臨生產成本上升的風險。	Being a water utilities company, Everbright Water heavily relies on chemicals as its primary raw materials. However, the prices of these chemicals are expected to rise due to escalating costs associated with the demand for decarbonisation throughout the supply chain. 作為一家水務公司,光大水務依賴化學品作為其主要原料。然而求與政本不斷上升,這些化學品的價格預計將會上漲。	The net zero target will result in an overwhelming call for use of clean production mechanisms and renewable energies throughout the supply and transportation chain, which will be translated into significant cost implications to the construction and operation of Everbright Water's projects.	Enhance budgetary preparedness for potential supply chain disruptions and increased costs of energy and raw materials such as chemicals. 做好預算準備,應對潛在的供應鏈中斷以及能源和化學品等原材料成本增加。

Overall Risk / Opportunity

整體風險/機會

Legend 圖例

High Risk 高風險	Medium Risk 中風險	Low Risk 低風險	Neutral 中性		.ow Opportu 氐機會	Medium Opportunity 中機會	High Opportunity 高機會
Aspect 方面	Factor 因素			既定	d Policies So (STEPS) E政策情境 (S 030 零年	2050 Sc 二零五零淨 2030	Emissions by cenario (NZE) 零排放情境 (NZE) 2050 二零五零年
Sector 行業	Underlying Sector Risk ar 潛在的產業風險與產業》	nd Stigmatisation of Sector 亏名化					
Regulatory 法規	Carbon Pricing Mechanis 碳定價機制 Enhanced Emissions-Rep 排放報告義務日益強化 Exposure to Litigation 訴訟風險 Mandates on and Regula 對現有產品和服務的授	orting Obligations tion of Existing Products ar	nd Services				
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 M 原料成本增加	aterials					

Climate-Related Opportunities

氣候相關機遇

Aspect 方面	Major Opportunities 主要機遇	Potential Financial and/or Operational Opportunities 潛在財務及/或運營機遇	Management Approach 管理方針
Corporate Reputation 企業商譽	ESG investments ESG投資 Climate change brings about ESG investment opportunities. As investors become increasingly environmentally aware, ESG performance has become one of the most important considerations during investments. 氣候變化帶來ESG方面的投資機遇。隨著投資者綠色意識增強,企業的ESG績效躍升為重要的投資考慮之一。	 Increase in asset value. 資產價值增加。 Enhance the Group's reputation and competitiveness. 本集團聲譽及競爭地位提升。 	 To adopt international best practice standards in sustainability reporting. 在可持續報告中採用國際最佳實踐標準。 To increase data transparency and disclose more detailed ESG data. 增加資料透明度,披露更詳盡ESG相關數據。 To integrate ESG into the Group's operational considerations. 把ESG納入本集團的運營考慮。 To capitalise on green financing should opportunities arise. 及時把握出現的綠色融資機會。

Potential Financial and/or Aspect **Major Opportunities Operational Opportunities Management Approach** 方面 主要機遇 潛在財務及/或運營機遇 管理方針 Increased demand for sustainable Sustainable waste water treatment **Market Change** To continue to uphold Everbright solutions water governance solutions. Water's core business of Water 市場轉變 可持續的污水處理方案 對可持續水環境治理方案的需求 Environment treatment. The 大增。 Group will strengthen its efforts In the context of climate change, in technology R&D to unleash the sustainable water environment . Enhance the Group's reputation synergistic effect of "Reducing governance solutions have become one of and market standing. Pollution and Carbon Emissions" in the main demands of the market. 本集團聲譽及市場地位提升。 its water environment management 在氣候變化的大環境下,可持續的水環 projects 水環境治理將繼續作為光大水務的 境治理方案成為市場的主要需求之一 核心業務。本集團將會加強技術研 發,以發揮其在水環境治理項目中 At just the right time, Everbright Water's business is aiming at reducing pollution 「減污降碳」的協同效應。 and carbon, turning waste into energy, and intelligent water. The Group's governance promotes comprehensive water resources governance, which is in line with market trends. 適逢其會,光大水務的業務正以降污減 碳、轉廢為能、智慧水務為目標。本集 團治理推動綜合水資源治理,符合市場 捣埶。 **Changing Customer Behaviour Market Change** As the core of Everbright Water's Seize the opportunity to bolster water 市場轉變 客戶行為模式改變 operations, water treatment safety, and remain steadfast to our represents an essential public commitment to provide clean water If the services are elastic and there are utility that possesses an inelastic supplies to our clients. competitors in the market, clients have nature, making it irreplaceable. 把握加強水安全的機會, 並堅定不 the option to choose an alternative Consequently, as the issue of water 移地履行為客戶提供清潔水供應的 scarcity intensifies amidst global 承諾。 provider for the same services. It is probable for clients to lean towards warming, the demand for affordable services that are more climate friendly. reusable water will rise, presenting 如果服務具有彈性且市場上有競爭對 Everbright Water with increased 手,客戶可以選擇提供相同服務的替代 opportunities - for example, in the 提供者,而客戶可能會傾向於更氣候友 reusable water sector which offers 善的服務。 an additional source of clean water for clients. 光大水務的核心業務為污水處 理,是一項重要的公共設施,具有 非彈性的特點,因此不可替代。 因此, 隨著全球暖化導致水資源 短缺問題加劇,對平價回用水的 需求將會增加,這將為光大水務 帶來了更多的機會一例如回用水 領域為客戶提供了額外的清潔水 來源。 Corporate Alignment of Company Business with • The waste water treatment Remain committed to the trend of Reputation Clean and Smart Cities industry's environmental benefits market expectations and contribute 公司業務與清潔城市和智慧城市的結合 企業信譽 are in line with the current policy to the building of a smart and resilient

The water sector is not subject to public scrutiny under climate change in general. Instead, its role in ensuring clean water supply and effective waste water treatment is an inherent means of climate resilience, hence would be supported by

一般而言,水務部門在氣候變遷下受公 眾審視壓力較小。相反,由於它在確保清 潔水供應和有效廢水處理方面的作用是 氣候適應力的必由之路,因此將受到公 眾的支持。

- objective of creating a clean and smart city, emphasising resource circularity and energy conservation in the water sector. 污水處理產業的環境效益符合 目前創造清潔智慧城市、水務領 域強調資源循環和節能的政策 日標。

緊扣市場預期趨勢,為建立智慧城 市、韌性城市貢獻力量。

Relevant Metrics

The Group has formulated a greenhouse gas accounting framework that aligns with the CDM methodology under the United Nations Framework Convention on Climate Change, the GHG Protocol Corporate Accounting and Reporting Standard, and ISO 14064-1, and calculates the greenhouse gas emissions and avoidance of each project accordingly. The Group has commissioned the Hong Kong Quality Assurance Agency as a third-party certification and audit agency to conduct independent audit and verification on the Group's greenhouse gas inventory during the Reporting Period in accordance with ISO14064-1. The relevant verification statement is appended to this Report. This demonstrates that Everbright Water is committed to its responsibility of managing, quantifying and reporting greenhouse gas emissions, and has taken an important step towards promoting a low-carbon economy. In order to further improve its greenhouse gas accounting framework, the Group is establishing a Scope 3 greenhouse gas emission calculation framework, so as to establish a more comprehensive role for environmental performance in the corporate value chain.

As per the TCFD Recommendations, the Group is actively looking into comprehensively evaluating the baseline fuel and electricity consumption of its assets, such that it can look for opportunities to set decarbonisation goals in the longer term.

Data Calculation Method

The Group has calculated its greenhouse gas emissions and avoidance by referring to the CDM methodologies *AM0080*: *Mitigation of Greenhouse Gases Emissions with Treatment of Wastewater in Aerobic Wastewater Treatment Plants (Version 1.0)*. In order to comply with the latest accounting standards at home and abroad, the Group further revised the calculation methods and updated the emission factors quoted in the calculations, in accordance with the *2006 IPCC Guidelines for National Greenhouse Gas Inventories (2019 Revision)*. Additionally, greenhouse gas emissions figures for air travel were calculated using the International Civil Aviation Organization ("**ICAO**") Carbon Emissions Calculator.

相關指標

按照TCFD建議,本集團正在積極研究對資產的基準燃料和電力消耗進行全面評估,以便尋找長期內設定減碳目標的機會。

數據計算方法

本集團已參照CDM方法《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)》計算出溫室氣體的排放及避免量。為貼合國內外最新的核算標準,本集團進一步按照《2006年IPCC國家溫室氣體清單指南2019修訂版》修訂計算方法及更新計算內所引用的排放因子。另外,飛機差旅的溫室氣體排放數字為國際民航組織(「ICAO」)的碳排放計算器計算而得。

Greenhouse Gas Avoidance

To summarise the Group's achievements in low-carbon transition, the Group also calculated the amount of greenhouse gas avoidance of its operating projects. The Group achieves greenhouse gas avoidance mainly through the use of renewable energy, waste water nitrogen removal treatment process, and facility greenery. The relevant calculation methods are as follows:

Renewable Energy

The Group has installed photovoltaic power generation facilities in its plants during the Reporting Period. The Group adopts the CDM methodology, estimating greenhouse gas emissions from renewable energy and comparing it against equivalent greenhouse gas emissions from fossil fuel power plants, to calculate the amount of carbon dioxide emissions avoided by the Group's operations.

Nitrogen Removal Through Waste Water Treatment Process

The nitrogen content in waste water plays a significant role in emission of nitrous oxide in the effluent. To mitigate the release of nitrous oxide in the effluent, the Group has implemented a waste water nitrogen removal treatment process to improve water quality and indirectly avoid greenhouse gas emissions. According to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2019 Revision), the Group estimates and compares the nitrous oxide emissions of treated (nitrogen removal) and untreated waste water, then calculates the greenhouse gas emissions avoidance indirectly by treating waste water.

Greenery in the Facilities

In order to create a more comfortable and pleasant working environment, the Group actively promotes greenery, to enhance the employees' well-being. The Group has planted trees, flowers, shrubs and other plants in its project facilities, and calculated the number of trees planted in each project facility. The Group also calculated the amount of carbon dioxide avoidance achieved by greenery in its projects during the Reporting Period, based on the annual carbon dioxide absorption of each mature tree as published by the European Environment Agency.

溫室氣體避免

為總結本集團在低碳轉型方面的成果,本集 團亦計算了運營項目的溫室氣體避免量。本 集團主要透過利用可再生能源、污水除氮處 理工藝和廠內綠化來達到溫室氣體避免,相 關計算方法如下:

可再生能源

本集團於報告期內安裝有廠內光伏發電設施。本集團使用CDM的方法,估算和比較使用可再生能源及以化石燃料發電廠發電的溫室氣體排放量,從而計算本集團的運營所避免的二氧化碳排放量。

污水除氮處理工藝

污水的氮含量將影響出水的氧化亞氮排放量。因此,為了減少出水所釋放的氧化亞氮,本集團使用了污水除氮處理工藝改善水質,間接避免溫室氣體排放。本集團按照《2006年IPCC國家溫室氣體清單指南2019修訂版》,估算和比較經(除氮)處理及未經處理污水的氧化亞氮排放,再計算出經處理污水所間接避免的溫室氣體排放量。

廠內綠化

為帶來更舒適宜人的工作環境,本集團積極推動綠化工作,希望為環境和員工健康出一分力。本集團已於旗下項目廠內栽種樹木、花卉、灌叢等其他植物,並且統計了各個項目廠內所種植的樹木數量。本集團亦按照歐洲環境署公佈每棵成年樹木每年的二氧化碳吸取量,計算報告期內廠內綠化所達到的二氧化碳避免量。

Enhance Cities' Resilience Against Climate Change

As global climate change intensifies, the frequency and severity of various extreme weather events and natural disasters has been increasing accordingly. Phenomena such as heat waves, droughts, and floods have brought intermittent disruptions to cities, while long-term phenomena such as rising global temperatures and rising sea levels put cities at risk of flooding. All these significant developments reflect the broader changes to the various hydrological conditions, which threatens the stability of water, energy and food supply. In order to tackle this common challenge to society, the Group attaches great importance to climate change response policies and measures. The Group has incorporated climate change risks into the existing Risk Management System, aiming to formulate a more comprehensive emergency and natural disaster response plan to improve the resilience and recovery capabilities of its business operations.

Based on a holistic view for the water management industry, the Group acknowledges that the foundation of water resources management lies in river basin management that treats both the symptoms and root causes. Therefore, the Group provides comprehensive water environment management services, which encompasses raw water protection, municipal waste water treatment, industrial waste water treatment, waste water pipeline network construction, reusable water and sludge treatment and disposal projects. These projects help to alleviate the pressure on urban water supply, reduce harmful pollutants from the water source, and protect water bodies and terrestrial ecology. The Group has also established a system for surface runoff and flood control, and constructs projects based on the policy tenet of "pollution in the water, root cause on the shore", strengthening the city's resilience against floods, and contributing its wisdom and strength to the construction of sustainable cities and communities.

提升城市應對氣候變化的抗禦能力

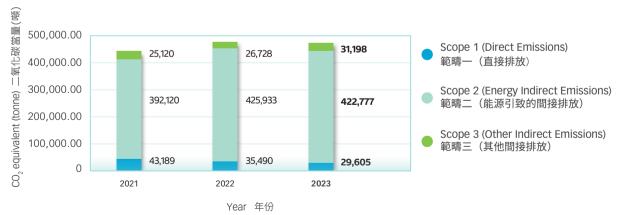
隨著全球氣候變化日趨嚴重,各類極端天氣事件和自然災害的發生頻率和嚴重程度都都來間歇性的打擊,而全球整體氣溫上升來間歇性的打擊,而全球整體氣溫上升來面上漲等長期現象更是為強味著獨別人類、這些變化的程度之大,可能威強之人,可能國人大可能國人大,可能國人大可能國人大,可能國人大大,不能源、食物三大資源的穩定供給。為更有過人類社會的共同挑戰,本集團已將氣道變化應對政策措施。本集團已將氣之之檢入現有的風險管理體系中,希望是人國險納入現有的風險管理體系中,希提高於經濟學的緊急與自然災害應變方案,提高業務運營韌性及恢復能力。

本著水務整全觀,本集團深明水資源治理的根本在於標本兼治的全流域治理。因此,透過推出水環境綜合治理服務,本集團開展了原水保護、市政污水處理、工業廢水處理、污水管網建設、中水回用及污泥處理處置與處置等,希望緩減城市供水壓力之餘,從應至實與條低有害污染物,保護水體和陸上生態。本集團亦建立了控制表面徑流和防洪排澇策統,以「污染在水裡、根源在岸上」的政策與路推進項目建設,加強城市應對水患的抗禦能力,並為建設可持續城市和社區貢獻智慧和力量。

In 2012. China introduced the modern concept of "Sponge City" rainwater management into water resources governance, hoping to emulate the natural water cycle in urban flood drainage systems and practicing the concept of "following the nature and adapting with flexibility". Henceforth, the idea of integrated flood control has become increasingly commonplace, prompting operators to take a more holistic approach by integrating the six guidelines of "seepage, stagnation, storage, purification, use, and drainage". The Group participated in various "Sponge City" projects, where it assisted in a series of surface runoff controls and ecological environment management processes, thereby helping cities to improve their abilities in absorption, infiltration, retention. release and purification of rainwater, strengthen urban waterlogging prevention and control, reduce pollution, and reuse rainwater. In particular, in response to Zhenjiang City's waterlogging problems such as flood disasters and early rain pollution, the Zhenjiang Sponge City Project has adopted green infrastructure to ensure that the City can still operate safely as usual, even when facing a once-in-50-year rainstorm. In 2021, the Zhenjiang Sponge City Project won an award as one of the top five projects in the UNECE "Building Back Better Infrastructure Award", and was showcased as one of the best "People-first" PPP projects at the UNECE 5th International PPP Forum. In 2023, the Group's operating projects avoided a total of 118,085 tonnes of carbon dioxide equivalent of greenhouse gas emissions.

二零一二年,中國把現代化雨水管理的概念 「海綿城市」引入水資源治理,寄望城市排 洪能夠模擬大自然水循環,達致「順應自然, 彈性適應」。因此,整合防洪管理的方式亦 越來越普及,在城市防洪排澇改造時,管理 者一般會參照「滲、滯、蓄、淨、用、排」六個 方針進行綜合考量。在參建的「海綿城市」項 目中,本集團協助建造了一系列控制表面徑 流和生態環境治理的工程, 銳意提升城市 吸納、蓄滲、緩釋和淨化雨水的能力,並加 強城市的內澇防治、污染削減及雨水再用。 當中鎮江海綿城市項目更活用了綠色基礎 設施,並針對洪澇災害和初雨污染等積水問 題作出應對,確保鎮江市在五十年一遇的暴 雨天氣之下仍能安全如常運作。在二零二一 年,該項目亦有幸參與聯合國歐經會「更 好重建」基礎設施獎項(Building Back Better Infrastructure Award)的評選該項目獲得了 五強的優異成績,並作為最佳「以人為本」 (People-first) PPP項目之一在聯合國歐經會 第五屆國際PPP論壇上進行案例展示。二零 二三年,本集團的運營項目共避免了118,085 噸二氧化碳當量排放。

GHG Emissions by Scope in 2023 二零二三年按範疇劃分的溫室氣體排放



Notes:

The calculation of greenhouse gas emissions from operating projects reference CDM methodology AM0080: Mitigation of Greenhouse Gases Emissions with Treatment of Wastewater Aerobic Wastewater Treatment Plants (Version 1.0), GHG Protocol Corporate Accounting and Reporting Standard, ISO 14064-1, and 2006 IPCC Guidelines for National Greenhouse Gas Inventories (2019 Revision).

- The calculation of scope 1 emissions includes fugitive methane emissions from all operating waste water treatment projects, nitrous oxide emissions from biological treatment process, and direct emissions released from the use of fuels.
- The calculation of scope 2 emissions includes the indirect emissions from purchased electricity consumption. The calculation boundary of scope 2 emissions covers all waste water treatment projects, reusable water projects, waste water source heat pump projects, sludge treatment and disposal projects water supply projects, leachate treatment project, and water environment management projects that are under construction or in operation.
- The calculation of scope 3 emissions includes fuel consumption for sludge transportation by third parties, indirect emissions from employees' air travels, and nitrous oxide released from effluent. Greenhouse gas emissions from air travel are calculated using International Civil Aviation Organization's Carbon Emissions Calculator.

To facilitate clients' greenhouse gas reporting, this Report aggregated all the greenhouse gas emissions caused by electricity consumption during waste water treatment, and broke it down as "emission factor" and "emission intensity factor" according to their potential impact. A breakdown of the figures is available in the "Key Figures" section of this Report.

附註:

- 本集團的溫室氣體計算參照CDM方法 《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)》、《溫室氣體核算 體系:企業核算與報告標準》及ISO 14064-1之 規範,並參考《2006年IPCC國家溫室氣體清單 指南2019修訂版》核准的計算方法。
- 範疇一的計算包括所有運營中的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及經直接使用燃料而產生的直接排放。
- 範疇二的計算為經使用外購電力而產生的間接排放。範疇二的計算邊界包括所有在建與運營中的污水處理、中水回用、污水源熱泵、污泥處理處置、供水、滲濾液處理項目與水環境治理項目。
- (4) 範疇三的計算包括第三方污泥運送的燃油消耗、員工飛機差旅的間接排放及從出水中釋放的氧化亞氮。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。

為了方便客戶進行報告,本報告綜合了處理污水時因電耗造成的溫室氣體排放,並根據其潛在影響統整出「排放因子」及「排放強度因子」。數據明細可在本報告的「主要數據」章節中獲得。

PROTECTING LUSH MOUNTAINS AND LUCID WATERS DEVOTING

TO FULFILLING GREEN COMMITMENTS

保護青山綠水 致力實踐綠色承諾



eing "Devoted to Ecology and Environment for a Beautiful China" is the corporate mission that Everbright Water has been adhering to for many years.

With the goal of promoting the construction of national ecological civilisation, the Group is committed to contributing to the sustainable development of cities and communities. Keeping pace with the times, Everbright Water relentlessly promotes innovation and technological development, and applies advanced waste water treatment technology to provide professional and comprehensive water management services. The Group has drawn up a blueprint for business development with environmental protection compliance, and continues to improve resource utilisation and environmental performance. These measures not only boost operational efficiency, but also help the Group enhance its resilience to climate change and achieve its vision of harmonious coexistence between projects and the natural environment.

The Group promotes industrial reform and structural upgrading by actively exploring innovative technologies, and utilises comprehensive inspection and management systems to ensure the green implementation of projects. Through utilising such systems, the Group can minimise the impact of harmful pollutants from waste water discharge on the ecosystem.

In addition to its green technological endeavours, the Group attaches great importance to establishing effective communication channels and understanding the local communities' views on various environmental impacts of the projects. Towards this end, the Group has established an effective grievance redress mechanism for each project to address the concerns and complaints of affected individuals regarding the environmental impacts of project activities. During the Reporting Period, the Group did not receive any complaints related to environmental impact and nuisance.

繁生態環境,築夢美麗中國」是 光大水務多年以來所堅守的企 業使命。

本集團以推動國家生態文明的建設為目標,致力為城市和社區的可持續發展作出貢獻。 光大水務與時並進,持續不懈地推動創科發展,應用先進的污水處理技術以提供專業卓越的水環境綜合治理服務。本集團從環保合規的角度勾畫企業發展藍圖,持續提高資源利用率及環保表現。這些舉措除了提升運營效益外,更可強化本集團應對氣候變化的韌性,實現項目與自然環境雙生共融的願景。

本集團積極探索創新科技以推進產業改革及 產業結構升級,以綜合檢測管理體系為項目 的綠色實施保駕護航。通過利用此類系統, 本集團得以最大限度減少有害污染物對生態 環境的污染。

除了在綠色科技方面的投入之外,本集團亦高度重視建立有效的溝通渠道並了解當地社區人士對項目所帶來環境影響的意見。為此,本集團各個項目均已設立有效的申訴機制,以處理受影響人士對項目活動環境影響的關注和投訴。報告期內,本集團並未收到任何與環境影響和滋擾相關的投訴。

Grievance Redress Procedures

To file a grievance against a particular project, the complainant can contact the person in charge via the dedicated hotline or email address, which is available in the domestic languages or dialects. Upon receipt of the complaint, the project company will review whether the grievance is relevant to Everbright Water's operations, and refer those that are irrelevant to other appropriate parties.

Once a grievance is deemed relevant, the complainant will receive a notice of grievance acceptance within 2 working days. The project company will then issue the first grievance resolution progress report within 12 working days, and update the report every 5 working days until the grievance is resolved or closed. The default maximum duration of the process is 40 days, but may be extended in exceptional circumstances based on the complexity of the issue.

The Group is deeply committed to protecting the water environment in China and will continue its efforts to promote pollution prevention and ecological protection. The Group strives to make greater contributions to improving the water environmental quality and better serving local communities.

申訴解決機制

若要對特定項目提出申訴,投訴人可以通過專用的熱線電話或電子郵件地址聯繫負責人,該熱線或電子郵件地址將提供當地語言或方言的服務。在接到申訴後,項目公司將審視申訴是否與光大水務的業務相關,並將與光大水務業務無關的申訴轉交給其他相應當事方。

一旦申訴被認定為相關,投訴人將在2個工作日內收到申訴收悉的通知。項目公司隨後將在12個工作日內發布第一份投訴解決進展報告,並每5個工作日更新一次報告,直到投訴得到解決或結案。該過程的默認最長持續時間為40天,但根據問題的複雜性,在特殊情況下可能會延長。

本集團深耕中國水環境領域,將繼續推進污染防治及生態環境的保護工作。本集團致力 為改善水生態系統及求更好地服務當地社群 作出更大貢獻。



Environmental Management Approach

Amidst increasing environmental challenges, the Group keeps pace with national policies by strictly adhering to the latest environmental laws and regulations, and actively responding to the government's initiatives to protect and manage the ecological environment. The Group updates its environmental management policy system continuously, and uses it as a guide to refine its work and responsibilities to ensure its sustainable development.

Policy and System

Under the leadership of a dedicated and competent management team, the Group upholds the sustainable development philosophy of "Taking Quality as the Top Mission and Keeping Efficiency as the Priority with Support by Scale" and strictly enforces the *Corporate Policies on Environmental Management* formulated by Everbright Water.

環境管理方針

面對日益嚴峻的環境挑戰,本集團緊跟國家步伐,嚴格遵循政府最新頒佈的環境法規, 積極響應政府號召,為生態環境治理與保護 添磚加瓦。本集團持續完善環境管理政策體 系,以指導細化工作內容及責任落實,確保 本集團的可持續發展。

政策及體系

在敬業精幹的管理團隊的帶領下,本集團 秉持「品質第一、效益優先、規模助力」的可 持續發展理念,嚴格遵守光大水務所訂立的 《環境管理企業政策》。

Corporate Policies on Environmental Management – These policies set up the important principles for the Group to implement environmental management and minimise the negative implications on the environment and natural resources. They also provide detailed guidance on the environmental impacts associated with the Group's operations.

環境管理企業政策—該等政策為本集團落實環境管理提供了重要綱領,爭取最大程度降低本集團 對環境及自然資源可能造成的負擔。該政策亦對本集團運營中所涉及的環境影響提供詳細指引。

Six key areas of the policies: 政策的六大核心:



Compliance 合規



Risk management and due diligence 風險管理和盡職調查



Environmental protection 環境保護



Health and safety 健康和安全



Supply chain management 供應商管理



Monitoring and communication 監測和溝通

Six key environmental guidelines of the policies: 政策提出的

六大環境指引:

Air and greenhouse gas emissions 廢氣及溫室氣體排放

Discharges into water bodies and land 向水及土地的排污

Generation and disposal of hazardous and nonhazardous waste 有害及無害廢棄物 的產生及處置

Energy 能源

Water resources 水資源 Use of raw materials 原材料使用

The Group is committed to taking the following actions to achieve sustainable development:

- Fully implementing the environmental management system
- Having all environmental protection policies approved by the Senior Management or the Board
- Developing a more comprehensive greenhouse gas audit framework
- Formulating robust carbon reduction plans
- Closely monitoring the Group's environmental performance
- Striving to protect the environment
- Striving to promote environmental awareness
- Effectively utilising natural resources and energy
- Striving to reduce the generation of wastes and emissions
- Actively engaging with various stakeholders regarding environmental protection topics
- Actively reporting on environmental matters

In order to standardise its project operations and integrate social responsibility into its business operations and daily management, the Group has established and implemented the ESHS Management System, Risk Management System and "Intelligent Water" Information Management System.

While continuously improving the ESHS Management System and Risk Management System, the Group has formulated the *Contractors ESHS Management Measures* to ensure that suppliers and contractors comply with its environmental management policies. These two management systems provide more comprehensive frameworks and regulations, reducing the probability of risk occurrences and ensuring the fulfilment of environmental and social responsibilities both upstream and downstream of the supply chain.

本集團為實踐可持續發展,承諾採取以下行動:

- 堅決落實環境管理系統
- 環保政策均由高級管理層或董事會許可
- 制定更加全面的溫室氣體審計框架
- 制定穩建的減碳計劃
- 嚴格監控本集團的環保表現
- 致力保護環境
- 致力推廣環保意識
- 有效地使用天然資源和能源
- 致力減少廢物及排放的產生
- 積極與各持份者討論環保相關議題
- 主動提交環境相關事項的報告

為規範本集團項目的經營實踐,將社會責任 落實到業務運營過程和企業日常管理當中, 本集團制定並實施了ESHS管理體系、風險管 理體系及「智慧水務」信息管理體系。

本集團持續優化ESHS管理體系和風險管理體系,並制定了《承包商ESHS管理標準》,以確保供應商和承包商遵守本集團的環境管理政策。這兩大管理體系為企業運作提供了全面的指導及規範,有效降低風險發生的概率,確保供應鏈上下游對環境社會責任的履行。

To align with the national aim of "Achieving Carbon Neutrality", the Group promotes the large-scale application of the "Intelligent Water" Information Management System, which automatically controls and systematically optimises the operation of the waste water treatment plants and their electricity usage. This enables the Group to conserve more energy and reduce emissions, creating a stronger technological foundation for the implementation of green strategies in the future.

本集團亦積極響應國家的「碳中和」政策,推動「智慧水務」信息管理系統的大規模應用,智慧把控和系統性優化污水處理廠的運行和用電耗能,進一步節能減排,為實施未來綠色戰略奠定科技基礎。

The Group upholds the business philosophy of green development, and considers environmental performance as a key indicator for assessing the operation of its projects. According to the Group's internal regulations, project companies with independent registration status are required to apply for three system management certificates, namely ISO 9001 Quality Management System, ISO 14001 Environmental Management System, and ISO 45001 Occupational Health and Safety Management Systems. In 2023, 59 of the 60 eligible project companies have achieved the three ISO certifications, an overall certification rate of 98%. In addition, the Group analyses and evaluates the projects' environmental and social risks prior to investing, and ensures all necessary permits and Environmental Impact Assessment approvals can be duly obtained prior to the commencement of construction.

本集團以綠色發展為經營理念,視環境表現為項目投運的一大重要評估指標。根據本集團內部規定,旗下所有具備獨立註冊地位的項目公司均應獲得三項體系管理證書,包括ISO 9001質量管理體系、ISO 14001環境管理體系及ISO 45001職業健康安全管理體系。二零二三年,符合條件的60個項目公司中已有59個獲得三項ISO體系管理證書,認證率等98%。此外,本集團在投資項目之前均會節查其環境及社會風險,並確保於施工前獲得所需的許可及環評報告批覆。

Environmental Management System Requirements 環境管理體系要求	Description 描述
Monitoring, measurement, analysis and evaluation 監督、量測、分析與評估	Monitor, measure, analyse and evaluate the environmental performance of projects. 監督、量測、分析與評估其環境績效。
Leadership and Commitment 領導與承諾	Top management should assess the effectiveness of the environmental management system, ensuring 1) the consistencies between existing environmental protection policies and the Group's overall strategic direction; 2) proper implementation and execution at the operation level; and 3) compliance with the environmental management system requirements and environmental awareness being effectively communicated and consistently prioritised. 最高管理層應評估環境管理系統的有效性,確保1) 現有環保政策與本集團的戰略方向一致,2) 在運營層面的正確實施和執行,以及3) 有效地傳達並始終如一地優先考慮遵守環境管理系統要求和環境意識。

Environmental Management System Requirements 環境管理體系要求	Description 描述
Internal and external audit 內部和外部審計	Conduct internal and external audits at planned intervals to determine its compliance with the the requirements of the environmental management system and international standards. 按規劃的時間間隔進行內部和外部審計,以判斷是否符合環境管理系統及國際標準的要求。
Training and awareness 培訓和認知	Provide appropriate training on environmental management systems to employees, so that they can thoroughly understand the Group's environmental policies and the ways to avoid potential environmental impacts associated with their work. 為員工提供適當的環境管理系統相關培訓,讓員工透徹了解本集團的環境政策,以及避免其工作對環境造成影響的方法。
Remedial actions 矯正措施	Take appropriate actions against non-compliance based on the severity of environmental damage. 針對不合規情況並根據對環境破壞的嚴重程度採取適當的行動。
Roles and responsibilities 角色和職責	Clarify the respective roles and responsibilities within the environmental management system. 釐清環境管理系統內各自的角色和職責。
Legal register and environmental impact register 法律法規登記冊和環境影響登記冊	Clearly define, maintain and regularly update all applicable laws, regulations and other requirements. Prepare and update the environmental impact register based on the Group's activities, products and services. 清晰界定、維持及定期更新所有適用的法律法規和其他要求,以及根據本集團的活動、產品及服務來編製及更新環境影響登記表。
Environmental objectives 環境目標	Establish environmental objectives, consider the inherent risks and opportunities, and set deadlines to achieve these objectives. 建立環境目標,考量隱含的風險和機會,並設立達到目標的限期。
Compliance with regulations 遵守法規	Evaluate the status of compliance according to the relevant regulations and take appropriate actions as needed. 評估遵守法規的狀態並按需採取適當的行動。
Environmental performance records 環境績效記錄	Ensure proper documentation that records the monitoring, measurement, analysis and evaluation of environmental performance. 妥善保存記錄環境績效的監督、量測、分析與評估的文件。

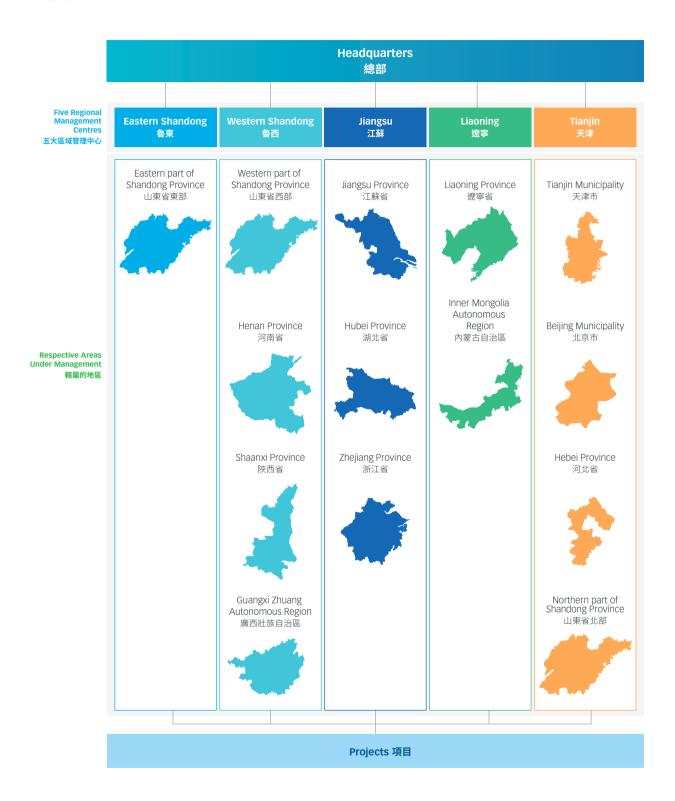
Division of Responsibilities

In order to effectively implement the core management concepts and policies, the Group has established a clear division of work to systematically clarify various responsibilities. Five regional management centres have been set up in Eastern Shandong, Western Shandong, Jiangsu, Llaoning and Tianjin respectively, complementing the Group's three-tier management model of headquarters, regional management centres, and local projects. The Group is therefore able to establish safety and environmental management institutions at the regional and project company levels. These measures enable the Group to optimise resource allocation according to the characteristics of projects in different regions, and enhance inter-regional communications. They also significantly improve the Group's environmental management efficiencies and operational benefits, enhancing its overall decision-making efficiency and risk control capabilities.

責任與分工

為保證其核心管理理念與政策的有效落實,本集團已建立明確的分工,系統地釐清各項職責;分別設置了魯東、魯西、江蘇、遼寧、天津五大區域管理中心,形成了本集團總部一區域管理中心一項目的三級管理模式,並且本集團亦得以在各區域和項目公司開資工程。這些舉措有過於本集團根據不同地區的項目特點優化空門也提高了本集團的環境管理效率及經營效益,從而大幅提升其整體的決策運行效率和風險管控能力。





Note 附註:

- Only projects in operation are managed by the regional management centres while projects in preparatory stage or under construction are managed by the engineering centres of the Group.
 - 僅運營項目由區域管理中心管理,籌建項目或在建項目由本集團的工程中心管理。

Environmental Disclosure

The Group strives to provide the public with transparent and reliable information on the environmental performance of project operations, such as environmental impact assessment reports, annual environmental monitoring plans, environmental emergency preparedness and response plans, and waste water/sludge/air/noise monitoring results, etc. All reports are publicly accessible via Everbright Water's corporate website and/or relevant local official websites. At the same time, the Group actively opens its waste water treatment facilities for public visits in response to requirements of the Ministry of Ecology and Environment and the Ministry of Housing and Urban-Rural Development of the PRC so as to promote environmental protection to the general public while accepting monitoring from the public.

Environment-Friendly Design

Everbright Water considers the potential impacts of projects on the overall water cycle and ecosystem as early as in the process of planning and designing and incorporates ecofriendly elements into the designs to address important issues such as ecosystem resilience, flood risk, water security, water pollution, other environmental concerns, etc. To support ecological protection and eco-management of lakes and river basins, the Group is dedicated to improving the effluent standard of waste water treatment projects. The Group's riverbasin ecological restoration projects play an important role in improving the water quality of river basins, by carrying out a series of betterment works such as river dredging, waste water outfall improvement, and riverside environment enhancements. These improvements also provide suitable habitats for wild animals and plants on the riverbanks, and contribute to the protection of biodiversity.

In addition, the Group pays great attention to how the projects might impact local residents. Therefore, when planning each project, the potential impacts of the project on local residents are fully considered, and the interfacing impacts on other public facilities and roads are minimised to ensure sustainability and avoid compromising quality of life.

環境披露

本集團堅持主動對外披露透明、可靠的項目 運營環境績效,如環評報告、年度環境監測 計劃、突發環境事件應急預案、污水/污水/ 廢氣/噪聲監測結果等。此類信息可於 光大水務網站或當地官方指定網站查閱。 同時,本集團積極響應中國生態環境部及住 房和城鄉建設部的要求,加入光大水務環保 設施整體開放計劃,向公眾開放污水處理設 施,對大眾進行環保宣傳與科普,主動接受 社會監督。

環境友善設計

在項目規劃及設計過程中,光大水務會考慮項目對整體水循環及生態系統的潛在影響,並將生態友好元素融入設計,以應對生態友好元素融入設計,以應對生態方次是,於復原力、洪水風險、水資源安全、水質原力、洪水風險、水資源安全、水質源安全、水質原則題。本集團致力於提高污水域的生態環境保護和治理。本集團的河道流域的性質,其項目通過提供河流疏浚、排污口整治,對環境提升等一系列河道流域治理服務,於對環境提升等一系列河道流域治理服務,對過緣化坡岸改善沿河的環境,為保護生物是動植物提供合適的生存環境,為保護生物基樣性作出貢獻。

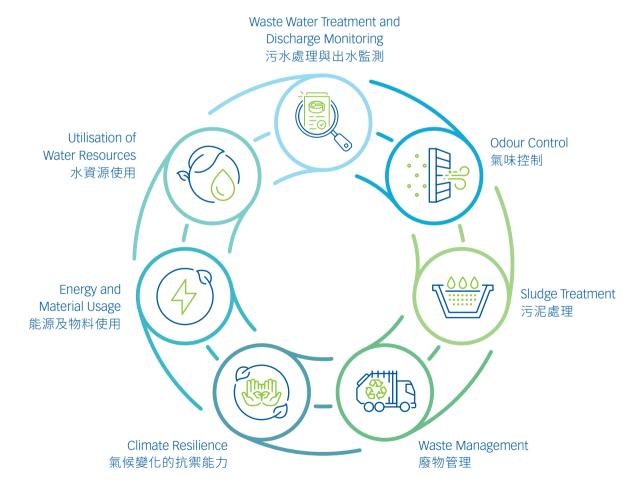
本集團亦相當重視項目對當地居民的影響, 因此在規劃每個項目時充分考慮項目對當地 居民的潛在影響,並致力把對其他公用設施 及道路的影響減至最低,以確保持續和不受 影響的生活質量。

Environmental Performance

As a leading water environment management enterprise in China, the Group is highly cautious about its project compliance. The Group upholds the highest degree of professionalism and strictly complies with the relevant standards and requirements. In addition, the Group has chosen the best-fitting waste water treatment processes to continuously improve the quality and hygiene of freshwater resources in China, while substantially minimising the negative environmental impacts brought by waste water discharge. The Group also takes into consideration the livelihood of surrounding communities and adopts appropriate alleviation measures in response to potential "Not in My Back Yard" nuisance. During the Reporting Period, there was no record of breach of relevant laws and regulations that would have had a significant impact on the Group. In view of its business nature, the Group reported its environmental performance in the following seven aspects:

環境表現

作為中國領先的水環境綜合治理企業,本集 團對項目合規性格外謹慎。本集團秉承最高 的專業精神,嚴格遵守相關標準和要求。本 集團亦已選用最合適的污水處理工藝,持續 改善中國的淡水品質和衛生狀況,最大限 減少污水排放對環境帶來的負面影響。本集 團亦致力將項目實施與周邊社區的民生相結 合,採取充分、適當的緩解措施以化解「鄰避 效應」。報告期內,本集團無任何因違反相關 法律法規而造成重大影響的記錄。根據業務 性質,本集團依據以下七個範疇報告其環境 表現:



Waste Water Treatment and Discharge Monitoring

As a water environment management service provider, delivering high-quality water treatment services is the top priority of the Group. The Group, through its nationwide operations, has established a mature network with sophisticated water management. The Group actively promotes the implementation of "Intelligent Water", enhancement of water resources protection measures, construction of sludge treatment and disposal facilities, and quality enhancement of municipal waste water pipeline networks. By adopting stringent standards for the discharge of the Group's waste water treatment projects, the majority of the Group's projects complies with, or is better than, the Grade 1A standard of the Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant (GB18918-2002), which minimises the environmental damages caused by the waste water discharge and protects the health of the public and the sustainability of water environment.

Waste Water Treatment Process and Performance Indicators

In order to ensure compliance with discharge standards, the Group incorporates a series of waste water treatment stages in projects, including pre-treatment, primary treatment, secondary treatment and tertiary treatment. These treatment stages utilise physical, chemical and biological processes to effectively purify water and meet emission standards. Pretreatment removes solid wastes and grits from the waste water via screening and de-gritting. In primary treatment, a sedimentary process is used to remove sedimentable suspended solids from the waste water and chemicals are added to enhance the removal efficiency. These treatment processes can reduce suspended solids, COD and biological oxygen demand ("BOD"). Secondary treatment is a biological treatment process in which the organic pollutants are decomposed by micro-organisms, which can further remove suspended solids, COD and BOD, and remove nitrogen and phosphorus. Tertiary treatment is typically the final stage of the treatment process that further enhances the quality of effluent. A combination of polishing processes such as filtration. ultraviolet disinfection and chlorination or dechlorination are used to further remove residual organic pollutants, suspended solids and nutrients.

污水處理與出水監測

作為水環境治理服務商,提供高質量水處理服務是本集團的首要任務。本集團通過遍佈全國多地的項目,搭建起成熟的業務網絡,並積極推動「智慧水務」建設、水資源安全保護措施升級、污泥處理處置設施建設、城鎮污水管網提質等產業升級工作。本集團對污水處理項目採用嚴格的出水標準,大部分項目的出水水質嚴格執行甚至優於《城鎮污水處理廠污染物排放標準》(GB18918-2002)一級A標準,大幅度降低污水排放對環境造成的損害,保障公眾的健康與水環境的可持續。

污水處理流程及表現指標

本集團採用了一系列的污水處理技術,結合 物理、化學及生物過程除污淨水,以達到排 放標準。本集團的污水處理流程主要包括 預處理、一級處理、二級處理及三級處理。 在預處理階段,污水中的固體廢物和砂礫透 過隔濾移除。在一級處理中,使用沉澱過程 去除污水中可沉澱的懸浮固體,並添加化學 物質以強化除污的效果。該處理程序可減少 污水中懸浮固體、化學需氧量及生化需氧 量。二級處理為生物污水處理程序,利用微 生物分解污水中的有機污染物,進一步降低 污水中懸浮固體、化學需氧量及生化需氧量 (「BOD」),並達到脫氮除磷。三級處理是最 後一道除污淨水程序,利用紫外線、加氯/ 除氯處理或其他方法為處理後的污水消毒, 將有機污染物、懸浮固體和營養物減至極低 水平。

The performance indicators of the Group's waste water treatment projects are listed as follows: 以下為本集團的污水處理項目表現指標:

Solids removed from waste water via screening 從污水中移除的隔濾物量

8,937

6,722

water 從污水中移除的沙礫量 removed from waste water 從污水中移除的懸浮固體量

317,940

Chemical oxygen demand (COD) removed from waste water 從污水中移除的化學需氧量

434,053

Biochemical oxygen demand (BOD) removed from waste water 從污水中移除的生化需氧量

156,148

Total phosphorus (TP) removed from waste water 從污水移除的總磷量

6,634

Total nitrogen (TN) removed from waste water 從污水中移除的總氮量

51,944

Ammoniacal nitrogen (NH3-N) removed from waste water 從污水中移除的氨氮量

57,210

Unit:Tonne 單位:噸



Improving Discharge Standards 提升出水標準

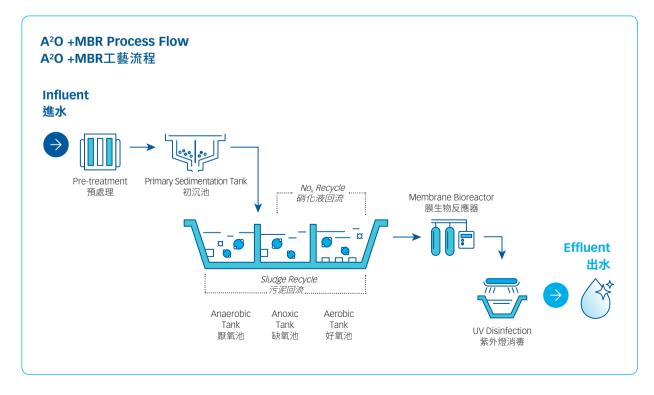
Anaerobic-Anoxic-Aerobic ("A²O") Process and Membrane Bioreactor ("MBR") 厭氧一缺氧一好氧法 (「A²O」) 工藝+膜生物反應器 (「MBR」)

The Anaerobic-Anoxic-Aerobic ("A²O") process and Membrane Bioreactor ("MBR") technology combines the biological treatment and membrane filtration processes for effective removal of pollutants in waste water. The A²O process consists of three stages for effective removal of organic matters, nitrogen, phosphorus and other pollutants. The MBR further enhances the effluent quality and stability of the treatment process by trapping suspended solids, bacteria and residual pollutants in the waste water treatment reactors. The A²O with MBR process ensures a reliable treatment process and compliance with discharge standards.

厭氧一缺氧一好氧法(「 A^2O 」)工藝+膜生物反應器(「MBR」)技術將生物處理和膜過濾過程相結合,以有效去除污水中的污染物。 A^2O 過程包括三個階段,用於有效去除有機物質、氮、磷和其他污染物。MBR則進一步通過在污水處理反應器中截留懸浮固體、細菌和剩餘污染物,提高出水質量和處理的穩定性。 A^2O 與MBR過程確保了處理過程可靠並符合排放標準。

By adopting A²O and MBR, Ji'nan Waste Water Treatment Project has become the first project in a Chinese provincial capital city that fully complies with the national Grade 1A standard for its treated effluent. It is also a "National Municipal Golden Cup Demonstration Project" and has, for two consecutive years, won the national waste water treatment competition for 36 large-and medium-sized cities, which was organised by the Ministry of Housing and Urban-Rural Development of the PRC. In addition to the expansion projects for the Ji'nan Waste Water Treatment Plants 1 and 2 which have been in operation for nearly two years, the Ji'nan Tangye New Area Waste Water Treatment PPP Project and the Ji'nan East Station Area Underground Waste Water Treatment Project have also adopted the process of pre-treatment, A²O, MBR and ultraviolet disinfection, which combines the merits of various technologies, enabling effective removal of nitrogen and phosphorus, and improving the discharge quality and treatment stability.

通過採用A²O與MBR,濟南污水處理項目成為中國首個省會城市全部執行國家一級A排放標準的項目。該項目亦是「國家市政金杯示範工程」,曾連續兩年獲中國住房和城鄉建設部組織的全國36個大中城市污水處理評比第一名。除了已投產近兩年的濟南污水處理項目一廠、二廠的擴建項目及濟南唐冶新區污水處理PPP項目外,濟南東站片區地下污水處理項目亦採用了預處理+A²O工藝+MBR+紫外線消毒的除污工藝,結合多種技術優點,能夠同時達到脫氮除磷,以提高出水質量及處理穩定性。

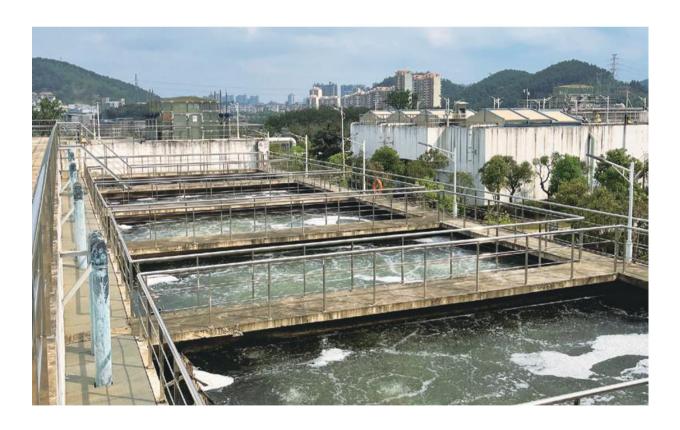


Nanning Shuitang River Water Quality Treatment Plant EBAF® Generation III Biological Aerated Filter

Located in Guangxi Zhuang Autonomous Region, the Group's Nanning Shuitang River Water Quality Treatment Plant utilises EBAF® biological aerated filter as the main biochemical treatment method to facilitate high filtration rate and loading capabilities. Under the conditions where the influent water quality has low carbon to nitrogen ratios, the EBAF® aeration biofilter is able to complete the coating and domestication processes in only 50 days under winter water temperature of about 20°C. In the meantime, after dynamic adjustments of the carbon injection and reflux ratio, all indicators of the effluent meet the Grade 1A standard of the *Discharge Standard* of Pollutants for Municipal Wastewater Treatment Plant (GB18918-2002). The fast activation and stable operation of this technology have provided a new technological direction and positive experiential feedback on the treatment of lowconcentration domestic waste water in southern China.

南寧水塘江水質淨化廠EBAF®第三代曝氣生物濾池

本集團位於廣西壯族自治區的南寧水塘江水處理廠採用EBAF®曝氣生物濾池作為主要生化處理方式,實現高過濾率和負荷能力的處理工藝。在低碳氮比的進水水質條件下,EBAF®曝氣生物濾池可在冬季水溫約為攝氏20度的情況下,50日即完成掛膜與馴化,同時,經過動態控制碳源投加量和回流比後,出水各項指標均滿足《城鎮污水處理廠污染物排放標準》(GB18918-2002)的一級A標準。這個技術的快速啟動、穩定運行,可為處理中國南方地區低濃度生活污水提供新的工藝思路和調試運行經驗,獲取積極的經驗反饋。



Everbright Water's Measures on Effluent Quality Control 光大水務在控制水質方面的舉措



Continuous Effluent Monitoring System

持續出水監測系統

All of the Group's waste water treatment projects have installed continuous water monitoring systems which are able to record effluent data promptly, accurately and continuously. Such data is connected to the real-time monitoring platform of the relevant local governments for public supervision.

本集團已在所有污水處理項目安裝了持續出水監測系統,以便能夠迅速、可靠和持續地記錄出水水質數據。此類資料均與當地政府有關部門的即時監測平台聯動,以供公眾監督。



Regular Monitoring by Third-Party Laboratories

由第三方化驗所定期檢測出水樣本

To ensure the independence and impartiality of effluent monitoring results, all project under the Group engage third-party laboratories to regularly test effluent samples.

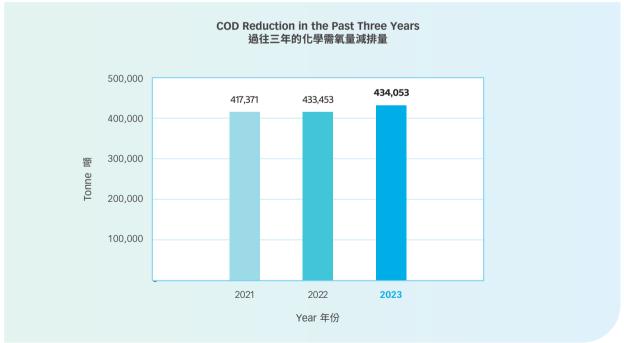
為確保所有污水處理項目的出水監測結果均透過獨立與公正的檢測程序得出, 本集團旗下每個項目均聘請第三方化驗所定期檢測出水樣本。

In 2023, the Group treated an aggregate of approximately 1,749,241,000 m^3 waste water and reduced an aggregate of approximately 434,053 tonnes COD. The Group's reusable water projects produced an aggregate of approximately 45,523,000 m^3 reusable water.

二零二三年,本集團共處理約1,749,241,000立方米污水,同時減少了約434,053噸的化學需氧量排放。本集團的中水回用項目共生產了約45,523,000立方米的回用水。







Odour Control

The Group engages third-party laboratories to conduct regular tests on the air emissions of its waste water treatment projects, including ammonia (NH₃), hydrogen sulphide (H₂S), ozone (O₃), methane (CH₄), etc., to ensure that they strictly comply with the *Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant* (GB18918-2002), the *Emission Standards for Odor Pollutants* (GB14554-93), or equivalent standards. The Group utilises new biological deodourisation systems, which utilise different strains of micro-organisms for removal of different types of odourous gases. The technology is industry-proven to be effective in the removal of unpleasant odours emitted during waste water treatment process while producing minimal waste by-products, making the plants more friendly to the environment and the community.

Sludge Treatment

Sludge is a semi-solid precipitation by-product produced from waste water treatment process and is mainly produced during the process of sedimentation and biological treatment. While sludge contains bacteria, pathogenic sources, organic and inorganic pollutants, etc., the organic matter in the sludge also contains a large amount of recoverable energy resources.

In accordance with the "14th Five-Year Plan" for Urban Waste Water Treatment and Resources Utilisation Development, the Group actively implements pollution control with unwavering determination and strict compliance with standards. The Group has fully implemented the harmless disposal of sludge, and accelerated the reduction of sludge landfills. The Group actively promotes the utilisation of sludge resources and has been strictly adhering to the various national standards such as Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant (GB18918-2002) for the treatment of sludge generated from waste water treatment projects.

氣味控制

本集團聘請第三方化驗所定期檢測旗下項目的大氣污染物排放指標,涵蓋氨、硫化氫、臭氧濃度及甲烷等,以確保污水處理項目嚴格遵守《城鎮污水處理廠污染物排放標準》(GB18918-2002)、《惡臭污染物排放標準》(GB14554-93)或同等標準中的大氣污染物排放要求。本集團採用新型生物除臭系統,能根據不同類型的氣體進行調整處理,該技術經過業界證明可有效去除污水處理過程中散發的異味,同時產生最少的廢棄物副產品,使廠區對環境和社區更為友好。

污泥處理

污泥是污水處理過程中的副產物,主要是經 沉澱和生物處理後產生的半固態沉積物。污 泥含有細菌、致病源、有機及無機污染物等, 同時污泥中的有機物蘊含大量可回收的能源 和資源。

按照《「十四五」城鎮污水處理及資源化利用發展規劃》,本集團以堅定不移的決心、堅守標準,積極開展治污工作。本集團已全面實施污泥無害化處置,加快壓減污泥填埋規模。本集團積極推進污泥資源化利用,亦嚴格執行《城鎮污水處理廠污染物排放標準》(GB18918-2002)等有關國家標準處理污水處理項目所產生的污泥。

Sludge Treatment Process

All sludge must first undergo dewatering process that reduces its water content and volume, after which most of the treated sludge that passed testing is sent to qualified third parties for further treatment, reuse and/or integrated utilisation, such as incineration (waste heat recovery), utilisation as construction materials, etc.

污泥處理流程

所有污泥必須首先經過脫水處理以減少含水量及體積,之後大部分經處理並通過檢測的污泥會被送到合資格第三方作進一步處理、循環再用及/或作綜合利用,如焚燒(餘熱回收)、建材利用等。



By adhering to the principle of "Development Driven by Technology and Innovation", the Group continued to boost its investment and efforts in the field of technology R&D. As a result, the Group achieved significant breakthrough in the low-temperature sludge drying technology, which effectively reduces sludge weight by 60%. The high efficiency and stability of sludge treatment equipped the Group with a leading position in the water sector. The Group will continue exploring low-cost and efficient sludge treatment and comprehensive utilisation technologies (such as protein and phosphorus recovery technologies), further progressing the water industry towards technological transformation and sustainable development.

本集團堅持「創新引領科技,科技引領發展」,持續加大在技術研發領域的投資及研究。因此,本集團在污泥低溫乾化技術上取得重大的突破,有效將污泥重量減少60%。高效穩定地處理污泥使本集團在水務行業處於領先地位,因此本集團將繼續探索更低成本、高效率的污泥處理和綜合利用技術(如蛋白質和磷回收技術),務求進一步推動水務行業的技術改革和可持續發展。

In 2023, the Group generated a total of approximately 1,055,779 tonnes of sludge.

二零二三年,本集團共產生了約1,055,779噸 污泥。



To promote sustainable waste management throughout the value chain, the Group engages qualified third parties for further treatment of the sludge produced by its project companies. To ensure environmental protection responsibilities of downstream businesses in the value chain, the Group also conducts regular audits to make sure that the sludge treatment and disposal processes comply with the national environmental protection laws and regulations. Most of the sludge treatment techniques also incorporate re-circulation measures to enhance energy recovery and material reuse, further promoting sustainable waste management.

為促進整個價值鏈的可持續廢物管理,本集團僱用合資格的第三方組織進一步處理項目公司所產生的污泥。為確保價值鏈下游企業的環保責任,本集團亦透過定期審計,以確保污泥處理及處置流程遵循國家環保法規。大部份的污泥處理技術更包含循環措施,以實現能源回收及物料再生利用,推動可持續廢棄物管理。

Waste Management

Waste recycling is an effective way of resource utilisation. The Group extensively recycles and reuses wastes including paper, metal, plastics, and food waste in its operating facilities, offices and dormitories, etc. The Group also actively encourages employees to reduce waste at source and cultivate the habits of waste separation and recycling, thereby putting green concepts into practice. At the same time, the Group regularly monitors, verifies and records relevant data of various types of recycled waste in the monthly production or environmental protection reports. All general wastes are handled by qualified external waste collectors and recyclers to ensure proper waste disposal and compliant reuse.

廢物管理

廢物回收利用是廢物資源化利用的有效途徑。本集團在其運營設施至辦公室和宿舍等地均進行廢棄物回收以及重用,回收的廢棄物包括紙張、金屬、塑料和廚餘等。本集團積極鼓勵員工源頭減廢,培養垃圾分類、與利用的生活習慣,將綠色理念付諸實踐。同時,本集團在月度生產或環保報告中定點測、核實並記錄各類回收廢棄物的相關數據。所有一般廢物均由合資格的外部廢物收集商和回收商處理,以確保廢棄物的妥善處理及合規二次利用。

Consumption and Recycling of Office Materials, Plant Area Materials, and Packaging Materials in 2023 二零二三年辦公室物料、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)	24,777	1,690
Plastics ⁽¹⁾	塑料⑴	0	0
Metal ⁽²⁾	金屬(2)	0	3,088
Packaging materials paper products,	包裝材料(包括紙製品、塑料、		
plastics, foam and wood boards)(3)	泡沐及木板) ⁽³⁾	0	0

Notes:

(1)

- 11.
- ⁽²⁾ Only applicable to plant areas.

Only applicable to office areas.

- Only applicable to the equipment manufacturing sector.
- 附註:
- ⑪ 僅適用於辦公區域。
- ② 僅適用於廠區。
- ③ 僅適用於裝備製造板塊。

Energy and Materials Usage

In pursuing the "Dual Carbons" goals, the transformation of the water management industry towards a low-carbon or even carbon negative direction has become a top priority. Everbright Water continuously explores energy-saving and emission-reduction measures in all aspects of its business operations, and reduces unnecessary resource consumption during operation and construction. For example, energy-saving competitions are organised at the project company level, and advanced energy-saving equipment, such as light guide beams and new sodium lamps, is adopted.

Another important route to improving resource utilisation is to recycle energy from waste water. The Group utilises methane produced from sludge digestion to generate electricity for inplant use, thereby reducing reliance on non-renewable energy. In addition, the Group's waste water source heat pump project extracts thermal energy from the organic materials in waste water, and provides heat service for the surrounding buildings in winter. In recognition of its merits, the waste water source heat pump has been designated as a demonstration project on energy saving.

To implement a long-term sustainable strategy for resource management, each of the Group's project companies keeps detailed monthly records of its energy and key materials usage, which are submitted to the regional management centres for compilation. By analysing resource usage by sectors, the Group can make adjustments and better utilise available energy and materials. At the same time, the adoption of the "Intelligence Water" digital system introduced big data analysis, and has enabled a more refined and dynamic management of the production and management processes of the entire water system, which allows for a more comprehensive assessment of asset life cycle, and provides effective support for cost optimisation and decision-making on energy resources.

能源及物料使用

在實現「雙碳」目標的過程中,水治理行業向低碳乃至負碳方向轉型成為當務之急。光大水務在業務運營的各個環節不斷探索節能減排措施,減少運營和建設過程中不必要的資源消耗,包括舉辦項目公司層面的節能競賽,在處理廠採用導光束、新鈉燈等節能設備。

此外,回收利用污水中的能源亦是本集團重要的資源利用,如利用污泥消化過程中產生的甲烷進行發電供廠內使用,以減少使用非再生能源。另外,本集團的污水源熱泵項目透過提取蘊藏於污水有機物內的熱能,為周邊建築提供冬季供暖服務,是環保節能示範工程。

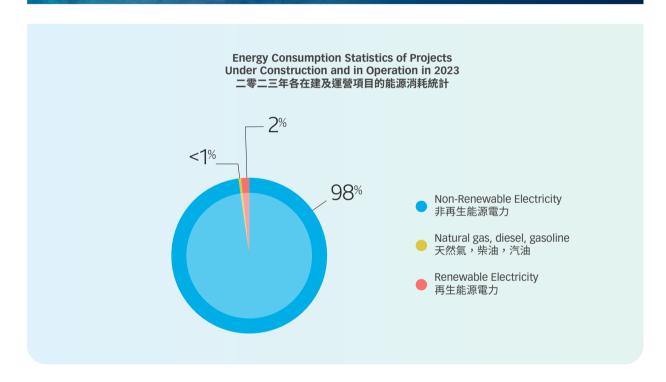
為配合制定長遠及可持續的資源管理策略, 本集團的各項目公司每月都詳細記錄能源和 主要物料的使用情況,並提交至區域管理中 心進行整合。透過分析各層面的資源利用情 況,本集團能對能源和物料使用做出相應的 調整。同時,「智慧水務」數字化系統的應用, 通過大數據分析,可以更加精細和動態的方 式來管理水務系統的全線生產、管理和服務 流程,有助於更全面地評估資產生命週期, 並為能源資源成本優化和決策提供有效支 持。

In addition, the Group promotes a green and low-carbon working environment and encourages employees to adopt energy-saving measures, such as switching computers to energy-saving mode, turning off computers, printers and other electrical appliances after working hours, as well as unplugging all electrical devices when leaving offices for long holidays.

本集團更提倡綠色低碳工作模式,鼓勵員工採用節能措施,包括將電腦調至節能模式,於工作日結束時關掉電腦、打印機及其他電器,並於長假前離開辦公室時拔掉電器的電源。

In 2023, the Group consumed energy in total of **2,632,241 GJ**.

<u>二零二三年,本集團共耗用**2,632,241吉焦**能源。</u>



Note:

Energy consumption is calculated based on the reference coefficients given by *China Energy Statistical Yearbook 2022*.

附註:

能源消耗量是根據《中國能源統計年鑒2022》 的參考系數所計算。

Water Neutrality

Water neutrality, a concept evolved from carbon neutrality, aims to achieve a balance between the amount of water consumed by human activities and the water replenished. China's economic growth has fuelled an ever-increasing demand for freshwater resources, which if not properly replenished in a timely manner, might lead to water insecurity and eventual depletion, particularly in more arid regions. As a leading water treatment enterprise in China, Everbright Water actively responds to the "14th Five-Year Plan" for Safeguarding Water Safety, and considers water neutrality be of utmost importance in securing a long-term supply of water that supports economic growth.

As a leading water treatment company in China, the Group exercises water neutrality through the utilisation, protection and allocation of water resources. In terms of consumption, the Group proactively seizes opportunities to reduce freshwater consumption and explore opportunities for water reclamation, which helps improve the utilisation efficiency of water resources and reduce the pressure on local freshwater supply. The Group's freshwater consumption is mainly sourced from municipal water supply utilities and is generally used for conventional industrial use within the waste water treatment plants.

水中和

水中和從碳中和概念演變而來,旨在實現人類活動所消耗水量與補充水量之間的平衡。中國的經濟增長推動了對淡水資源的日益增長需求,如果不及時進行補充,可能會對水資源安全造成影響,尤其是在乾旱地區可能導致枯竭。作為中國領先的水處理企業,光大水務積極響應《「十四五」水安全保障規劃》,高度重視追求水中和,以確保能夠長期供應水資源以支持經濟增長。

作為中國領先的水處理企業,本集團在水資源的利用、保護、配置方面貫徹水中和的思想理念。在消耗方面,本集團積極把握減少淡水消耗的機會,並探索水資源再利用的機會,從而提高水資源利用率,緩解地方淡水資源壓力。本集團使用的淡水主要源自市政供水,一般用作污水處理廠內工業用途。

Reusable Water 中水回用

Effluent from waste water treatment plants is polished in accordance with the *Reuse of Urban Recycling Water-Water Quality Standard for Industrial Uses* (GB/T19923-2005) or equivalent standards and becomes reusable water for use by external parties. Such water produced by reusable water projects can be used for power plants and general industrial use to reduce the freshwater consumption of cities.

45,523,000m³ produced in 2023

污水處理廠的污水根據《城市污水再生利用工業用水水質》(GB/T19923-2005)或相等標準處理,使其能夠被第三方再次利用。通過中水回用項目產生的回用水可用於發電廠或作一般工業用途,幫助節省城市淡水用量。

二零二三年產生 **45,523,000**立方米

In terms of ecological replenishment, the Group's primary contribution lies in its highly efficient waste water treatment projects, which convert municipal and industrial effluent into clean water, which is then be discharged to nearby water bodies as ecological restoration water, subsequently replenishing the natural water cycle. All such effluents are discharged in strict compliance with applicable standards to ensure minimal adverse impacts on downstream users of water bodies (including agricultural irrigation, public recreation, drinking etc.). The different types and conditions of receiving bodies will be taken into consideration when assessing the environmental impact of individual projects.

在生態補水方面,本集團的主要貢獻在於高效的污水處理項目,將市政污水和工業廢水轉化為清潔水,作為生態補水排放到就近水體中,進而補充自然水迴圈。所有排放的生態補水均嚴格遵循排水標準以確保水體的下游使用者(包括農業灌溉、公眾休憩或飲用等)皆不會受到負面影響。本集團亦根據接納各項目出水的水體類別和環境容量,在進行環境影響評估時作相應考量。

In addition, the Group has strategically located its projects in areas with water stress, where water resources sustainability is a critical issue. During the Reporting Period, the Group assessed the water stress of its projects with reference to the Water Risk Filter published by the WWF, and formulated action plans for its project companies under high water stress, such as regular inspections of pipes to avoid wasting water resources due to leaky or broken pipes. WWF assesses the water stress by following a three-level hierarchy, comprising physical, regulatory and reputational risks. It contains a total of 32 basic indicators, covering aspects ranging from water scarcity, flooding, water quality, ecosystem services status, to infrastructure fund accessibility. As a result of the Group's strategic planning, 76% of the clean water discharged by the Group contributes to alleviating the water stress in these areas.

此外,本集團亦在因水資源短缺而水資源可持續性至關重要的地區進行戰略性的項目選址。在報告期內,本集團參考WWF發布的水風險篩選工具,對其項目的水資源短缺進行評估,並為存在高水資源壓力的項目公司制定應對計劃,例如定期檢查喉管,避免因過過一定應對計劃,例如定期檢查喉管,避免過遵循三級層次(物理、監管和聲譽風險)對水過過資源短缺進行評估。該工具包含共計32個基礎「短缺進行評估。該工具包含共計32個基礎「無,涵蓋的範圍從水資源短缺、洪水、水質、生態系統服務狀態,到基礎的激節資源短號所數方數於緩解這些地區的水資源短缺問題。

Reclaimed Water 再用水

Reclaimed water refers to the effectively treated effluent which is clear and safe for in-plant general industrial use or non-potable purposes, such as street cleaning, vehicle washing, landscaping, toilet flushing, firefighting, etc.

24,336,361m³ utilised in 2023

再用水是指經過高效污水處理的排放水,水質清澈並可安全用作多項廠內一般工業用途或非飲用用途,包括清洗街道及車輛、園藝灌溉、沖廁和救火等。

二零二三年利用**24,336,361**立方米

To further reduce freshwater demand, most of the Group's waste water treatment projects produce reclaimed water at the end of its advanced tertiary waste water treatment process. Reclaimed water is highly treated waste water which is clear in appearance, odourless and is safe for non-potable uses such as street cleaning, vehicle washing, landscaping, toilet flushing, firefighting, etc. The Group's reusable water projects polish effluent from waste water treatment plants in accordance with the Reuse of Urban Recycling Water - Water Quality Standard for Industrial Uses (GB/T19923-2005) or equivalent standards, suitable for use as cooling water or for general industrial use by other corporations. The Group's Operations Manual sets out the standards for reusable water produced from the reusable water projects, and employees are required to continuously monitor the quality of the reusable water to ensure the health and safety of customers, in addition to complying with the relevant national standards.

Moreover, the Group is committed to comprehensive water management and has invested in projects that protect raw water sources and restore river-basin ecosystems. These projects have improved the ecological health of water catchment areas, and water production, capture, and retention capacity of water bodies, enhancing the resilience of the natural water cycle. The Group's projects have resulted in an estimated net production of 3,629,000 m³ of freshwater being restored and replenished in the natural water cycle.

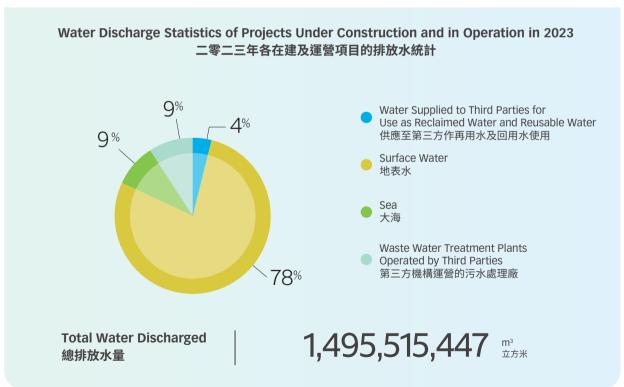
此外,本集團致力於水環境綜合治理, 投資原水保護和河道流域治理項目。 這些項目有助於改善水域集水區的生 態健康以及水體的生產、捕集和蓄 能力,並增強自然水循環的抗禦能力。 根據估計,本集團的項目在自然水循環 中恢復和補充了約3,629,000立方米的 淡水。

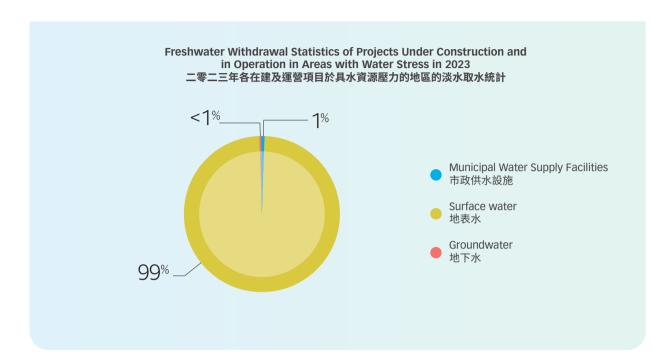


As a combined result of the Group's efforts to reduce freshwater consumption and dedication to water restoration, the Group has achieved "water neutrality" during the Reporting Period, as demonstrating by the following numbers:

作為本集團努力減少淡水消耗及致力水資源 補充的綜合成果,本集團在報告期內實現了 「水中和」,具體數據如下:







Biodiversity Risk

The "Kunming-Montreal Global Biodiversity Framework", which was passed and adopted at the 15th meeting of the Conference of the Parties to the *United Nations Convention on Biological* Diversity in December 2022, aims to address issues such as biodiversity loss, ecosystem restoration, and the protection of indigenous peoples' rights. The 3030 targets set out in the framework are conducive to advancing the implementation of concrete actions to protect biodiversity and address climate change. The Ministry of Ecology and Environment of the PRC also issued the China Biodiversity Conservation Strategy and Action Plan (2023-2030), which provides scientific guidance for comprehensively improving biodiversity governance. The 14th Five-Year Plan formulated by the PRC emphasises ecological and environmental protection, with green development as the main theme, and coordinates high-quality economic development and promotes green development while protecting the ecological environment at a high level. These measures fully reflect the importance of the international community to the protection of the earth's ecosystems, as well as China's determination to take practical actions to protect biodiversity, and provide clear direction support for the Group's business development.

生物多樣性風險

《聯合國生物多樣性公約》第十五次締約方 大會於二零二二年十二月舉行並通過了「昆 明一蒙特利爾全球生物多樣性框架」,旨在 解決生物多樣性喪失、恢復生態系統、保護 原住民權利等議題。該框架制訂的「三零三 零目標」有利於推進保護生物多樣性和應對 氣候變化具體行動的落實。中國生態環境部 亦隨之發布《中國的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了科學指引。中國制訂 的「十四五」規劃強調生態環境保護,以推動 綠色發展為主調,協同推進經濟高品質發展 和在生態環境高水平保護中推動綠色發展。 這些舉措都充分反映出國際社會對保護地球 生態系統的重視,以及中國落實保護生物多 樣性切實行動的決心,為本集團的業務發展 提供了清晰的方向支持。

Everbright Water is highly concerned about ecological protection and biodiversity risks. Therefore, the Group actively practises ecological environment conservation throughout the planning and operation stages of its projects. Prior to constructing new projects, the Group evaluates potential impacts on the local ecological environment and biodiversity to avoid building project facilities near natural habitats and highly ecologically sensitive areas as much as possible. The Group's raw water protection and river-basin ecological restoration projects are also equipped with ecological buffer areas to minimise the impact on the local ecological environment.

The Group uses the Integrated Biodiversity Assessment Tool ("IBAT") together with contextual analysis based on the International Union for Conservation of Nature's *Red List of Threatened Species*, the World Database of Protected Areas and the Biodiversity Critical Areas Database to assess the impact of its economic activities on biodiversity, in order to effectively formulate investment and operational strategies, to minimise the loss of biodiversity.

Findings of IBAT Assessment

Protected areas are areas recognised and managed through legal or other effective means to achieve the long-term conservation of nature with associated ecosystem services and cultural values. Based on the Group's analysis, 73% of the Group's projects are not located in or adjacent to any protected area. The analysis also found that 16% of the Group's projects are located within 50 km of one protected area, while 11% are located within 20 km of two protected areas.

光大水務非常關注生態環境保護及生物多樣性風險。本集團從規劃到運營階段都積極實踐生態環境保育,在建設新項目前充分評估當地生態環境及生物多樣性,盡量避免在自然棲息地及高度生態敏感地區附近興建項目設施;本集團的原水保護項目及流域治理項目均設有生態緩衝區,以減低項目對當地生態環境的影響。

本集團使用綜合生物多樣性評估工具 (「IBAT」),按照國際自然保護聯盟《瀕危物 種紅色名錄》、世界保護區資料庫及生物多 樣性關鍵區域資料庫,以評估本集團的經濟 活動對生物多樣性的影響,從而制定有效的 投資及運營策略,遏止喪失生物多樣性。

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,用於長期保護具有相關生態系統服務和文化價值。根據本集團的分析,73%本集團旗下的項目並不位於或鄰近保護區。16%及11%項目的50公里範圍內有一至二個保護區。

Number of Protected Areas within 50 km of Projects, by% of Number of Projects 項目50公里範圍內的保護區數目,按項目數目百分比

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	73%
1	16%
2	11%

100%

Key biodiversity areas are sites that contribute significantly to the preservation of global biodiversity, which includes terrestrial, freshwater and marine ecosystems. 48% of the Group's projects are not located in or adjacent to any key biodiversity area. 20% of the Group's projects are located within 50 km of one key biodiversity area, while 22% are located within 50 km of two key biodiversity areas.

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。48%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。20% 及22%項目的50公里範圍內有一至兩個生物 多樣性關鍵區。

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

Number of Key Biodiversity Areas within 50 km 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	48%
1	20%
2	22%
3	6%
4	3%
5	1%

100%

The Group's projects strictly comply with national and international environmental standards to ensure that they have no negative impact on adjacent ecosystems and wildlife. During the Reporting Period, no significant impact on biodiversity and species on International Union for Conservation of Nature's *Red List of Threatened Species* from the Group was observed. The Group will continue to monitor and report any potential negative impacts of its projects on biodiversity.

本集團的項目嚴格遵循國家及國際環境標準,以確保項目不會對鄰近的生態系統及野生生物造成負面影響。報告期間,本集團並沒有發現對國際自然保護聯盟《瀕危物種紅色名錄》所列物種造成顯著影響。本集團將繼續監察和報告其項目對生物多樣性的潛在影響。

Case Study 個案分享



Everbright Water's Environmental Public Welfare Activities the "World Environment Day" 2023 光大水務舉辦二零二三年「世界環境日」環保公益活動

Everbright Water initiated the 2023 "I am a Little Ecology Artist" competition, as well as a series of public welfare lectures to commemorate the "World Environment Day". "I am a Little Ecology Artist" was a competition held in the project sites of Nanjing and Suzhou, and the public lecture series was held in the project sites of Ji'nan, Nanning, Zibo and Dalian. The Group's effort in commemorating the World Environment Day has received a warm response. The activities received positive feedback and echoed with the Group's mission of contributing towards environmental education for the public.

為紀念世界環境日,光大水務近期精彩推出二零二三年「我是小小環保畫師」比賽暨公眾開放公益宣講系列活動。光大水務位於南京和蘇州的項目舉辦了「我是小小環保畫師」比賽,而位於濟南、南寧、淄博、大連的項目則在本地開展公益宣講活動。本集團慶祝世界環境日的舉措引發熱烈反響。這些活動獲得高度評價,同時也與本集團積極推動環保教育的責任相呼應。





Everbright Water's Environmental Public Welfare Activities the "World Water Day" and "China Water Week" 2023 光大水務舉辦二零二三年「世界水日」及「中國水週」環保公益活動

22 March 2023 was the 31st "World Water Day", while the 36th "China Water Week" took place from 22 to 28 March 2023. In response to the themes of these campaigns, Everbright Water held a series of activities to celebrate with the public. The themes for 2023 included: to raise public awareness of love and conservation of water; to jointly safeguard our water resources; to improve the water environment of the Earth's homeland; and to enhance the awareness on water governance and to treasure water. For six consecutive years, Everbright Water has organised these celebrations, hosting activities including public opening of the Group's facilities, greens planting and water protection initiatives, environmental protection lectures, and theme painting. In particular, Everbright Water (Tongxiang) Limited, Sanmenxia Everbright Water Limited and Everbright Water (Nanning) Limited organised educational lectures in local schools to raise awareness of environmental protection in future generations.

二零二三年三月二十二日是第三十一屆「世界水日」,二零二三年三月二十二日至二十八日是第三十六屆「中國水週」。為響應這些活動的主題號召,光大水務開展了一系列活動,旨在與公眾共同慶祝。二零二三年的主題包括喚起廣大市民愛水節水意識,共同守護賴以生存的水資源,攜手改善地球家園的水環境,營造治水愛水的濃厚氛圍。光大水務已連續六年開展此項慶祝,活動包含了公眾開放、植綠護水、環保宣講、主題繪畫等。其中較為突出的為光大水務(桐鄉)有限公司、三門峽光大水務有限公司及光大水務(南寧)有限公司,在當地校園中開展了系列教育講座,旨將環保理念傳承到下一代。



Talent Development 人才發展

he Group believes that a consistent and skilled talent team is the foundation of a sustainable business. The Group has always adhered to a "People-Oriented" philosophy and strives to build a robust talent management system and training mechanism. The Group formulates its human resources policies based on the necessities arising from its long-term business development goals. Moreover, the Group strategically trains business talents, enhances the talent management process, and offers employees with attractive career development opportunities. Meanwhile, the Group makes efforts in creating a fair, diverse, caring and inclusive working environment.

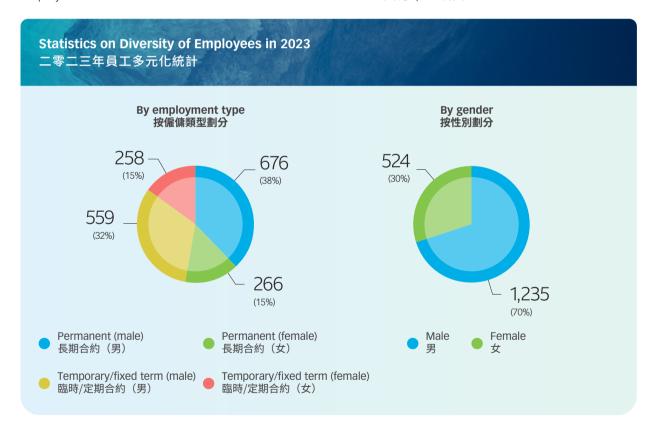
集團將優秀、穩健的人才隊伍視作為企業長青的基石,一直以來堅持「以人為本」的理念,著力構建人才管理體系和完善的人才培養機制,不斷透過制定符合企業長遠發展目標需求的人力資源策略培養業務英才,著力建構和完善人才管理體系,為員工提供具吸引力的職業發展機會及打造公平、多元、關愛、包容的工作環境。

Employment Profile

As at 31 December 2023, Everbright Water had a total of 1,759 employees. (1)

員工概覽

截至二零二三年十二月三十一日,光大水務 共有1,759名員工。⁽¹⁾



Note:

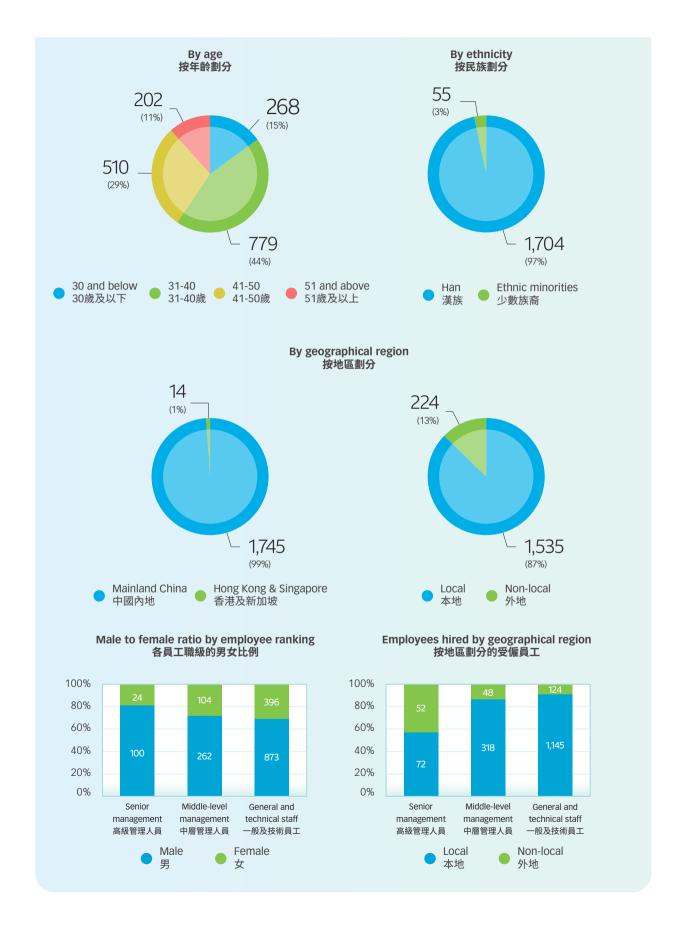
附註:

(1) All the employees were full-time employees.

(1) 所有員工均為全職員工。

Talent Development

人才發展



Talent Development 人才發展

Notes:

- For mainland China, employees hired from the same Province are classified as local employees, whereas the employees hired from other Provinces are classified as non-local employees.
- (2) As at 31 December 2023.

Talent Recruitment and Management

Recruiting top-notch talent is crucial for driving innovative business development. In pursuit of this goal, Everbright Water collaborates with various talent recruitment agencies and educational institutions to recruit professionals from various fields. The Group leverages various channels, including local, overseas, and on-campus recruitments, to find the best suitable candidates. The Group also actively brings in domestic and foreign technical and management talents by hiring renowned experts as technical advisors and merging with technology companies. Moreover, the Group cares about economic development and local employment in remote areas, and sources labour locally for its projects whenever possible.

The Group has formulated various employment measures to retain talents, including competitive remuneration packages, comprehensive employee benefits and growth prospects. The Group also regularly revises its remuneration packages based on employment market trends. During the Reporting Period, the Group has reviewed remuneration for all employees, and made appropriate adjustments.

Furthermore, the Group is committed to providing employees with comprehensive protection, allowing them to enhance their sense of accomplishment and belonging. As such, Everbright Water provides employees with a career management plan including retirement arrangements. Moreover, the Group provides mandatory pension insurance in accordance with the laws and regulations of the countries or regions where the employees are employed and has also established a supplementary pension system as an additional retirement benefit for employees to achieve the aim of caring for employees.

In 2023, there were 38 new employees, accounting for 2% of the Group's total workforce, while staff turnover (including resignation and retirement) was 411, accounting for 23% of the Group's total workforce.

附註:

- 在中國內地同省份受聘的員工被視為本地員工,而在中國內地外省份受聘的員工則被視為外地員工。
- ② 截至二零二三年十二月三十一日。

吸引及管理人才

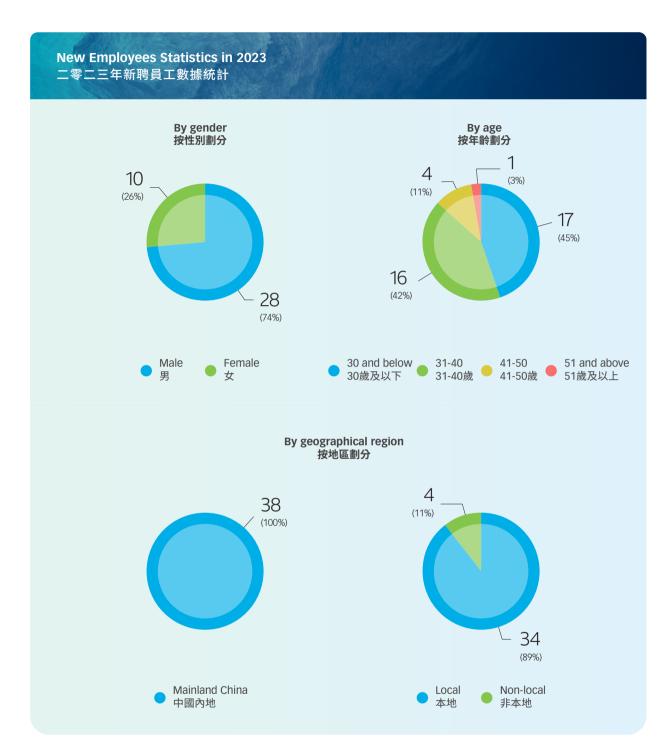
引才納賢是推動業務創新發展的基礎。因此,光大水務透過與各類人才招聘機構及高等院校合作招攬各領域的專家,包括本地招聘、海外招聘、校園招聘等途徑,以覓得最佳人選。本集團更積極聘請知名專家擔任技術顧問、併購技術公司等方式引進國內外的技術和管理專才。同時,為了推動偏遠地區的經濟和就業發展,本集團盡可能於項目發展地區聘用當地人才。

本集團制定了多項僱傭措施,包括提供具有 競爭力的薪酬待遇、全面的福利待遇及發展 前景,致力留存人才。本集團亦按照勞工市 場趨勢,定期檢討及調整薪酬待遇。於報告 期內,本集團已經為所有員工檢討及適當調 整薪酬待遇。

本集團致力於提升員工的工作成就感和歸屬 感,努力為員工提供全方位保障。因此,光大 水務為員工妥善提供包括退休安排在內的職 業生涯管理計劃。另外,本集團按照僱員受 聘的國家或地區的法律規定提供強制性養老 保險,更建立了補充養老制度,作為員工額 外的退休福利,務求達到關愛員工的目的。

二零二三年,本集團新聘了38名員工,佔員工總數的2%,員工流失數目(包括離職或退休)為411,佔員工總數的23%。

Talent Development 人才發展

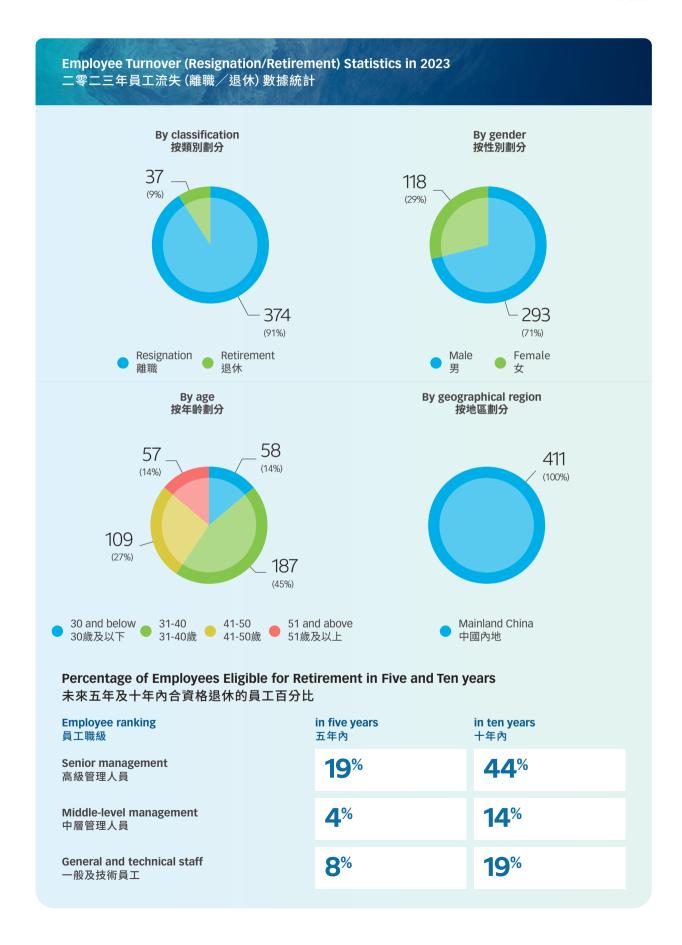


Note:

For mainland China, employees hired from the same Province are regarded as local employees, whereas the employees hired from other Provinces are regarded as non-local employees.

附註:

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



Talent Development



Everbright Water places a significant emphasis on the career progression of its employees and is committed to providing them with substantial and valuable growth opportunities, allowing them to fully unleash their potential at work and thrive in both

personal growth and career development. Based on the "People-Oriented" philosophy, the Group has formulated the *Human Resource Management and Capacity Building Policy* and a systematic talent development framework, which provides customised skills training for employees based on their roles and levels. In addition, the Group continues to improve the organisational human resources management system, developing and strengthening the development of internal training talent teams and the cultivation of backup talents pool. The Group is dedicated to providing employees with multiple career development plans and abundant learning opportunities, helping individuals identify their potential and establish core competencies throughout their career planning.

人才發展



光大水務高度重視員工的 職業生涯規劃,並致力為員 工提供充實及具價值的發 展機會,讓他們能夠在工作 上盡展所長,在個人成長和 職業生涯上均能獲得良好

發展。本集團基於「以人為本」的理念,制定了《人力資源管理培訓政策》及系統性人才發展框架,本集團為不同類型和層級的員工提供專項技能培訓。此外,本集團持續完善組織人力資源管理制度,建設並強化內部培訓人才隊伍建設及後備人才培養。本集團亦致力於為員工提供多元事業發展計劃以及貫穿職業生涯規劃的豐富進修機會,幫助員工發掘潛力、打造核心能力。

In 2023, the Group provided on-the-job training for all the employees. The total training hours were **141,265 hours**, while the average training hours per employee were **80 hours**.

二零二三年,本集團為每位員工均提供在職培訓。培訓總時數為 141,265小時,員工人均培訓時數為80小時。

Statistics on employee training and development in 2023 二零二三年員工培訓與發展數據統計

Average training hours per person by gender 按性別劃分的人均培訓時數



Female 女



Male 男 **85** Average training hours per person by employee ranking 按員工職級劃分的人均培訓時數

Senior management 高級管理人員

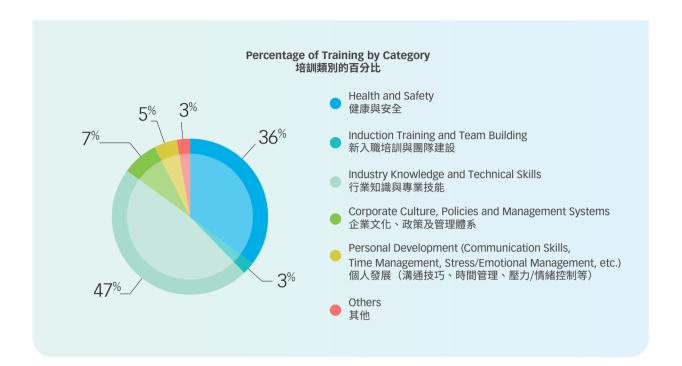
Middle-level management 中層管理人員

General and technical staff 一般及技術員工

73

166

56



In 2023, the Group initiated the following employee development programmes, aiming to establish a proactive and creative team of talents.

二零二三年,本集團推行了以下員工發展計劃,務求建立一支積極自主且具有創造力的 人才隊伍。

Safety Production Emergency Training Drill

Everbright Water abides by the principle of "obeying the safety production law and taking primary responsibility", and holds safety training and drills tailored to local conditions, which can enhance employees' own safety awareness, safeguard their occupational health and safety, and improve the employees' response speed and coordination ability in dealing with emergencies. The Group also undertakes a series of "Safe Production Month" activities, which help solve the existing outstanding problems in production safety, implement safety inspections and special rectification, and promote the implementation of the safety production responsibility system of all parties.

Comprehensive Appraisal System

The Group implements a comprehensive appraisal system that closely monitors and rewards its employees' career development by setting achievable goals, evaluating their performance regularly, and encouraging their proactiveness based on the core values of the Group.

安全生產應急培訓演練

光大水務堅守「遵守安全生產法,當好第一責任人」的原則,因地制宜地開展安全培訓和演練活動,切實提高員工自身安全意識,有效保障員工職業健康安全,切實提升本集團應對緊急事故的反應速度和統籌處理能力。同時,本集團也舉辦了一系列「安全生產月」活動,以解決當前安全生產突出問題,開展安全生產檢查及專項整治,以推動落實各方安全生產責任制度。

綜合考核機制

本集團設有綜合考核機制,透過制定確切 的工作目標及持續性的評估,適時監察並 獎勵員工績效,激發員工積極維護本集團 核心價值。

Tiered Talent Development Strategy

The Group established a backup talent pool for management and technical staff to give priority to high-performing talents for internal promotion opportunities.

Apprenticeship Programme

In order to preserve the inheritance of valuable skills and knowledge, the Group implemented a "passing on the torch" approach, and established an apprenticeship programme where skilled workers mentor and guide newcomers. Through this initiative, it enables the new employees to familiarise themselves with the new environment and establish their own practical career plans.

Technical Talent Training Programme

Through "Industrial-Academic" collaboration, Everbright Water invited local and overseas technical experts to provide training and exchanges for both managerial and technical personnel, thus developing its own talent team.

Safeguarding Employees



Employee Diversity and Equal Opportunities



Everbright Water has compiled the Staff Handbook and Code of Conduct to standardise the principles of recruitment management. The purpose is to ensure that employees and job seekers receive fair and transparent assessment and employment opportunities. The Staff Handbook and Code of Conduct cover topics including salary and dismissal, recruitment and promotion, working hours, holidays, equal opportunities, diversity, antidiscrimination, prevention of child labour and

forced labour, and other welfare benefits. In order to ensure equality in remuneration, career prospects and training opportunities, any discrimination based on gender, age, race, nationality, marital status, religion, etc., is strictly prohibited. The Code of Conduct also addresses topics such as anti-bribery, anti-extortion, anti-fraud and anti-money laundering.

梯隊式人才佈局

本集團設立了管理及技術後備幹部人才庫, 優先為高績效人才提供內部晉升機會。

「師帶徒」計劃

為確保珍貴技術知識得以傳承,本集團基 於薪火相傳的理念,建立了「師帶徒」計劃, 讓熟練技工帶領新技工工作。透過本計劃, 新員工可以融入新環境,並制定職業生涯 計劃。

技術性人才培訓計劃

光大水務持續加強「產學研用」協同創新,精 心部署海內外技術專家對項目管理層及技術 人員進行培訓與交流,發展自身人才隊伍。

保障員工







員工多元化與平等機會

光大水務訂立了《員工手冊》 及《行為守則》以規範招聘管 理原則,確保員工及求職者 獲得公平透明的考核與就業 機會。《員工手冊》及《行為守 則》涵蓋薪酬及解僱、招聘及 晉升、工作時數、假期、平等 機會、多元化、反歧視、防止 童工及強制勞動以及其他待 遇和福利。為保障員工及求 職者的報酬、職業前景和培

訓機會均等,任何基於因性別、年齡、種族、 國籍、婚姻狀況、宗教等因素而產生的歧視 均被嚴格禁止。《行為守則》同時也應對防賄 賂、防勒索、反欺詐及反洗錢等議題。

The Group respects and protects the rights and interests of all employees, and strictly complies with international conventions on labour and human rights. It regularly reviews and improves the remuneration and welfare system to ensure that employees receive reasonable salaries, benefits and holidays. The Group's recruitment process ensures that employees hired are of legal working age and that child labour and forced labour practices are strictly prohibited. In doing so, the Group has maintained low risks in terms of human rights violations, use of child labour, and forced/compulsory labour. During the Reporting Period, there was no case related to discrimination, or violation of human rights, and no incident of child or forced labour.

本集團亦尊重和保障每個員工的權益,並嚴格遵守勞工和人權的國際公約,並定期檢討完善薪酬福利體系,確保員工獲得合理的薪酬、福利和假期。本集團招聘程序確保所聘用的員工符合法定工作年齡,絕不僱用童工及強制勞工。透過嚴格執行以上一系列的措施,本集團在侵犯人權和使用童工或強迫/強制勞動方面的風險甚低。報告期內,本集團沒有出現任何與歧視或侵犯人權相關的事件,亦未發現僱用童工或強迫/強制勞動之案例。

In view that the water and engineering industries are mainly dominated by males, the Group pays special attention to gender equality and remuneration issues, striving to ensure employees' remuneration levels and composition are not affected by gender. Moreover, the group implements various initiatives to attract and retain female talent to contribute to the Group.

鑒於從事水務和工程相關行業的人力資源分佈側重於男性,本集團特別重視性別平等與薪酬待遇等議題,務求使員工的薪酬水平及結構不受性別因素影響,同時積極採取多種措施,吸引更多女性加入及留任。

The *Code of Conduct* also stipulates the Group's expectations for employees' moral behaviour and integrity, clarifies ethical standards for employees, and provides long-term and phased training courses on various employment policies, anticorruption awareness and integrity construction.

《行為守則》亦訂明本集團對員工道德行為及 誠信的期望,明確員工道德準則,長期及階 段性地提供為員工有關各僱傭政策及措施的 培訓課程與落實反貪倡廉工作。

In addition, in order to promote multiculturalism, the Group has established a robust human resources management system. A dedicated group under the Human Resources Department addresses issues related to equal opportunities, and cultivates a culture of inclusivity within the organisation. Any instances of inequality or discrimination are promptly reported to relevant management personnel for corrective action. During the Reporting Period, the Group conducted a series of training activities such as "Corporate Culture Training" to strengthen the Group's diverse and inclusive culture.

同時,為了促進多元文化,本集團亦建立了健全的人力資源管理系統,並在人力資源部設置專門負責平等機會的工作小組,在組織內營造包容性文化。任何不平等或歧視行為一經發現,均可及時向相關管理階層人員報告,以及時糾正不當行為。於報告期內,本集團舉辦了一系列「企業文化培訓」等培訓活動,以強化本集團的多元及包容文化。

Two-Way Communication

Adhering to a high standard and strong transparency governance concept, the Group attaches great importance to administrative transparency and integrity in its operations. The Group encourages its employees to report any suspected or ongoing illegal or improper conduct, This aids in maintaining good corporate governance and efficient daily functioning in its operations, avoiding reputational damage and economic losses. Employees can directly communicate with the CEO and/or the Chairman of the AC via email in accordance with the *Reporting Policies and Procedures for Misconduct* and file anonymous grievances or express opinions in areas such as labour relations, human rights, workplace harassment and discrimination, and all information collected will be kept confidential to protect the whistleblower(s).

Employee Benefits

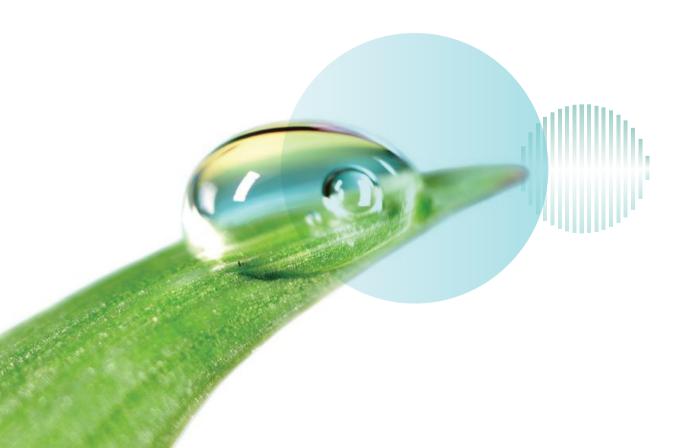
The Group acknowledges that employee welfare is an important factor in attracting and retaining talents, and consistently improves its employee welfare system under the "People-Oriented" philosophy. It strictly complies with the statutory requirements of the regions where it operates, providing its employees with comprehensive and adequate welfare protection in various areas.

雙向溝通

本集團秉持高水準與高透明度之管治理念, 高度重視企業運營過程中的行政透明與 潔,鼓勵員工積極檢舉已發生或懷疑是 生、有可能發生的違紀行為,以避免損害 集團聲譽或造成任何經濟損失,從而保障 康的企業管治及高效的日常運轉。員電不 據《不當行為的舉報政策及程序》透過電子可 據《不當行為的舉報政策及程序》透過電子 時與總裁及/或審計委員會主席 通等方式,就勞資關係、人權、職場 題等方式,就勞資關係、人權、職場 通等範疇上進行舉報及提出匿名申訴或 視等範疇上進行舉報及提出匿名申訴 意見。過程中所收集的資料均會保密,以保 護舉報人。

員工福利

員工的福利待遇是吸引及留住人才的重要因素,因此本集團不斷完善員工的福利制度, 秉持「以人為本」的理念,嚴格按照運營地區 的法定要求,全方位提供優厚的員工福利待 遇條件。



Provision of Employee Benefits and Protection 為員工提供的主要福利與保障

Providing adequate welfare and safeguard to regular employees 為正式員工提供足夠的福利保障





Medical insurance 醫療保險



Disability insurance 傷殘保險



Maternity and paternity leave benefits 產假及侍產假等福利



Distributing bonuses based on the employees' performance 按員工表現派發獎勵花紅

Assisting employees in retirement planning 協助員工規劃退休生活



Compulsory pension insurance prescribed by laws 法律規定的強制性養老保險



Employee supplementary pension benefits are established as additional retirement benefits 建立了員工補充養老補貼作為額外的退休福利

Ensuring physical and mental health of employees 促進員工的身心健康



Various entertainment facilities are set up in the project companies 在項目公司設置了各種文娛設施



Regularly organise various team building activities, such as sports competitions and outings

定期舉辦體育競賽和郊遊等康體活動



Annual free medical check-ups and occupational disease surveillance examinations for the employees 每年為員工提供免費的身體檢查服務及職業病防範檢查



Provide employees with physical and mental health seminars to enhance employees' ability for work-life balance

為員工提供身心健康講座,協助員工增強 平衡好工作和生活的能力

Improving female staff's welfare 提升女性員工福利



Provide the employees with adequate maternity leave 給予員工充足的產假



Reserve positions for female employees who are on maternity leave and encourage them to return to work after the leave period, and ensure that their career development and salary are not affected 為正在放產假的女性員工保留職位,鼓勵她們分娩假期後重返崗位,並保證其職業發展和薪酬不會因此而受影響

Maternity/Paternity Leave Statistics in 2023 二零二三年產假/待產假數據		
	Female 女	Male 男
Number of employees who took maternity/paternity leave in 2023 二零二三年放產假/待產假的員工數目	23	44
Number of employees who returned to work after maternity/paternity leave in 2023 二零二三年產假/待產假結束後重返工作崗位的員工數目	17	43
Number of employees who returned to work after maternity/paternity leave ended in 2022 and were still employed by the end of 2023 二零二二年產假/待產假結束後重返工作崗位並於二零二三年底仍在職的員工數目	26	21
Percentage of employees who returned to work after maternity/paternity leave ended in 2023 二零二三年產假/待產假結束後重返崗位的員工比例	74%	98%
Percentage of employees who returned to work after maternity/paternity leave ended in 2022 and were still employed by the end of 2023 二零二二年產假/待產假結束後並於二零二三年底仍在職的員工比例	72%	84%

Occupational Health and Safety



The Group pays great attention to the occupational health and safety of its employees, and takes proactive measures to establish a healthy and safe working environment for them, laying a solid foundation for project implementation. The

Group also conducts routine occupational health examinations for its employees and furnishes essential protective gear to deter the onset of occupational illnesses. The Group implements and reinforces high-quality health and safety management systems in all operational and under-construction projects to reduce operational risks and safeguard the well-being of employees.

職業健康與安全



本集團高度關注員工的職業健康與安全,積極為員工 創造一個健康安全的工作環境,打好項目實施的基礎。本集團定期為員工開展職業健康體檢,並配備和

下發必要的勞動保護用品,防範職業病的發生。本集團在旗下各建設、運營項目推行並持續加強高質量的健康與安全管理體系,以降低運營風險並保障員工的健康與安全。

Health and Safety Management System

The Group implements the ESHS Management System and Risk Management System strictly at all levels and comprehensively regulates internal management and risk control in all project investment, construction and operation processes by following standard operating procedures (SOP). The establishment of an ESHS management team and a sound emergency reporting system in each project company identifies and manages potential safety risks throughout the entire project cycle. A comprehensive investigation will be conducted after a serious accident, including the causes of the accident and related risks, accident prevention and rectification measures, and lessons learned from safety production management, so as to comprehensively prevent possible future work-related accidents. In addition, the Group has incorporated climate change risks into the Risk Management System to minimise the potential risk of natural disasters in future business operations. The Group's Safety and Environmental Management Committee is responsible for regulating, supervising, and leading the implementation of environmental and safety work in each project of the Group, and holds regular meetings to review the Group's ESHS Management System. At the same time, the Group actively listens to the opinions of employees at all levels on the ESHS Management System, operational safety systems and measures, and hopes to improve the management system by understanding opinions from all parties. Meanwhile, the Group also refers to the internationally recognised ISO 45001 Occupational Health and Safety Management System to ensure operational safety.

健康與安全管理體系

本集團持續在各級單位嚴格實施ESHS管理體 系和風險管理體系,並通過遵循標準作業程 序(SOP),全面規範項目投資、建設及運營流 程各環節的內部管理及風險管控。每個項目 公司均建有ESHS管理團隊及完善的事故通 報系統,以及時識別和管理項目全週期中的 任何隱患和不安全因素。本集團亦會在嚴重 意外事故發生後進行全面調查,內容包括事 故發生原因及相關風險、事故防範和整改措 施、總結安全生產管理方面的經驗教訓等, 以全面防範工傷事故再次發生。此外,為最 大程度減低企業未來運營因自然災害而受到 的潛在影響,本集團亦將氣候變化風險納入 風險管理體系。本集團設立了安全與環境管 理委員會,負責重點規範、監督本集團各項 目環境及安全工作的執行情況,並透過定期 會議檢討及完善本集團的ESHS管理體系。同 時,本集團積極聆聽各級員工對於ESHS管理 體系、運營安全制度及措施的意見,期望透 過了解各方意見以便完善管理體系。本集團 亦參照國際認可的ISO 45001職業健康安全管 理體系,保障運營安全。

Occupational Health and Safety Management System Requirements 職業健康與安全管理需求	Description 描述
Regular training 定期培訓	Regularly train employees on the occupational health and safety management system to ensure that they understand the relevant policies of the Group. 定期與員工進行職業健康與安全管理系統培訓,以確保他們了解本集團的相關政策。
Occupational health and safety objectives 職業健康和安全目標	Establish occupational health and safety objectives, and commit to 1) ensuring a secure and healthy work environment to prevent work-related harm or injuries; 2) adhering to relevant laws, regulations and other requirements; and 3) engaging employees and employee representatives in the decision-making process relating to the occupational health and safety management system. 建立職業健康和安全目標,並承諾1) 確保安全和健康的工作環境,以避免因工受傷; 2) 遵守相關法律、規例和其他規定; 及3) 鼓勵員工和員工代表參與職業健康安全管理系統的決策過程。

Occupational Health and Safety Management System Requirements 職業健康與安全管理需求	Description 描述
Internal and external audit 內部和外部審計	Conduct internal and external audits at planned intervals to determine the Group's compliance with the occupational health and safety management system and international standards. 定期進行內部和外部審計,以確定本集團是否符合職業健康和安全管理系統和國際標準。
Occupational health and safety policies 職業健康和安全政策	Top management formulates, implements and maintains occupational health and safety policies upon discussion with employees at all levels of the Group. 最高管理層與本集團各級員工討論後制定、實施及維護職業健康與安全政策。
Leadership and commitment 領導力和承諾	At planned intervals, top management assesses the applicability, adequacy and effectiveness of the occupational health and safety management system, and analyses if the occupational health and safety performance could meet the established objectives. 最高管理層按時評估職業健康安全管理系統的適用性,充分性和有效性,並分析職業健康績效是否能達到既定目標。
Monitoring, measurement, analysis and evaluation 監察、測量、分析和檢討	Monitor, measure, analyse and evaluate the occupational health and safety performance. 監察、測量、分析和檢討職業健康和安全績效。
Hazard identification and risk assessment 危險識別和風險評估	Establish and implement ongoing and proactive processes for hazard identification so that associated occupational health and safety risks could be properly considered, mitigated and effectively managed. 建立並實施持續和主動的危險識別流程,以便正確考慮、減輕和有效管理相關的職業健康和安全風險。
Emergency preparedness and response 緊急事故準備和應變	Identify potential emergencies and assess the occupational health and safety risks associated with them to prevent or minimise any negative consequences. 識別潛在的緊急情況並評估由此引致的職業健康和安全風險,以防止或盡量減少任何負面後果。



To ensure consistency in managing suppliers, on-site third-party contractors and subcontractors, the Group has integrated relevant provisions from its ESHS Management System into contracts, and regularly carries out in-depth ESHS assessments on its major business partners. To regulate and manage possible environmental, social and safety risks in the supply chain, the Group has formulated and implemented the *Contractors ESHS Management Measures*, which reviews the contractors from different aspects, including background, qualifications, performance, safety production and environmental protection.

The Group performs an on-site ESHS audit every year on all of its projects, including those that are operating and under construction. The scope of the audit covers safety production, fire management, environmental compliance, occupational health management, education training and drills, vehicle use, pandemic prevention and control, etc. It evaluates the low-, medium- and high-risk factors based on their severity and impact, and takes measures to strengthen the management and control of risk factors, so as to minimise the impact of projects on local environmental, safety, health and social aspects.

為確保供應商、現場第三方承包商及分包商處理的一致性,本集團將ESHS管理體系的相關要求納入合約中,並定期組織對主要合作商的健康與安全績效進行深入持續的評估。本集團擬訂並落實了《承包商ESHS管理標準》,透過審視承包商的公司背景、資質、業績、安全生產及環保等各方面的綜合表現,監管供應鏈中與環境、社會和安全相關的風險。

本集團每年會為旗下所有運營及在建項目進行一次內部ESHS現場審計,內容涵蓋安全生產、消防管理、環境合規、職業健康管理、教育培訓與演練、車輛使用、疫情防控等內容,並根據嚴重性及影響評定低、中、高風險因素,採取措施加強風險因素的管控,將項目對當地環境、安全、健康和社會方面的影響降至最低。



Constructing Projects with High Safety Standard

The Group firmly believes that designing and constructing projects according to safety standards and strengthening construction site management are the basic principles for ensuring construction safety. The Group has continuously improved its project construction rules and regulations, which provide scientific guidelines on the scheduling and management of project construction, so as to enhance the level of on-site standardised management. The Group has continuously strengthened the management and assessment of contractors and suppliers, and conducted a number of special safety and environmental inspections to eliminate violations. The Group has also arranged for all construction projects to sign Construction Unit Safety Responsibility Letters with the relevant construction contractors, thereby enforcing the safety production responsibility of the construction units, and promoting the principle of "Everyone is a safety officer. Everyone should be responsible for safety".

項目安全施工高標準化

本集團堅信按照安全標準設計及建設項目並加強施工現場管理是保障施工安全的基本原則。本集團持續完善工程建設規章制度管理提供指引,從而提升工程現場的標準化管理提供指引,從而提升工程現場的標準化管理水平;同時不斷加強管理與考核施工方和供應商,開展多種安全與環境專項檢查工作,杜絕違章行為。本集團更安排所有建設事均與施工單位簽訂《施工單位安全責任,倡導「人人都是安全員、人人都為安全負責」。

Safety Measures in Place at Project Facilities

The Group has implemented the identification and evaluation of existing safety hazards and risks in its operating projects, and formulated corresponding preventive measures to strengthen management and control, such as the installation of fences around the waste water treatment tanks. Utilising materials with non-slip surfaces in the passageways and setting up safety warning signs could strengthen the control of limited spaces.

Safe Protection Programmes

The Group protects its employees' physical and mental well-being by providing annual medical check-ups and occupational disease monitoring. This initiative aims to encourage employees to pay attention to their health. Furthermore, it has set up an Employee Safeguard and Safety Fund, which can be disbursed upon application to support employees who suffer from accidents or diseases, alleviating the financial burden of their families.

Emergency Management and Safety Training

All of the Group's operating projects have implemented emergency response plans for all potential accidents at every stage of the projects, instructing employees to react swiftly and effectively. The respective project safety management teams are responsible for executing the emergency response plans, while the scope of safety risk management includes the project company and neighbouring communities. Regular health and safety training is also provided by the team, covering topics such as emergency response plans, operational hazards, and legal matters. The aim of the training is to enhance employees' crisis management skills and knowledge, and ensure that emergency plans can be activated immediately and efficiently when needed.

The Group places significant emphasis on its employees' physical and mental health, and encourages employees and outsourced workers to leave the workplace immediately when encountering dangerous situations or the environment they consider potentially harmful to their health. Accordingly, they should report the relevant situation to the project safety management team, and the Group shall guarantee that they are not subject to disciplinary action or other such adverse treatment as a result.

項目設施已採用的安全措施

本集團已實施轄屬項目辨識評估安全生產過程存在的安全隱患及風險,並制定相應的防範措施,加強管控,防範安全事故的發生,如在污水處理池邊緣架設圍欄及在通道採用有防滑表面的物料,加強有限空間的管控、設置安全警示標識等。

安全保障計劃

為保障員工身心健康,本集團每年為員工提供醫療檢查及職業病監測,督促員工關注自身健康狀況及保障員工健康。此外,本集團設立了員工保障及安全基金,在員工不幸發生工傷事故或患病時,可以申領基金以紓緩員工家庭經濟壓力。

緊急事故應對及安全培訓

本集團各運營項目皆專門設有應對不同階段 各種事故的應急預案,以協助員工迅速有效 地對緊急事故作出反應。應急預案由項目安 全管理團隊執行,安全風險管理範圍包含項 目公司及周邊社區。該團隊負責定期為員 舉辦健康與安全培訓,包括緊急應對計劃、 運營操作危害、法律等議題,務求提高到、 運營操作危害、法律等議題,務求提高和 節安全意識以及應對危機時的處理技巧和 識,確保能在意外發生時迅速高效地啟動應 急預案。

本集團格外注重員工的身心健康,鼓勵員工 及外判工人在工作中遇到任何他們認為可能 導致危險或疾病的狀況時,應立刻離開該環 境,並向項目安全管理團隊報告相關狀況; 本集團保障他們不會因此而遭受處分或其他 不利的對待。

The Group is dedicated to organising training activities which aim to motivate its employees to acknowledge the importance of safety management, laying the foundation for better and safer production management work at the workplace. The Group's health and safety trainings cover the following topics:

本集團致力於舉辦培訓活動,旨在激發員工 對安全管理工作的認識與思考,為更好地開 展工作場所日常安全生產管理工作打下基 礎。本集團的健康與安全培訓內容包括:



Health and Safety Laws and Regulations 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



Recognition and Control of Hazard Sources 危險源的辨識和控制



Risk Monitoring and Assessment at Different Risk Levels 風險分級管控和 隱患排查



Procurement and Storage of Hazardous Items 採購及儲存危險物品



Emergency Response Management 事故應急管理



Occupational Health Management 職業健康管理



First Aid 急救

Besides the Group's employees, the Group also offers training for third-party contractors' and subcontractors' on-site workers. Training topics include the ESHS Management System and emergency response management, etc.

除了本集團員工,本集團亦向第三方承包商 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。

In 2023, the total health and safety training hours of the Group were approximately **33,429 hours**.

二零二三年,本集團的健康與安全培訓總時數約為33,429小時。

During the Reporting Period, the Group remained dedicated to the "Safe Production Month" initiative and relentlessly pursued the "Dual Zero" goal (zero safety accidents, zero environmental incidents) across all project companies, This was achieved via a variety of themed activities, training and education, safety inspections, and emergency drills. 報告期內,本集團透過舉辦「安全生產月」活動,內容包括主題宣講、培訓教育、安全檢查、應急演練等,在所有項目公司深入貫徹並實現「雙零」目標(零安全事故、零環境事件)。



Case Study 個案分享



Hazardous Sources Identification and Potential Hazards Prevention and Control Training Conducted by Everbright Water Suizhou Water Environment Management Limited 光大水務隨州水環境治理有限公司開展危險源辨識及隱患排查治理培訓

On 25 August 2023, Everbright Water Suizhou Water Environment Management Limited ("**Suizhou Water**") organised a training session for all employees on "Hazardous Sources Identification and Potential Hazards Prevention and Control", aiming to improve its safety and environment management level.

為全面提升安環管理水平,於二零二三年八月二十五日,光大水務隨州水環境治理有限公司(「**隨州水務**」)組織全體員工開展了一次「危險源辦識及隱患排查治理」培訓。

The training focused on the identification of causes of the accidents, identification of hazardous sources, risk assessment and management, and prevention and control of potential hazards. To create an engaging learning environment, the safety production case studies were made use of and through interaction, the employees actively responded to training questions, further enhancing their understanding on "safety". Proper measures to handle safety and environment management issues faced in daily operations were also addressed, thereby improving the overall safety and environment management level within the project company.

此次培訓主要圍繞事故發生的原因、危險源辨識、風險評估與管控、隱患排查治理四個方面。為豐富培訓氛圍,結合安全生產案例,員工們進行互動,積極回答培訓中提出的安環問題,進一步提升了員工對於「安全」的理解,教導員工們如何應對、解決日常工作中的安環管理問題,從而提升項目公司整體安環管理水平。

Through this training, Suizhou Water has instilled "safety" into the front-line operations and into the hearts of the employees, converting their mindsets from "I have to follow safety requirements" to "I want safety requirements", thereby enhancing the overall awareness on safety for all employees. 通過此次培訓,隨州水務將「安全」更加深入前綫運營,深入人心,由「要我安全」變為「我要安全」,全面提升員工的安全意識。



Case Study 個案分享



Fall from Height Emergency Drill Conducted by EW Water (Dalian) Co., Ltd. 光水水務 (大連) 有限公司開展高處墜落應急預案演練

To further enhance employees' ability to mitigate risks and coordinate during emergency situations, on 10 March 2023, EW Water (Dalian) Co., Ltd. conducted a drill on how to handle emergencies involving fall from heights.

為進一步提升公司員工應急處置和協調能力,於二零二三年三月十日,光水水務(大連)有限公司組織開展高處墜落應急預案演練。

The drill was designed to simulate a real-life scenario of a fall accident that could occur while working at heights. Under the guidance of the management team, an emergency team comprising of a paramedic unit, communication unit, security unit and rescue unit was formed which responded swiftly with a clear division of work. The emergency rescue plan was skillfully executed, resulting in the desired outcome. Through this drill, the emergency rescue plan was proven to be feasible and effective.

演練採用場景設置、實戰參演的方式開展,現場模擬高空作業墜樓事故。在高處墜落演練領導小組的領導下,醫療教護組、通訊聯絡組、警戒保衛組、搶險救援組四支應急隊伍,反應迅速,分工明確,應對及時得當,全面找照預定應急救援方案執行到位,演練取得了預期效果,有效檢驗了現場高處墜落應急救援預案的可操作性和有效性。

The emergency drill showcased a clear work division and efficient responses, with different operation units demonstrating enhanced coordination skills. The emergency drill successfully achieved its intended purposes of boosting employees' safety awareness, and improving the ability to respond to emergencies. The desired effect of "practice makes perfect" has been achieved. 本次演練分工明確、行動迅速、措施得當,進一步增強了各班組之間的協作能力,提升了全員的風險防範意識和突發事件應變與處理能力,達到了「以演促訓、以練應戰」的預期效果。



Establish a Safety Culture to Ensure Safe Operation

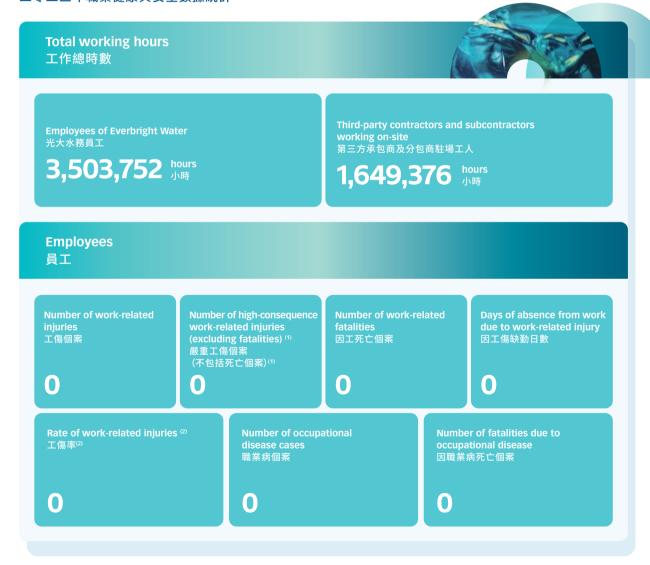
Based on the long-term goal formulated by the Group in 2020, the Group is committed to maintaining the average work injury rate at 0.25 or below from 2020 to 2030. During the Reporting Period, to achieve this goal, the Group has strengthened daily inspections on safety, environmental, and occupational health. These inspections ensure that various safety systems are strictly implemented in all projects under construction and in operation. Additionally, emergency drills were conducted regularly to enhance the crisis response skills of employees.

建立安全文化保障安全運營

根據本集團於二零二零年制定的長期目標,本集團致力於將工傷率於二零二零至二零三零年間平均維持於0.25或以下。本集團於報告期內加強安全、環境與職業健康的日常檢查工作,確保所有在建及運營項目嚴格執行各項安全制度,同時定期為員工安排應急演習,藉此提高員工應對危機時的處理技巧。

Occupational Health and Safety Statistics in 2023

二零二三年職業健康與安全數據統計



Third-party contractors and subcontractors working on site 第三方承包商及分包商駐場工人 **Number of work-related** Number of high-consequence **Number of work-related** due to work-related injury 因工傷缺勤日數 work-related injuries (excluding fatalities) (1) fatalities 因工死亡個案 injuries 工傷個案 嚴重工傷個案 0 0 0 disease cases occupational disease 0 0 O

Notes:

- High-consequence work-related injuries (excluding fatalities) refer to work-related injuries causing the worker being unable to recover fully to pre-injury health status within 6 months.
- Rate of work-related injuries = (Total number of work-related injuries/Total working hours) \times 200,000.

附註:

- (1) 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。
- 工傷率 = (工傷個案總計/工作總時數) X 200,000



COOPERATING
with our stakeholders
ACCOMPLISHING
GREATNESS HAND-IN-HAND

與持份者緊密合作 **攜手**共創輝煌





ver the years, Everbright Water has consistently striven to fulfil its corporate responsibilities and obligations. The Group is committed to promoting community development, eco-friendly infrastructure and sustainability. As a leading water environment management enterprise, the Group shows its dedication to giving back to society by participating in charitable events and organising community activities that spread warmth and positivity.

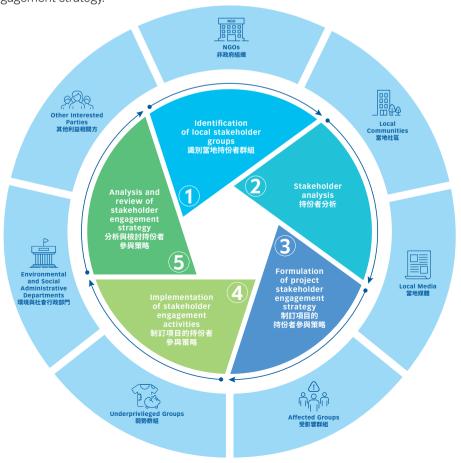
Community Engagement Plan

The Group recognises the importance of giving back to the community, and is constantly mindful of the impacts of its business activities on various local stakeholders. Everbright Water has formulated a comprehensive community engagement plan at the project level, by fully considering and evaluating each project's impacts on local stakeholder groups. The Group also formulates corresponding strategies to address stakeholder concerns, mitigate project risks and create shared value for stakeholders. The Group's community engagement plan consists of the following five steps: identification of local stakeholder groups, stakeholder analysis, formulation of project community engagement strategy, implementation of community engagement activities, and analysis and review of community engagement strategy.

年來,光大水務始終如一地努力履行企業責任和義務,致力於促進社區發展、環保基礎設施和可持續發展。作為領先的水環境治理企業,本集團通過參與慈善活動和舉辦社區活動,傳遞溫暖和積極向上的氛圍,展現回饋社會的決心。

社區參與計劃

本集團深知回饋社會的重要性,並時刻關注 其業務活動對各當地持份者的影響。本集團 已在項目層面制訂了全面的社區參與計劃, 充分考慮及評估每個項目對當地持份者群組 的影響,並制定相應策略,回應持份者的關 注,降低項目風險,構建共同價值。本集團的 持份者參與計劃由以下五個步驟組成:識別 當地持份者群組、持份者分析、制訂項目的 社區參與策略、落實社區參與活動及分析與 檢討社區參與策略。





Step 1: Identification of local stakeholder groups

第一步:識別當地持份者群組

The Group uses a systematic approach to identify potential stakeholders who may be directly or indirectly affected by the project. The first step of identifying stakeholders is to delineate the geographical boundaries of the area likely to be affected by the project. In addition to the construction site and the areas where the project facilities are located, the Group also considers all nearby facilities that could potentially be affected by the project, including other local public utilities and roads. Other sources of impact on stakeholders include the project's environmental emissions, off-site transportation of materials and waste, and the impact on local economies through job creation along the supply chain. In particular, the Group pays great attention to the ecological impact of each project. Therefore, during the process of stakeholder identification, the Group actively engages local NGOs, experts, universities and government departments that are involved in biodiversity initiatives. Based on the results of the comprehensive identification process, the Group establishes a list of stakeholder groups for each project, providing a basis for stakeholder analysis in the next step.

本集團採用系統化的方法識別每個項目中直接或間接受到影響的持份者。識別持份者過程的第一步首先是劃定項目的地理影響範圍。本集團除了項目的施工現場及廠區佔用的土地外,還將周邊所有可能受到項目影響的設施,包括當地其他公共設施、交通道路等均納入此範圍考量之中。其他對持份者的影響來源包括項目的環境排放、物料及廢棄物的場外運輸,以及供應鏈各環節所創造的就業機會對當地的經濟影響等。此外,本集團非常關注每個項目的生態影響。因此,在識別持份者的過程中,亦會積極地邀請生物多樣性倡議的非政府組織、專家和大學及政府部門參與其中。本集團基於全面的識別過程結果,建立項目的持份者群組名單,為下一步的持份者分析提供基礎。



Step 2: Stakeholder analysis

第二步: 持份者分析

Stakeholder input is one of the key considerations in the Group's decision-making process. It has a significant influence on the risks and successes of the Group's projects and overall business. The primary objective of undertaking stakeholder analysis is to comprehend the needs, interests and influence of various stakeholder groups. Stakeholder analysis provides in-depth information that is crucial to the development of each project's community engagement strategies and activities, helping to balance the interests of all parties and ensure successful project delivery.

持份者的意見是本集團作決策時的關鍵考慮因素之一,對本集團項目和整體業務的風險和成敗具有重大影響。進行持份者分析的主要目的是了解不同持份者群組的需求、利益和影響力,提供對制訂每個項目的社區參與策略和活動深入的和重要的信息,達致平衡各方利益,確保項目得以順利交付。

In order to communicate and interact with different stakeholder groups efficiently, the Group prioritises its stakeholder groups and formulates appropriate communication strategies for different types of stakeholders. The Group employs a stakeholder influence/interest matrix to divide stakeholders into four categories according to their level of interest and influence on the project.

為更有效地與不同的持份者群組進行溝通互動,本集團為持份者群組排列優先次序,並為不同類型的持份者制訂相應的溝通策略。本集團按照持份者群組與項目的利益關係和他們在項目中的影響力,採用持份者影響力/利益矩陣,把持份者分為四個類別。

Influence/interest matrix

影響力/興趣矩陣 Influence High High influence. 1 2 High influence, high level of interest low level of interest 影響力大、利益 影響力大、利益 4 關係水平低 關係水平高 3 **KEEP SATISFIED MANAGE CLOSELY** 5 保持滿意 重點管理 6 **Level of interest** Low High 利益關係水平 Low influence. Low influence. high level of interest low level of interest 影響力小、利益 影響力小、利益 關係水平低 關係水平高 7 **MONITOR KEEP INFORMED** 充分溝通 監察 Low



NGOs 非政府組織



Local Communities 當地社區



Local Media 當地媒體



4 Affected Groups 受影響群組



5 Underprivileged Groups 弱勢群組



6 Environmental and Social Administrative Departments 環境與社會行政部門



7 Other Interested Parties 其他利益相關方



Step 3: Formulation of project stakeholder engagement strategy 第三步:制訂項目的持份者參與策略

Based on the stakeholder analysis and the influence/interest matrix, the Group has formulated corresponding engagement strategies for different types of stakeholders in the project. Stakeholder engagement strategies are divided into the following five levels:

基於持份者分析及持份者影響力/利益矩陣,本集團針對項目不同類別的持份者制訂相應的參與策略,持份者參與策略分為以下五個層級:



- Partnership: These stakeholders include local communities, affected groups and environmental and social
 administrative departments, who have high levels of interest and influence in the Group's projects. To
 maximise their involvement, these stakeholders are invited to participate in different stages of decisionmaking in the project development and advancement processes.
 - 夥伴關係:這些持份者包括當地社區、受影響群組及環境與社會行政部門等,他們對本集團項目的利益關係密切,亦具有影響力。為了盡量提升他們的參與度,本集團會邀請他們參與項目每個階段的決策過程,讓他們參與項目開發和推進工作。
- Participation: The Group acknowledges the aspects of its projects that are of high significance to the stakeholders, and encourages their participation by inviting them to take on specific roles. Stakeholder participation leverages the influence of stakeholders to facilitate successful project delivery.
 - 參與:本集團識別出與這些持份者有密切關係的項目領域,並邀請他們擔當特定的角色,以提高他們的參與度,並運用其影響力促成項目的交付。
- Consultation: The Group frequently engages with these stakeholders to seek their support and obtain their feedback on project development.
 - 諮詢:本集團經常與持份者接觸並諮詢他們的意見,以確保得到他們認同與支持,並收集有助於項目發展的反饋。

 Push communication: To ensure stakeholders stay abreast of the latest project updates and remain engaged with them, the Group frequently distributes project-related information through email and other communication channels.

推式溝通:為確保持份者及時了解最新的項目消息,並持續參與計劃,本集團定期通過電子郵件和其他溝通管道向持份者發放項目相關信息。

• Pull communication: For stakeholders with limited interest and influence, the Group shares project-related information on its website or other publicly accessible platforms for their perusal, this approach allows for gathering feedback from them in an efficient manner.

拉式溝通:對於興趣和影響力有限的持份者,本集團在其網站或其他公共平台上提供項目相關的資訊供他們閱覽,這種方法能有效地收集他們的反饋。



Step 4: Implementation of stakeholder engagement activities

第四步:制訂項目的持份者參與策略







The Group's stakeholder communication and consultation guidelines specify the responsibilities of project companies in stakeholder consultation and the frequency of engagement activities. Project companies have the flexibility to arrange stakeholder participation activities through appropriate communication channels, taking into

account local conditions and their community engagement strategy. Project companies also regularly invite stakeholders to express their views on the projects, so that the expectations of stakeholders can be met through effective project development strategies.

本集團的持份者溝通及諮詢指引,明確規定了在項目中公司對於持份者諮詢的職責分配,以及持份者參與活動應有的頻率。項目公司可依據當地的環境和具體情況,結合其社區參與策略,採用靈活的方式,通過適宜的溝通渠道和持份者參與活動,定期邀請持份者就項目提出意見。這樣可以有效地滿足持份者的期望,並為項目的發展戰略制定提供指導。







In order to ensure that the rights and interests of local residents, indigenous peoples and other affected groups are fully protected, the Group takes proactive measures to engage and communicate with these stakeholders at the early stages of each project and ensures that sufficient stakeholder communication activities are conducted in the local dialect and caters to the needs of indigenous peoples. The Group is committed to maintaining a high degree of transparency of project-related information by disclosing the nature and scope of the project and reasons for land acquisition to the public. By disclosing adequate information, the Group enables the affected groups to fully understand the compensation and resettlement plan for land acquisition, the impacts of the resettlement plan on their future lives, their rights and the grievance mechanisms related to environmental/social compliance.

為了充分保障當地居民、原住民及其他受影響群體的權益,本集團在每個項目的前期階段積極開展對話,確保有足夠的持份者溝通活動是以當地方言進行,以照顧原住民的需求。本集團致力保持項目相關的資訊透明度,向公眾公開項目的性質、範圍及徵地的原因,並讓受影響群組能夠充分了解收地補償安置方案、安置方案對他們往後生活的影響、他們的權益及與環境/社會合規相關的申訴機制。

The Group's stakeholder communication and consultation activities are carried out in an open and transparent manner, and all affected persons can freely express their views without any external manipulation, interference or threat of retaliation. Moreover, the Group endeavours to include women and vulnerable groups in consultation activities and takes their opinions and concerns into due consideration during project development.

本集團的持份者溝通和諮詢活動以公開透明的形式進行,所有受影響的人士可以自由發表自己的觀點,不受任何外部操縱、干涉或報復威脅。本集團亦努力讓婦女和弱勢群體參與諮詢活動,並在項目開發過程中充分考慮她們的意見和關注。



Step 5: Analysis and review of stakeholder engagement strategy 第五步:分析與檢討持份者參與策略

The Group regularly evaluates the stakeholder engagement activities and communication records, and assesses any grievances raised by stakeholders (if any). The Group consistently seeks stakeholder feedback on project impacts through consultations and questionnaires at the mid- and late-stages of project development. Thereafter, the Group analyses and reviews the effectiveness of the stakeholder engagement strategy of the projects and makes improvements to the existing project strategy accordingly.

本集團透過定期評估持份者參與活動、檢視持份者溝通記錄及分析持份者提出的任何不滿(如有),並且在項目發展的中、後期階段繼續透過諮詢及問卷調查,不斷尋求持份者對項目影響的評價,從而分析與檢討項目持份者參與策略的有效性,並根據檢討分析結果改善項目現有的策略。

Promotion of Environmental Protection and Education

Everbright Water actively responds to the initiatives announced by the Ministry of Ecology and Environment and the Ministry of Housing and Urban-Rural Development of the PRC by continuously opening its waste water treatment facilities to the public. This further enhances the Group's position as an advanced hub for public visits and environmental protection promotion that concurrently provides on-site visits, practical education and technical training. Multiple waste water treatment plants of the Group received recognition at state, province and city levels, having been awarded titles such as "Science Hub for Ecological Environment", "Environmental Protection Science Hub", "Ecological Progress Education Hub", "Education Base for Ecological Civilisation Development" and "Popular Science Education Hub".

宣揚環境保護及教育

光大水務積極回應中國生態環境部和住房和城鄉建設部的倡議,持續向公眾開放污水處理設施。這進一步加強了集團作為公眾參觀和環保推廣的先進樞紐的地位,同時提供現場參觀、實踐教育和技術培訓。本集團旗下多個污水處理廠獲得「生態環境科普基地」、「環保科普基地」、「生態文明教育基地」、「生態進步發展教育基地」和「科普教育基地」等榮譽稱號。

In 2023, Everbright Water (Ji'nan) Limited was successfully selected into the Ministry of Ecology and Environment's *Excellent Case Collection of Development of Environmental Protection Facilities to the Public*, the Zhenjiang Sponge City Project was selected as a Green Development Service Demonstration Case at the 2023 China International Fair for Trade in Services, while Everbright Water (Xianyang) Limited was awarded "Ideological and Political Education Coordinated Practical Education and Teaching Hub". Everbright Water's project companies have been consistently dedicated in their commitment to opening their facilities to the public, and have enhanced their competitive edge through innovative approaches, earning recognition from the authorities and the public.

於二零二三年,光大水務(濟南)有限公司成功入選生態環境部《環保設施向公眾開發優秀案例集》、鎮江海綿城市項目獲選為「二三中國國際服務貿易交易會綠色發展服務示範案例」、光大水務(咸陽)有限公司榮獲「"大思政課"共建實踐教育教學基地」等稱號。光大水務轄屬各項目公司致力於完善向公眾開放污水處理設施,並通過開放創新方法增強了競爭優勢,在此期間贏得了當局和公眾的認可。

Take Advantage of Your Strength – Proactively Restoring Activities in Collaboration with Organisations

Everbright Water's management has consistently taken the lead in organising public activities. Members of staff in charge of this effort reached out to higher-level authorities such as the Water Conservancy Bureau and the Ecology and Environment Bureau, and even established connections with the ecological environment colleges of major universities. Additionally, the Group also collaborated with various enterprises and party organisations from surrounding communities to ensure effective communication channels.

借力打力一主動與相關組織合作恢復活動

光大水務的管理層一直積極引領組織公眾活動。負責此項任務的同仁已經與水利局、生態環境局等高層機構建立了聯繫,甚至還與多所大學的生態環境學院進行了接洽。此外,本集團也與來自不同企業和周邊社區的各類黨團組織合作,以確保有效的溝通和協作渠道。

As of 31 December 2023 截至二零二三年十二月三十一日



In 2023 二零二三年



List of Environmental Projects that were Open to the Public

已向公眾開放的環保項目列表

Region	Number	Name of Waste Water Treatment Project
區域	個數	污水處理項目名稱
Western Shandong 魯西區域	13	Ji'nan Waste Water Treatment Project (Plant 1) 濟南污水處理項目 (一廠) Ji'nan Waste Water Treatment Project (Plant 2) 濟南污水處理項目 (二廠) Ji'nan Waste Water Treatment Project (Plant 3) 濟南污水處理項目 (三廠) Ji'nan Waste Water Treatment Project (Plant 4 & Dajin) 濟南污水處理項目 (四廠&大金廠) Ji'nan Huashan Waste Water Treatment Project (Plant 4 & Dajin) 濟南華山廠污水處理項目 Xianyang Dongjiao Waste Water Treatment Project 咸陽東郊廠污水處理項目 Zhangqiu Waste Water Treatment Project (Plant 1) 章丘污水處理廠項目 (一廠) Zhangqiu Waste Water Treatment Project (Plant 3) 章丘污水處理廠項目 (三廠) Zhangqiu Waste Water Treatment Project (Plant 4) 章丘污水處理廠項目 (四廠) Sanmenxia Industrial Cluster Area Waste Water Treatment Project 三門峽產業集聚區廠污水處理項目 Ji'nan East Station Waste Water Treatment Project 濟南東站廠污水處理項目 Ji'nan Tangye New Area Waste Water Treatment Project 濟南唐冶新區廠污水處理項目 Nanning Shuitang River Waste Water Treatment Project 南寧水塘江廠污水處理項目

Region 區域	Number 個數	Name of Waste Water Treatment Project 污水處理項目名稱
Eastern Shandong 魯東區域	7	Ju County Shudong Waste Water Treatment Project 宮縣沭東廠污水處理項目 Zibo Waste Water Treatment Project (New Plant 1) 淄博污水處理項目 (新一分廠) Zibo Waste Water Treatment Project (Plant 3) 淄博污水處理項目 (三廠) Binzhou Development Zone Waste Water Treatment Project 濱州開發區廠污水處理項目 Zibo Waste Water Treatment Project (Plant 2) 淄博污水處理項目 (二廠) Zibo Zhoucun Waste Water Treatment Project 淄博周村廠污水處理項目 Laiyang Economic Development Zone Waste Water Treatment Project 萊陽經開區廠污水處理項目
Jiangsu 江蘇區域	13	Nanjing Luhe Waste Water Treatment Project 南京六合廠污水處理項目 Nanjing Pukou Economic Development Zone Industrial Waste Water Treatment Project 南京浦口經開區工業廠污水處理項目 Nanjing Pukou Waste Water Treatment Project 南京浦口區珠江廠污水處理項目 Suzhou Wuzhong Chengnan Waste Water Treatment Project 蘇州吳中城南廠污水處理項目 Lianyungang Dapu Waste Water Treatment Project 連雲港大浦廠污水處理項目 Jiangyin Binjiang Waste Water Treatment Project 江陰濱江廠污水處理項目 Jiangyin Chengxi Waste Water Treatment Project 江陰濱西廠污水處理項目 Jiangyin Chengxi Waste Water Treatment Project 江陰澄西廠污水處理項目 Xinyi City Waste Water Treatment Project 新沂城市廠污水處理項目 Xinyi Economic Development Zone Waste Water Treatment Project 新沂開發區廠污水處理項目 Zhenjiang Zhengrunzhou Waste Water Treatment Plant Operation and Management Project 鎮江征潤州廠污水處理廠委託運營項目 Kunshan Gangdong Waste Water Treatment Project 昆山港東廠污水處理項目 Jiangyin Binjiang Waste Water Treatment Project (Plant 2) 江陰濱江廠污水處理項目 (二廠) Jiangyin Xili Waste Water Treatment Project 江陰西利廠污水處理項目

Region 區域	Number 個數	Name of Waste Water Treatment Project 污水處理項目名稱
Liaoning 遼寧區域	9	Dalian Quanshui phase 1 Waste Water Treatment Project 大連泉水廠污水處理項目 (一期) Dalian Malanhe phase 2 Waste Water Treatment Project 大連馬欄河廠污水處理項目 (二期) Dalian Siergou Waste Water Treatment Project 大連寺兒溝廠污水處理項目 Dalian Chunliuhe phase 2 Waste Water Treatment Project 大連春柳河廠污水處理項目 (二期) Zhuanghe Waste Water Treatment Project 莊河 (廠) 污水處理項目 Dandong Waste Water Treatment Project 丹東 (廠) 污水處理項目 Panjin Waste Water Treatment Project 盤錦 (廠) 污水處理項目 Dalian Pulandian Waste Water Treatment Project 大連普蘭店廠污水處理項目 Shenyang Hunnan Waste Water Treatment Project 瀋陽渾南廠污水處理項目
Tianjin 天津區域	3	Beijing Daxing Tiantanghe Waste Water Treatment Project 北京大興區天堂河廠污水處理項目 Dezhou Nanyunhe Waste Water Treatment Project 德州南運河廠污水處理項目 Tianjin Binhai new area Beitang Waste Water Treatment Project 天津北塘廠污水處理項目

Advocating Environmental Protection Promotional Campaign 推動環保主題公益宣傳

As an environmentally friendly company dedicated to water environment management, Everbright Water has, over the years, been actively organising charitable environmental protection activities in collaboration with different environmental protection and technology associations, as well as government agencies. The Group participates in local and overseas environmental technology activities, and encourages employees to adopt a low-carbon lifestyle. The Group also organises a range of online and offline environmental activities in conjunction with various environmental protection-themed events such as "World Water Day", "Earth Day" and "World Environment Day". Through these initiatives, the Group spreads environmental protection principles and amplifies the influence of sustainable development in the community. 作為一家致力於水環境治理的環保型企業,光大水務多年來積極與不同環保科技協會及政府機構合作,舉辦環保慈善活動。本集團參與本地及海外環保科技活動,鼓勵員工採用低碳生活模式。本集團亦結合「世界水日」、「地球日」及「世界環境日」等多項環保主題活動,舉辦一系列線上線下環保活動。通過這些舉措,傳播環保原則,並擴大可持續發展在社區的影響力。



In conjunction with the World Environment Day, Everbright Water launched the 2023 "I am a Little Environmental Painter" competition as well as a series of public welfare lectures and jointly launched them in project locations in six major cities, namely Nanjing, Suzhou, Jinan, Nanning, Zibo, and Dalian. This jointly fulfilled corporate social responsibilities, and was a practical measure of the Group which integrated into the construction of ecological civilisation and promoted the concept of a green and low-carbon living for society. The Group works together with various sectors of the community to build a beautiful home for mankind with blue sky, green land and clear water. Everbright Water has carried out charity activities on World Environment Day for six consecutive years to promote and spread the awareness of environmental protection.

為配合世界環境日,光大水務在二零二三年啟動了「我是小小環境畫師」比賽及一系列面向公眾的公益講座。活動遍及南京、蘇州、濟南、南寧、淄博、大連等六大項目城市。這一系列活動體現了本集團對企業社會責任的承擔,也是本集團融入生態文明建設、提倡綠色低碳生活理念的實際行動。本集團攜手社會各界,為創建擁有藍天、綠地和清澈水域的美好家園而共同努力。光大水務持續六年在世界環境日期間舉辦公益活動,致力於環保意識的提升和傳播。









World Environment Day activities in Jinan, Nanning, Zibo and Nanjing 濟南、南寧、淄博、南京世界環境日活動現場

Everbright Water's Celebration Activities of the World Water Day and China Water Week 2023 光大水務二零二三年世界水日暨中國水週慶祝活動

In 2023, Everbright Water held a series of activities to celebrate the 31st "World Water Day" on March 22, and the 36th "China Water Week" on 22-28 March. These activities seek to inspire the public's love for water, and their awareness of water conservation and governance. The activities included the public opening of the Group's facilities, greens planting and water protection, and environmental protection lectures. In particular, Everbright Water (Tongxiang) Limited, Sanmenxia Everbright Water Limited, and Everbright Water (Nanning) Limited organised educational lectures in local schools to raise the awareness on environmental protection among our next generation.

光大水務於二零二三年三月二十二日第三十一屆「世界水日」及三月二十二日至二十八日第三十六屆「中國水週」期間舉辦系列慶祝活動,旨在喚發公眾對水的熱愛,以及他們對水資源保護和治理的意識。活動包括集團設施的公開開放、綠化種植和水保護、環保講座等。其中,光大水務(桐鄉)有限公司、三門峽光大水務有限公司和光大水務(南寧)有限公司在當地學校舉辦教育講座,以提高下一代的環保意識。

"Discovering the Past and Present of Water" - Suzhou Project Opened to the Public Visits 「發現水的過去和現在」一蘇州項目向公眾開放參觀

To raise public awareness about the critical importance of water resources and the need for water conservation, the Suzhou Ecology and Environment Bureau has joined forces with the Suzhou Wuzhong Chengnan Waste Water Treatment Project to organise an Popular Science Education event. This collaborative initiative aims to educate the public about treating waste water through small experiments, fostering a sense of responsibility towards our environment and vital water resources.



為提高公眾對水資源和節約用水重要性的

認識,蘇州市生態環境局與蘇州吳中城南污水處理項目合作,舉辦了一次科普教育活動。這項合作計劃旨在通過小型實驗教育公眾處理污水,培養對環境和重要水資源的責任感。

"Children-led Future" - Little Journalists Visiting Jiangyin Project 「兒童主導的未來」 - 小記者探訪江陰項目

The little journalists, who had a strong interest in waste water treatment, visited our Jiangyin Waste Water Treatment Project and embarked on a learning journey. Through extensive explanations and the opportunity to observe the various different parts of the plant, their young minds were opened to learning about the complex process. They actively participated in a hands-on exercise, creating a small-scale water filter, to enhance their comprehension. The building of the filter gave them a deep appreciation of the effort required to obtain clean water resources. This experience instilled in them a strong feeling of water conservation, emphasising the necessity of appreciating and safeguarding this valuable natural resource. 對污水處理抱有濃厚興趣的小記者們參觀了我們的江陰污水處理項目,開始了他們的學習之旅。通過廣泛的說明和觀察工廠不同部分的機會,激發了他們年輕腦海中對複雜過程的認識。透過積極參與實作練習,他們製作了一個小型濾水器,這不僅增進了他們對此過程的理解,也讓他們深刻體會到在精心設計的篩選流程中獲取潔淨水資源所需的努力。這次實地學習經歷深化了他們節約用水的意識,並突出了珍惜及保護這一寶貴自然資源的重要性。

Little Journalist of Jiangyin Rong Media Center Visiting Jiangyin Project 江陰市融媒體中心小記者訪問江陰項目

Returning to the waste water treatment plant once more, the little journalists watched an educational cartoon video that illustrated the amazing process of waste water treatment in the Jiangyin Waste Water Treatment Project. They were truly excited about every captivating visual and informative explanation. Fueled by their passion for the treatment process, they eagerly explored different sections of the plant, witnessing the complex machinery and techniques employed to purify water. The visit also included an engaging activity where they actively participated in water testing, measuring various parameters and analysing the results. Bursting with curiosity, the children raised numerous thought-provoking questions, demonstrating their genuine interest and desire for deeper knowledge. The visit not only enriched their knowledge but also ignited a sense of curiosity and inspired them to explore further the fascinating world of environmental science.

再次造訪污水處理廠,小記者們觀賞了一段關於江陰污水處理項目污水處理過程的教育卡通影片,這一過程令人驚歎。他們對每個吸引人的畫面及信息解說感到無比興奮。出於對污水處理過程的熱忱,他們熱切地探索了處理廠的各個部門,親眼見到了用於淨化水的複雜設備和技術。此行還包括了一個引人入勝的實驗活動,他們積極參與了水質測試,測定各項指標並分析測試結果。孩子們展現出了滿腔的好奇心,提出了許多發人深省的問題,顯示了對深入了解這一領域的強烈興趣與渴求。這次實地考察不僅豐富了他們的知識庫,也激發了他們對於環境科學這一迷人領域進一步探索的熱情。

"Zero Distance to Waste Water Treatment Project" - Ji'nan Yuxiu Secondary School Visiting Huashan Project

「污水廠零距離」一濟南育秀中學考察華山項目

A group of enthusiastic students from Ji'nan Yuxiu Secondary School embarked on a memorable journey to the Ji'nan Huashan Waste Water Treatment Project. Upon entering the facility, they were greeted with a series of vivid cartoon illustrations that creatively depicted the process of treating waste water. These visual aids brought the complex concepts to life, allowing the students to grasp the intricacies of the treatment process with ease. Additionally, they had the privilege of exploring the sophisticatedly built facilities firsthand. The scale and sophistication of the machinery left them in awe, igniting a sense of inspiration within each student. Observing the project's operations and understanding the careful steps involved in purifying waste water left an unforgettable impression on their young minds, fostering an appreciation for the importance of environmental stewardship.

一群來自濟南育秀中學的熱心學生開展了他們難忘的濟南華山水質淨化項目之旅。踏入設施,首先映入眼簾的是一系列充滿活力的卡通插圖,這些插圖巧妙地描繪了污水處理的步驟。視覺輔助資料將這些複雜的概念變得生動有趣,幫助學生們輕鬆理解治水過程的細節。此外,他們還有機會親自探索這座精心設計的設施。設備的龐大與複雜令他們嘆為觀止,激發了每位學生心中的靈感。親眼見證項目運作和了解細致的污水淨化步驟,給他們留下了深刻的記憶,並培養了他們對環境監管重要性的認識。

Please refer to the chapter entitled "Major Recognitions, Awards and Memberships" of this Report for the details of projects with major education recognitions and major science, technology, and environmental protection education activities in 2023.

有關二零二三年主要項目教育榮譽與主要 科技及環保教育活動詳情,請查看本報告的 「主要嘉許、獎項及會籍」章節。

Caring for the Community and Creating a Harmonious and Inclusive Society





To minimise the adverse effects of project development on the surrounding environment and communities, the Group strives to adhere with the relevant guidelines of International Finance Corporation and local laws and regulations. Moreover, the Group also actively participates in community charity events, and strengthens its connection with the community, thus ensuring the projects are in harmony with the surrounding environment and communities. Furthermore, the Group takes community concerns into account in the design and operation stages of the projects, and respects the indigenous peoples' values in terms of their own identity, dignity, human rights, lifestyle and culture. This protects and enables them to gain socio-economic benefits that align with their cultural and traditional practices. Where inevitable impacts on such communities are identified at an early stage, the Group offers adequate and fair compensation and resettlement arrangements for the affected groups, such as indigenous peoples, in accordance with the applicable laws. At the same time, the Group has a confidential grievance mechanism for the relevant parties to raise their concerns. All information collected is handled properly and all grievances are responded by the Group's relevant departments in a timely manner. In 2023, the Group did not receive any grievances.

關愛社區,共創和諧共融社會





為盡量減低項目開發對周邊環境和社區的不 利影響,本集團致力遵守國際金融公司的相 關指引和當地法律與法規要求。本集團亦積 極參與社區慈善活動,加強與社區的聯繫, 確保項目與周邊環境和諧共融。此外,在設 計和實施項目的過程中,本集團將社區的關 注點納入考量,並對原住民自主定義的身份 特徵、尊嚴、人權、生活方式和文化特點予以 充分尊重,這保護並使他們能夠獲得與其文 化和傳統習俗相一致的社會經濟利益。若本 集團於早期階段確定項目將為社區群體帶來 不可避免的影響,本集團會按照適用法律為 原住民等受影響人士提供公平、充分的補償 和安置安排。同時,本集團設立保密申訴機 制,以供有需要人士進行申訴,所收集的資 料將會被妥善處理,本集團相關部門會適時 作出回應。於二零二三年,本集團並沒有收 到任何申訴。

Stakeholder Engagement 持份者參與

In order to prioritise public welfare and charity, the Group abides by its Donations and Sponsorships Management Measures and strives to gain a thorough understanding of societal needs. The Group promotes social, economic and environmental integration to prevent discrimination based on various factors such as age, gender, disability, and ensures the well-being of the underprivileged and people in need. In order to contribute to environmental protection and social harmony, the Group also encourages employees to participate in charitable activities such as monetary donations, visits, volunteering, blood donations and tree planting, with an emphasis on shouldering responsibility for poverty alleviation, education improvement, hazards reduction and environmental protection. During the Reporting Period, the Group's employees contributed to various charitable initiatives, including fund-raising, visits to disadvantaged households and volunteering.

本集團以公益慈善為優先,並因此制定《對外捐贈、贊助管理辦法》作為指引,務求全面了解社區需要,推動社會、經濟和環境共同融洽,防止基於年齡、性別、殘疾等不因素的歧視,確保弱勢社群及有需要人士則因素的歧視,確保弱勢社群及有需要人士的福祉。為促進環境保護和社會和諧,本集團 還鼓勵員工參與慈善活動,如捐款、探育改善、減災和環境保護的責任。報告期內,本集團的員工參與多項慈善活動,包括籌款、探訪弱勢住戶及義工服務。



he Group is committed to creating social and economic value while aligning its business activities with the United Nations' 17 SDGs, in order to address the world's most pressing environmental, social and economic issues. As a leading water environment management enterprise in China, Everbright Water has launched a series of sustainable development plans and project designs to ensure water supply security, protect the environment, and create a high-quality living environment for the public. The summary below illustrates how the Group's operational policies and activities are aligned with the SDGs.

集團致力於創造及促進社會和經濟效益,並配合聯合國的17項可持續發展目標,制定一系列政策以應對世界上最緊切的環境、社會和經濟議題。作為中國水環境綜合治理的領軍企業,光大水務透過落實一系列可持續發展計劃和項目設計,保障水資源供應、維護生態環境,同時為公眾打造一個優質的生活環境。以下概述了本集團的運營方針及活動與可持續發展目標的相關性。

Environment

SDGs 可持續發展目標



Ensure healthy lives and promote well-being for all at all ages 確保健康的生活, 促進各年齡段人群的福祉

3.9

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 Contributions

環境

本集團的貢獻

The effluent discharged from most of the Group's waste water treatment plants complies with or is better than Grade 1A standard of *Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant* (GB18918-2002), which is the highest national standard for municipal waste water plant effluent. The treated effluent can be utilised for non-potable purposes such as urban landscaping, as it is of high quality.

本集團大部分污水處理廠的出水均符合或優於《城鎮污水處理廠污染物排放標準》(GB18918-2002)的一級A標準。這是城市污水處理廠污水的最高國家標準。由於處理後的污水品質高,可用於城鎮景觀用水和一般非飲用水等用途。

SDGs 可持續發展目標



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

6.4

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 Contributions 本集團的貢獻

The Group treated a total of approximately 1,749,241,000 m³ of waste water and produced approximately 45,523,000 m³ of reusable water in 2023. The Group has also undertaken various projects to ensure the safety and hygiene of the sources of water supply. These include replenishing water resources, restoring river-basin ecosystems, and protecting drinking water sources. 本集團於二零二三年共處理了約1,749,241,000立

本集團於二零二三年共處理了約1,749,241,000立 方米的污水,並生產了約45,523,000立方米的回用 水。本集團也承建了多項旨在確保供水水源安全衛 生的項目,其中包括補充水資源、流域生態系統治 理、保護飲用水源項目等。

SDGs 可持續發展目標



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

7.2

By 2030, increase substantially the share of renewable energy in the global energy mix. 到二零三零年,大幅增加可再生能源在全球能源結構中的比例。

7.a

By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology. 到二零三零年,加強國際合 作,促進獲取清潔能源的研究 和技術,包括可再生能源、能 效,以及先進和更清潔的化石 燃料技術,並促進對能源基礎 設施和清潔能源技術的投資。

The Group's Contributions 本集團的貢獻

The Group has been actively promoting the use of renewable resources at its projects. This includes the utilisation of waste water source heat pumps, inplant photovoltaics, and sludge power generation. To further support this initiative, the Group has also set up a dedicated team to conduct research and exchanges with peers and academic institutions. 本集團一直積極推動其項目使用再生資源,包括污水源熱泵利用、廠內光伏發電、污泥發電等。為進一步支持相關舉措,集團也成立了專門研究團隊,與同行及相關院校開展研究和交流。

SDGs 可持續發展目標



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

9.4

By 2030, upgrade infrastructure and retrofit industries to make them sustainable. with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities. 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's Contributions 本集團的貢獻

With its river-basin ecological restoration projects, the Group contributes to a more stable ecological environment and enhances cities' resilience against regional water environment pollution. Meanwhile, the Group's "Sponge City" project facilitates effective drainage and rainwater reuse, strengthens urban ecosystems, and promotes sustainable development. 本集團的流域治理項目通過構建更穩定的生態環境從而提升城市水污染抵禦能力;「海綿城市」項目則有助疏導和雨水再利用、改善城市生態系統及促進可持續發展。

Furthermore, the Group has gained experiences and expertise on underground waste water treatment projects, which not only fulfils the Group's responsibilities towards pollution reduction, but also enhances the quality of life in local communities by providing a more pleasant ground environment. The Group currently has three operational underground/half-sunken waste water treatment projects in Beijing and Shandong, with a total daily treatment capacity of up to 220,000 m³, releasing a total of 60,000 m² of green area. The Group also has three underground/half-sunken waste water treatment projects under construction, with a total daily treatment capacity of 210,000 m³.

此外,本集團在地下污水處理項目方面積累了豐富的經驗和專業知識,這不僅履行了本集團在減污方面的職責,還為當地社區提供更加怡人的地面環境,提高了生活質量。本集團目前在北京市及山東省共有三個已投運的地下式或半地下式污水處理項目,日處理污水總規模達22萬立方米,並騰出6萬平方米綠地資源。本集團同時還有三個地下式或半地下式污水處理項目正在建設中,日處理污水總規模總計21萬立方米。

SDGs 可持續發展目標



Make cities and human settlements inclusive, safe, resilient and sustainable

建設包容、安全、有抵禦 災害能力及可持續的城市和 人類住區

11.6

By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and 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 注空氣質量,以及城市廢物管 理等。

The Group's Contributions 本集團的貢獻

The Group provides a wide range of water environment management services, which encompass raw water protection, municipal waste water treatment, industrial waste water treatment, water supply, reusable water, and sludge treatment and disposal. These services contribute to the development of sustainable cities and communities and help minimise the negative impacts of hazardous substances on aquatic and terrestrial ecosystems.

本集團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、工業污水處理、供水、中水回用及污泥處理處置等,為建設可持續城市和社區 貢獻力量,並將有害污染物對水體和陸上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

12.2

By 2030, achieve the 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 Group collaborates with qualified third parties to recycle and process sludge into compost or construction materials, or incinerate sludge for energy recovery, so as to best utilise waste materials at their end-of-life stage.

本集團聘請具有資質第三方把污泥回收加工,用於 堆肥、建材利用,或透過焚燒回收能源,從而在廢 物的最終處置階段盡量進行資源利用。

SDGs 可持續發展目標



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

13.1

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 Contributions 本集團的貢獻

The Group's waste water treatment process effectively lowers the total nitrogen concentration in effluent, thereby mitigating the fugitive nitrous oxide emissions and avoiding associated GHG emissions. As a result, the Group's operations successfully avoided 118,085 tonnes of carbon dioxide equivalent emissions in 2023.

本集團透過污水處理工藝降低出水的總氮含量以及其所引致的無組織氧化亞氮排放,並避免相關溫室氣體排放。二零二三年,本集團的運營共避免了118,085噸二氧化碳當量排放。

Furthermore, the Group has integrated climate risks into its existing Risk Management System to develop more comprehensive emergency and natural disaster response plans. This is vital for the resilience of the cities that the Group serves, as water supply and waste water treatment facilities are crucial urban infrastructures that cannot afford any disruption. 此外,本集團更將氣候變化風險納入現有的風險管

此外, 本集團更將氣候變化風險納入現有的風險官理體系中, 以制定更全面的緊急與自然災害應變方案。這對本集團所服務的城市的氣候適應能力而言至關重要, 因為供水和污水處理設施是重要的市政基礎設施, 不能受到任何干擾。

SDGs 可持續發展目標



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

14.1

By 2025, prevent and significantly reduce marine pollution of all kinds, in particular 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 Contributions 本集團的貢獻

In order to protect the aquatic ecosystem, the Group is committed to ensuring that all effluents discharged into the water bodies are effectively treated and relevant discharge standards are strictly abided. 本集團確保其所有排放水均經過高效的污水處理,並嚴格滿足相關排放要求,從而保護水下生態。

SDGs 可持續發展目標

15 UFE ON LAND

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

15.1

By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

到二零二零年,根據國際協議規定的義務,保護、恢復和可持續利用陸地和內陸的淡水生態系統及其服務,特別是森林、濕地、山麓和旱地。

The Group's Contributions 本集團的貢獻

The Group has invested a total of RMB4.085 billion in its river-basin ecological restoration projects, which focus on enhancing the overall well-being of river ecosystems, including riparian habitats.

本集團的流域治理項目改善和加強了河道生態系統,其中包括河岸棲息地,總投資額超過40.85億元人民幣。

Biodiversity risk assessment is included in this Report to analyse the impact of the Group's business activities on biodiversity, so as to formulate effective investment and operational strategies to prevent any loss of biodiversity.

本報告納入生物多樣性風險評估,以分析本集團的 經濟活動對生物多樣性的影響,制定有效的投資及 運營策略,遏止生物多樣性的喪失。

Social 社會

SDGs 可持續發展目標

1 POVERTY

End poverty in all its forms everywhere 在全世界消除一切形式的貧困。

1.2

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 Contributions 本集團的貢獻

The Group actively undertakes its responsibility for poverty alleviation through encouraging its employees to participate in donations, visits, and volunteering etc.

本集團透過鼓勵其員工參與捐贈、探訪、志願者服 務等活動,積極承擔扶貧責任。

SDGs 可持續發展目標



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

2.4

By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality. 到二零三零年,確保建立可持 續糧食生產體系並執行具有抗 災能力的農作方法,以提高生 產力和產量,幫助維護生態系 統,加強適應氣候變化、極端 天氣、乾旱、洪澇和其他災害 的能力,逐步改善土地和土壤 質量。

The Group's Contributions 本集團的貢獻

The Group contributes to food security through sustainable waste water management. The Group's waste water treatment plants provide reclaimed water for non-potable uses, freeing up more clean water for irrigation and drinking. Additionally, the Group's waste water treatment projects produced 1,055,779 tonnes of sludge in 2023, a portion of which was processed by qualified third parties in accordance with *Control Standards of Pollutants in Sludge for Agricultural Use* (GB4284-2018) to produce Grade A compost for agricultural use. The Group also collects food waste from offices and dormitories for recycling into compost or animal feed. These help enhance soil quality, reduce reliance on chemical fertilisers, and support sustainable agriculture.

本集團通過可持續污水管理,為糧食安全做出貢獻。本集團的污水處理廠可產生用於非飲用用途的再用水,節約更多的其他清潔水源供灌溉和飲用用途。此外,本集團的污水處理項目於二零二三年產生了1,055,779噸污泥,部份經由合資格的第三方依《農用污泥污染物控制標準》(GB4284-2018)處理後,用於生產A級農業堆肥。本集團亦從辦公室及宿舍收集餐廚垃圾,回收後可製成堆肥或動物飼料。這些措施有助於提高土壤質量,減少對化學肥料的依賴,並支持可持續農業。

SDGs 可持續發展目標

3 GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being 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

3.9

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 Contributions 本集團的貢獻

The Group gives priority to the safety of water environment. It deploys manpower and resources to the front line to ensure the stable and uninterrupted operation of projects, while maintaining compliance with discharge standards.

本集團將保障水環境安全放在首位,調集人力物力投入前線,確保項目穩定運行、達標排放。



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

4.4

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。 In order to promote environmental education and environmental protection awareness, the Group continues to welcome public visits to its environmental facilities through both offline and online platforms. Some of its waste water treatment facilities have been named as "Environmental Education Hub" or "Science Popularisation and Education Hub" by the national, provincial and municipal governments, highlighting the Group's expertise and accountability in science education. During the Reporting Period, the Group's projects received 11,023 visitors in 308 batches in aggregate. 為了推動環保教育、傳遞環保意識,本集團不斷推 進環保設施透過線下、在線平台向公眾開放。部分 污水處理設施被國家、省、市相關部門指定為「環境 教育基地」或「科普教育基地」,充分展現了本集團 在科普教育方面的優勢與責任感。於報告期內,本 集團的項目共接待308批次,合計11,023人次。

SDGs 可持續發展目標

5 GENDER EQUALITY

Achieve gender equality and empower all women

實現性別平等,增強所有婦女和女童的權能

5.1

and girls

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's Contributions 本集團的貢獻

To achieve gender equality, the Group ensures that its human resources management structure, including remuneration, training and promotion opportunities, is free from gender discrimination.

為達至男女性別平等,本集團確保其人力資源管理 架構,包括在薪酬水平、培訓及晉升機會方面,不 存在任何形式的性別歧視。



Promote sustained, inclusive and sustainable economic growth, 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

8.2

Achieve higher levels of economic productivity 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,實現更高水平的經濟生產力。

Through investment, construction and operation of advanced waste water treatment projects, the Group promotes the development of downstream industries through sludge transportation and treatment. This faciliates economic diversification and creates sufficient and productive employment opportunities, contributing to the development of a comprehensive and sustainable water treatment industrial chain.

本集團透過投資、建造及運營先進的污水處理項目,帶動了下游污泥運輸及處置等相關行業。這有利於實現經濟多元化,創造充足的生產性就業機會,並有助於形成完整且可持續的水處理產業鏈。

SDGs 可持續發展目標



Reduce inequality within and among countries 減少國家內部和國家之間的不平等

10.2

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's Contributions 本集團的貢獻

The Group places special emphasis on ensuring that its projects do not compromise the dignity, rights, livelihoods, or culture of indigenous peoples. Local ethnic minorities and the Han majority are respected and treated equally, fostering an equality and inclusive working environment.

本集團高度重視確保項目不會影響原住民族的尊嚴、權利、生計或文化。當地少數民族和漢族在工作上均受到同樣尊重和待遇,從而營造公平包容的工作環境。

SDGs 可持續發展目標



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels 倡建和平、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

16.2

End abuse, exploitation, trafficking and all forms of violence against and torture of children.

制止對兒童進行虐待、剝削、 販賣以及一切形式的暴力和酷 刑。

16.5

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。

The Group's Contributions 本集團的貢獻

The Group regularly reviews its recruitment practice to ensure its compliance with applicable laws and regulations regarding the prevention of child labour and forced labour. In addition, the Group requires its suppliers to comply with such regulations, in order to prevent the use of forced labour and child labour and to safeguard the human rights in the workforce.

本集團定期檢討其招聘措施,以確保遵守有關避免 童工及強制勞工的法律及規例,並要求供應商遵守 相關規例,避免任何強迫勞動、使用童工等行為, 維護員工的人權。

The Group regularly provides anti-corruption training to enhance employee awareness. It also incorporates the prevention of corruption and bribery into its risk assessment and internal control mechanisms, so as to enhance the Group's culture of integrity.

為加強僱員對反腐敗的警覺性,本集團定期為員工 提供防止貪污相關的培訓,並把貪污風險納入風險 評估及內部控制機制內,從而增進本集團的誠信廉 潔文化。

SDGs 可持續發展目標



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

17.3

Mobilise additional financial resources for developing countries from multiple sources.

從多渠道籌集額外財政資源用 於發展中國家。

17.9

Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation. 加強國際社會對在發展中國家 開展高效的、有針對性的能力 建設活動的支持力度,以支持 各國落實各項可持續發展目 標的國家計劃,包括通過開展 南北合作、南南合作和三方合 作。

17.17

Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.
借鑒夥伴關係的經驗和籌資

借鑒夥伴關係的經驗和籌資 戰略,鼓勵和推動建立有效的 公共、公私和民間社會夥伴關 系。

The Group's Contributions 本集團的貢獻

The Group has successfully expanded its expertise in sustainable waste water treatment to overseas by securing an O&M project for the St. Martin Waste Water Treatment Plant in Mauritius. In China, the Group has actively adopted the PPP and EPCO models in its projects with various local municipal governments, with a total investment of RMB1.568 billion. Amongst these, Zhenjiang Sponge City Project was regarded as one of the best "People-first" PPP projects at the 5th International PPP Forum of UNECE.

本集團通過毛里求斯的聖馬丁污水處理廠營運與維護項目,成功將其在可持續污水處理方面的專業知識擴展至海外。在中國,集團在與多個地方政府的項目中積極採用PPP和EPCO模式,總投資達15.68億人民幣。其中,鎮江海綿城市項目作為最佳「以人為本」PPP項目之一在聯合國歐經會第五屆國際PPP論壇上進行案例展示。

The Group's Targets

本集團的目標

Review of 2023's Targets

二零二三年目標回顧

Aspect 範疇	2023 Target 二零二三年目標	Achieved 已達成
Discharge Compliance 排放合規	To maintain zero substantial non-compliance cases in relation to effluent discharge. 有關排放的嚴重違規個案維持於零宗。	√
Occupational Health and Safety 職業健康與安全	To maintain the rate of work-related injuries of employees below the level of 0.25. 員工工傷率維持低於0.25水平。	✓
Employment Practice 僱傭行為	To maintain zero case in relation to slavery, forced and bonded labour, child labour and abusive employment practices. 有關任何奴役、強迫勞動、抵押勞工、使用童工及虐待行為維持於零宗。	√

Short and Medium/Long-Term Targets of the Group

本集團的短期及中長期目標

Aspect 範疇	Target 目標
GHG Management and Climate Response 溫室氣體管理及氣候變化的應對	To establish and implement GHG management procedures, and prepare resilience measures to address potential climate risks. 制定及實施溫室氣體管理程序及應對潛在氣候變化風險的抵禦措施。
Environmental Compliance 環境合規	To strictly comply with relevant local environmental regulations. 嚴格遵守項目所在地區的相關環境法規。
Water Resources Consumption and Waste Water Treatment 水資源消耗與污水處理	To provide high-quality water environment management services and minimise the environmental impacts arising from operations. To reduce water consumption for projects through the use of reclaimed water. 提供優質的水環境綜合治理服務,將運營的環境影響減至最低。並透過使用再用水,降低項目的水資源消耗。
Child Labour and Forced Labour 童工與強制勞工	To strictly prohibit any use of child labour and forced labour. 嚴格禁止使用任何童工與強迫勞動。
Occupational Health and Safety 職業健康與安全	To ensure that the occupational health and safety of all the Group's employees are well protected in accordance with relevant regulations. 確保本集團所有僱員的職業健康和安全受到充分保障,並遵守有關法規。

Aspect 範疇	Target 目標
Anti-Corruption 反貪腐	To provide anti-corruption training to the Group's employees and on-site third-party workers so as to enhance their awareness. 透過培訓以提高本集團僱員及駐場第三方工作人員的反貪腐意識。
Waste Management 廢物管理	To minimise waste generation and maximise recycling rate. 減少廢物產生及增加回收率。
Disaster and Emergency Planning and Response 災難及應急預案規劃	To minimise the number of unplanned shutdowns at operating projects. 降低運營項目非計劃停運的次數。
Social Compliance 社會合規	To strictly comply with relevant local social regulations and ensure that the Group is not involved in any misconduct, such as bribery, extortion, money laundering, etc. 嚴格遵守項目所在地區的相關社會法規,確保本集團沒有涉及賄賂、勒索或洗黑錢等不當行為。
Economic Performance 經濟績效	To create long-term and sustainable economic growth for the Group and its stakeholders. 創造長遠及可持續的經濟增長。
Rights of the Indigenous Peoples原住民權利	To protect the rights of indigenous peoples during the planning and operation of projects in strict compliance with the prevailing regulations. 於項目規劃和運營過程中嚴格遵守相關法規,維護原住民的權利。
Anti-Competitive Behaviour 反競爭行為	To stay free from any legal actions concerning anti-competitive behaviour, anti-trust and monopoly practices. 確保不涉入任何有關反競爭行為、反托拉斯和壟斷行為的法律訴訟。
Energy Efficiency 能源效益	To continuously reduce energy consumption in project operations and actively explore diverse solutions to improve energy efficiency, including generating electricity from on-site renewable sources to reducing operational energy intensity. 持續減低項目運營中的能源消耗,積極探索有助於提增能源效益的多樣化解決方案,當中包括採用廠內的可再生能源發電減低運營能耗強度。
Employee Training 員工培訓	To continuously increase resources for employee training, and provide employees with career development opportunities and diversified training throughout their careers. 持續加大培訓資源的投入,為僱員提供職業發展及貫穿職業生涯的多元培訓機會。

The Group has fully achieved its 2023 targets. These targets have effectively promoted the continuous improvement of the Group's sustainable business development. The Group has set the following major sustainable development targets for 2024 and the long term.

本集團已實現了其二零二三年目標。設立目標大大推動本集團持續改善業務的可持續發展。本集團設立了以下二零二四年與長遠的主要可持續發展目標。

Major Sustainable Development Targets

主要可持續發展目標

Aspect 範疇	2024 Target 二零二四年目標	Long-Term Target (2030) 長遠目標 (二零三零年)	
Discharge Compliance 排放合規	To maintain zero substantial non-compliance cases in relation to effluent discharge. 有關排放的嚴重違規個案維持於零宗。	To maintain zero substantial non-compliance cases in relation to effluent discharge consistently throughout the period of 2020-2030. 有關排放的嚴重違規個案於二零二零至二零三零年間持續維持於零宗。	
Occupational Health and Safety 職業健康與安全	To maintain the rate of work-related injuries of employees below the level of 0.25. 員工工傷率維持低於0.25水平。	To maintain the rate of work-related injuries of employees at the level of 0.25 or lower each year throughout the period of 2020-2030. 員工工傷率於二零二零至二零三零年間平均維持於0.25或以下水平。	
Employment Practice 僱傭行為	To maintain zero cases in relation to slavery, forced and bonded labour, child labour and abusive employment practices. 有關任何奴役、強迫勞動、抵押勞工、使用童工及虐待行為維持於零宗。	To maintain zero cases in relation to slavery, forced and bonded labour, child labour and abusive employment practices consistently throughout the period of 2020-2030. 有關任何奴役、強迫勞動、抵押勞工、使用童工及虐待行為於二零二零至二零三零年間持續維持於零宗。	

Received Numerous Awards in the Aspect of Corporate Social Responsibility

The year 2023 represents a fruitful year for Everbright Water. Thanks to its excellent operation, the Group was shortlisted as one of the "Top Ten Influential Enterprises in China's Water industry" for the sixth consecutive year and received the "ListCo Excellence Award" for the fourth consecutive year. In addition, Everbright Water has been awarded the Singapore Corporate Sustainability Award under the Mid-Cap Category at the Securities Investors Association (Singapore) ("SIAS") Investors' Choice Awards 2023. Notably, Everbright Water had received an award from SIAS in 2019. Receiving the award again by SIAS represents the recognition from Singapore capital markets and investors on the Company's corporate governance strategies and achievements, particularly in the area of sustainable development.

企業社會責任方面獲得眾多獎項

二零二三年對於光大水務而言是收穫頗豐的一年。憑藉卓越的運營表現,本集團連續六年榮登「中國水業十大影響力企業」之一榜單並連續四年獲得「傑出上市公司大獎」。同時,光大水務在新加坡證券投資者協會(「SIAS」)舉辦的二零二三年度「投資者協會(「SIAS」)與辦的二零二三年度「投資者者協」(中型股類別)。光大水務曾於二獎展大獎」(中型股類別)。光大水務曾於二獎展大獎」(中型股類別)。光大水務曾於二獎展大獎」(中型股類別)。光大水務曾於二獎展大獎」(中型股類別)。光大水務曾於二獎展大獎」(中型股類別)。光大水務曾於二獎展大獎」(中型股類別)。光大水務曾於二獎項標誌著公司在企業管治,尤其是在可持續發展領域的策略和成績備受新加坡資本市場和投資者的認可。

Major Awards and Recognitions in 2023

二零二三年主要獎項及榮譽

Awards and Recognitions 獎項及榮譽	Awarding Organisation(s) 頒發機構
One of the "Top Ten Influential Enterprises in China's Water Industry" (for the sixth consecutive year) 「中國水業十大影響力企業」之一 (連續第六年)	E20 Environment Platform E20環境平台
ListCo Excellence Award 2023 (for the fourth consecutive year) 傑出上市公司大獎2023 (連續第四年)	The "ListCo Excellence Awards" jointly launched by organisations including Hong Kong stock channel of <i>ifeng.com</i> and Hong Kong media " <i>am730</i> " 《鳳凰網港股》、香港媒體《am730》等機構聯合舉辦的「傑出上市公司大獎」評選
Singapore Corporate Sustainability Award (Mid-Cap Category) 新加坡企業可持續發展大獎 (中型股類別)	Securities Investors Association (Singapore) 新加坡證券投資者協會

Major Associations Participated by Everbright Water 光大水務參與的主要協會

Major Associations Joined by Everbright Water 光大水務參與的主要協會	Highlighted Activities in 2023 二零二三年重點活動
E20 Environment Platform E20環境平台	Attended relevant meetings 參加相關會議
China Integrated Environmental Protection and Education Alliance 中國生態環境產教聯盟	Attended relevant meetings 參加相關會議
China Exploration and Design Association, Municipal Engineering Section 中國勘察設計協會市政工程設計分會	Attended relevant meetings 參加相關會議
Xuzhou Municipal Exploration and Design Association 徐州市勘察設計協會	Attended relevant meetings 參加相關會議
Jiangsu Provincial Municipal Engineering Association 江蘇省市政工程協會	Attended relevant meetings 參加相關會議
Jiangsu Provincial Exploration and Design Association 江蘇省勘察設計行業協會	Attended relevant meetings 參加相關會議
Jiangsu Provincial Association of Engineering Consultants 江蘇省工程諮詢協會	Attended relevant meetings 參加相關會議
Jiangsu Association of Landscape Architecture 江蘇省風景園林協會	Attended relevant meetings 參加相關會議
Xuzhou Municipal Civil Engineering Society 徐州市土木建築學會	Attended relevant meetings 參加相關會議
Xuzhou City Association of Enterprise Credit Management 徐州市企業信用管理協會	Through the "2023 City Contract-abiding and Credit-Reliable Enterprise" publicity work organised by the association 通過協會組織的「二零二三年度市級守合同重信用企業」公示工作
China Urban Water Association 中國城鎮供水排水協會	Attended relevant meetings 參加相關會議
Ji'nan Municipal Association for Science and Technology 濟南市科學技術協會	Attended relevant meetings 參加相關會議

Major Associations Joined by Everbright Water	Highlighted Activities in 2023
光大水務參與的主要協會	二零二三年重點活動
Ji'nan Municipal Urban Water Supply and Drain Association 濟南市城鎮供水排水協會	Attended relevant meetings 參加相關會議
Qingdao Municipal Water Supply, Conservation and Drainage 青島市城鎮供水節水排水協會	Attended relevant meetings 參加相關會議
Shandong Urban Water Association 山東省城鎮供排水協會	Attended relevant meetings, and participated in the "2023 Selection of Advanced Groups and Individuals in the Urban Water Supply and Drainage Industry in Shandong Province" in October. Everbright Water (Dezhou) Limited was selected as an advanced collective, and 2 employees were selected as advanced individuals. 参加相關會議,並於十月參與「二零二三年山東省城鎮供排水行業先進集體和個人評選」,光大水務(德州)有限公司獲選先進集體,2名員工獲選先進個人。
Panjin Municipal Association of Environmental Protection Industry 盤錦市環境保護產業協會	Attended relevant meetings 參加相關會議
Dalian Environmental Protection Volunteers Association 大連市環保志願者協會	Attended relevant meetings 參加相關會議
Panjin Toxic and Chemicals Association 盤錦市易制毒化學品行業自律協會	Attended relevant meetings 參加相關會議
Jiangyin Municipal Society for Environmental Sciences 江陰市環境科學學會	Attended relevant meetings 參加相關會議
Jiangyin Municipal Waste Water Treatment Industry Association 江陰市污水處理行業分會	Attended relevant meetings 參加相關會議
Explosive Chemicals Association 易制爆化學品協會	Attended relevant meetings 參加相關會議
Kunshan Environmental Protection Industry Association 昆山環保產業協會	Attended relevant meetings 參加相關會議
Kunshan Water Society 昆山水務學會	Attended relevant meetings 參加相關會議

The Group's total economic contributions to the major 本集團二零二三年對各主要協會的總經濟貢 associations in 2023 amounted to RMB240,100.

獻為240,100元人民幣。



VERIFICATION STATEMENT

Scope and Objective

Hong Kong Quality Assurance Agency ("HKQAA") was commissioned by China Everbright Water Limited ("Everbright Water") to undertake an independent verification for the Sustainability Report 2023 (hereinafter called the "Report"). The Report stated the sustainability performance of Everbright Water in the period of 1 January, 2023 to 31 December, 2023.

The Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021, Rule 13.91 and Appendix C2 Environmental, Social and Governance Reporting Guide ("ESG Reporting Guide" of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "SEHK Listing Rules").

Level of Assurance and Methodology

The process applied in this verification was based on the International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information issued by the International Auditing and Assurance Standards Board. Our evidence gathering process was designed to obtain a reasonable level of assurance as set out in the standard for the purpose of devising the verification conclusion. The extent of this verification process undertaken covered the criteria set out in the GRI Standards and the SEHK Listing Rules (Rule 13.91 and Appendix C2 ESG Reporting Guide).

HKQAA's verification process included verifying the mechanisms for collecting, calculating and reporting the sustainability performance information, reviewing relevant documented information, interviewing responsible personnel with accountability for preparing the Report and verifying selected representative samples of data and information. Raw data and supporting evidence of the selected samples were also thoroughly examined during the verification process.

Independence

Everbright Water is responsible for the collection and preparation of the information presented. HKQAA did not Involve in the collection and calculation of data or the compilation of the reporting contents. Our verification activities were entirely independent and there was no relationship between HKQAA and Everbright Water that would affect the impartiality of the verification.

Conclusion

Based on the verification results and in accordance with the verification procedures undertaken, HKQAA has obtained reasonable assurance and is in the opinion that:

- The Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021 and the SEHK Listing Rules (Rule 13.91 and Appendix C2 the ESG Reporting Guide);
- The Report illustrates the sustainability performance of Everbright Water, covering all material aspects, in a balanced, comparable, clear and timely manner; and
- The data and information disclosed in the Report are accurate, reliable and complete.

Nothing has come to HKQAA's attention that the selected sustainability performance information and data contained in the Report has not been prepared and presented fairly and honestly, in all material aspects, in accordance with the verification criteria. In conclusion, the Report reflects truthfully of Everbright Water's sustainability performance that is commensurate with the sustainability context and materiality of the company.

Signed on behalf of Hong Kong Quality Assurance Agency

Chief Operating Officer 25 March 2024

M Tina



核實聲明

範圍及目的

香港品質保證局已對中國光大水務有限公司(「光大水務」)二零二三年可持續發展報告(以下簡稱「報告」)的內容進行獨立驗證。該報告涵蓋光大水務在 2023 年 1 月 1 日至 2023 年 12 月 31 日期間,有關可持續發展方面工作的表現。

此核實聲明的目的是對報告所記載之內容提供合理保證。報告是根據全球報告倡議組織(GRI)標準 2021, 香港聯合交易所有限公司證券上市規則(「聯交所上市規則」)第 13.91 條及附錄 C2 所載的《環境、社會 及管治報告指引》的要求編製。

保證程度和核實方法

此次驗證工作是依據 International Auditing and Assurance Standards Board (國際審計與核證準則委員會) 發布的 International Standard on Assurance Engagements 3000 (Revised), Assurance Engagements Other Than Audits or Reviews of Historical Financial Information (<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〉)執行。收集核實證據的過程是參考國際準則所訂立進行合理保證的原則而制定以確保能擬定核實結論。此外,核實的內容是按照 GRI 標準 2021、聯交所上市規則(第13.91 條和附錄 C2〈環境、社會及管治報告指引〉)而定。

香港品質保證局的核實過程包括驗證了了光大水務的可持續發展表現資料收集、計算和彙報的機制,檢閱 有關文件資料,與負責編制報告的代表面談,還取具有代表性的數據和資料進行查核。相關原始數據和支 持證據亦於核實過程中經過詳細審閱。

獨立性

光大水務負責收集和準備所有在報告內陳述的資料。香港品質保證局不涉及收集和計算此報告內的數據或 參與編撰此報告。就提供此核實服務而言,香港品質保證局與光大水務之間並無任何會影響核實公正的關 係,我們的核實過程是完全獨立的。

結論

基於是次的驗證結果,香港品質保證局對報告作出合理保證並總結:

- 報告是按照 GRI 標準 2021、聯交所上市規則(第 13.91 條和附錄 C2〈環境、社會及管治報告指引〉)
 編製而定:
- 報告平衡、具比較性、清晰、一致和適時地將重要的可持續發展表現範疇和議題作出闡述;及
- 報告內的數據和資料準確、可靠和完整。

根據驗證準則,香港品質保證局沒有發現在報告內闡述的可持續發展表現資訊和資料並非公平和如實地按 照核實標準在主要範疇作出披露。總體而言,此報告能如實地反映光大水務的可持續發展表現並與其具體 的可持續發展情況和重要性相稱。

香港品質保證局代表簽署

丁围海

丁國滔 運營總監 2024 年 3 月 25 日



14902979-OTH

Verification Opinion

Scope and Objectives

Hong Kong Quality Assurance Agency ("HKQAA") has been commissioned by China Everbright Water Limited ("CEWL") to conduct an independent verification of the Greenhouse Gases ("GHG") emissions inventory ("Emissions Inventory") for the period 1st January 2023 to 31st December 2023. The aim of this verification is to provide a reasonable assurance on the data consolidated in the Emissions Inventory compiled by CEWL 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 "CEWL SR23 GHG Inventory" by CEWL 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 water treatment facilities; and
- Desk-top review of 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 Environmental Management System were followed. HKQAA verification team did not partake in the GHG data preparation process.



14902979-OTH

Conclusion

Total GHG emissions and removals of China Everbright Water Limited in 2023:

2023 GHG Emissions and Removals	Tonnes (T) of CO ₂ equivalent	
Category 1): Direct GHG emissions (excluding anthropogenic biogenic GHG emissions)	582.0	-
Anthropogenic blogenic GHG emissions	30	0,615.8
Category 1): Direct GHG removals (excluding anthropogenic biogenic GHG removals)	0	
Anthropogenic biogenic GHG removals	11	B,085.4
Indirect GHG emissions	452,381.6	
Category 2): Imported Energy	42:	2,777.1
Category 3): Transportation		5,963.8
Category 4): Products used		1
Category 5): Use of products		/
Category 6): Other sources	2	3,640.7
Total (Direct + Indirect Emissions excluding anthropogenic biogenic GHG emissions)	452,963.6	
Total (Direct + Indirect Emissions including anthropogenic biogenic GHG emissions)	487,579.3	
Total (Direct + Indirect Removals excluding anthropogenic biogenic GHG removals)	0	

Signed on behalf of Hong Kong Quality Assurance Agency:

Lead Verifier:

Chief Operating Officer:

Tommy Lo

Date of Issuance: 14 March 2024

K.T. Ting

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Hong Kong Quality Assurance Agency 19/F., K. Wah Centre, 191 Java Road, North Point, Hong Kong Contact detail <u>www.hkqaa.org</u>

Remarks:

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Verification Opinion (Continued)

Introduction:

HKQAA has been commissioned by China Everbright Water Limited ("CEWL", address: 36/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 CEWL in its GHG Statement in form of "CEWL SR23 GHG Inventory" covering GHG emissions and removals of the reporting period 1st January 2023 to 31st December 2023.

Roles and responsibilities:

CEWL is responsible for the organization's GHG information 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 CEWL 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 March 2024. The verification was based on the verification scope, objectives and criteria as agreed between CEWL and HKQAA.

Detail of the Scope:

- The organizational boundary was established following the operational approach.
- The reporting boundaries were established including the identification of direct and indirect
 GHG emissions and removals associated with the following CEWL's operations of various water facilities.
- Title or description activities: Verification of GHG Inventory 2023 for CEWL
- Location/boundary of the activities:
 - Totally 115 wholly owned facilities (103 in operation stage and 12 in construction stage)
 for domestic and industrial wastewater treatment, reusable water treatment and riverbasin ecological restoration etc. in China for over 99% of GHG emissions

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Remarks

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- Physical infrastructure, activities, technologies and processes of the organization:
 - o Stationary combustion sources such as fuel combustion for generator set and machinery equipment
 - o Mobile combustion sources such as plant vehicles and mobile machines
 - o Indirect energy emissions from purchased energy
 - o Anthropogenic biogenic emissions of methane emissions from treatment of wastewater
 - o Anthropogenic biogenic emissions of N_2O emissions from biological treatment of wastewater
 - o N2O emissions in effluent discharged
 - o Contractor transportation of sludge generated from wastewater treatment facilities
 - o Air travel by employees
- GHG sources, sinks and/or reservoirs included: GHG sources as presented in the "CEWL SR23" GHG Inventory" of CEWL
- Types of GHGs included: CO_2 , CH_4 and N_2O , where NF_3 , SF_6 , HFCs and PFCs are either not used by CEWL 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 2023 to 31st December 2023
- Intended user of the verification opinion: Stakeholders identified by CEWL



14902979-OTH

Conclusion:

CEWL provided the GHG Statement in form of "CEWL SR23 GHG Inventory Revision 2" 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 452,963.6 tonnes of CO₂ equivalent (excluding anthropogenic biogenic GHG emissions), and anthropogenic biogenic GHG emissions of 30,615.8 tonnes of CO₂ equivalent, and anthropogenic biogenic GHG removals of 118,085.4 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 CEWL's reported GHG emissions.

The verification team assessed the GHG Statement in form of "CEWL SR23 GHG Inventory" of CEWL including the GHG information 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 2023 Emissions Inventory of CEWL. 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 CEWL's verification opinion under the scheme or reduce the scope of such verification or terminate the contract if CEWL is unable to comply with the requirements of the "Terms and Conditions".



審核編號: 14902979-OTH

核查聲明

範圍和目的

香港品質保證局("HKQAA")受中國光大水務有限公司(光大水務)委託,對光大水務於2023年1月1日至2023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ISO14064-1:2018《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,並對光大水務營運控制範圍的溫室氣體排放盤查中資料的完整性和基確性提供合理保證。

根據光大水務按 ISO 14064-1:2018 標準編製的「CEWL SR23 GHG Inventory」,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、電力消耗以及水處理設施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。 根據光大水務內部環境管理系統,確認了溫室氣體資料報告的定性真確性。 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。

第1頁

審核聲明



香港品質保證局

審核編號:14902979-OTH

結論

2023 年中國光大水務有限公司溫室氣體排放總量及清除總量:

噸二氧化碳當量 (tCO2e)
582.0
30,615.8
0
118,085.4
452,381.6
422,777.1
5,963.8
1
/
23,640.7
452,963.6
487,579.3
0

代表香港品質保證局簽署:

核査員:羅永雄 發行日期: 14/3/2024

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.hkgaa.org

了圈路

運營總監: 丁國滔

備註:本驗證聲明包括第<1>頁至第<4>頁

審核編號: 14902979-OTH

Verification Statements 審核聲明



香港品質保證局

驗證聲明(續)

簡介:

香港品質保證局("HKQAA")受中國光大水務有限公司(光大水務)委託,對光大水務於 2023 年 1 月 1 日至 2023 年 12 月 31 日期間的溫室氣體 ("GHG") 排放盤查 ("Emissions Inventory", CEWL SR23 GHG 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,並對光大水務營運控制範圍的 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:

光大水務負責組織的溫室氣體資訊系統,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水務 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2024年2月至3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。核查是根據光大水務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水務的各種水設施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: 光大水務 2023 年溫室氣體盤查核查
- 活動地點/邊界: 位於中國的115個全資設施(103個處於營運階段,12個處於建設階段),用於生 活和工業廢水處理、中水處理和流域生態修復等,佔溫室氣體排放量的99%以上
- 組織的實體基礎設施、活動、技術和流程包括:
 - 固定燃燒源,例如發電機組和機械設備的燃料燃燒
 - 移動燃燒源,例如工廠車輛和移動機器
 - 購買能源所產生的間接能源排放
 - 廢水處理產生的甲烷排放的非自然生物排放
 - 廢水生物處理中 N2O 排放的非自然生物排放
 - 排放廢水中的 N2O 排放
 - 承包商運送廢水處理設施所產生的污泥
 - 員工航空商務旅程等
- 溫室氣體來源、匯集/或儲存庫:光大水務的「CEWL SR23 GHG Inventory」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 未被光大水務使用或用量極少。
- 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

備註: 木驗證聲明包括第<1>百至第<4>百

HKQAA-F1025-HKO-7TC-OB 18 November 2021 (#4134577)



香港品質保證局 審核編號: 14902979-OTH

- 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: 2023年1月1日至2023年12月31日

- 核查意見的使用者:光大水務的利益相關方

結論:

光大水務根據ISO14064-1:2018的要求,以「CEWL SR23 GHG Inventory」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452,963.6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30,615.8噸二氧化碳當量,非自然生物溫室氣體清除量為118,085.4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,包括評估與光大水務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水務「CEWL SR23 GHG Inventory」的溫室氣體聲明,包括溫室氣體資訊系統和報告協議。 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,核查團隊認為光大水務2023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。

如光大水務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 撤回光大水務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

Key Statistics 主要數據

Economic Performance

經濟表現

		2023 HK\$'000 港元千元	2022 HK\$'000 港元千元	2021 HK\$'000 港元千元
Direct Economic Value Generated	產生的直接經濟價值			
Revenue	收入	6,704,684	6,727,967	6,912,371
Other income and gains/(losses), net	其他收入及收益/(虧損)淨額	46,007	53,793	(22,492)
Share of profits/(losses) of associates	所佔聯營公司盈利/(虧損)	2,008	11,226	(6,758)
Share of profit of a joint venture	所佔合營公司盈利	1,261	_	-
Economic Value Distributed				
Staff costs	員工開支	484,110	474,098	519,429
Other costs (1)	其他成本(1)	3,826,997	4,166,180	4,140,444
Net financial costs	財務費用淨額	564,263	516,313	413,303
Dividends	股息	356,224	302,562 (Restated) (經重列)	360,119 (Restated) (經重列)
Taxes (2)	稅項⑵	267,685	240,314	203,264
Profit attributed to holders of perpetual capital instruments	永續資本工具持有人	37,578	14,334	-
Profit attributed to non-controlling interests	非控股權益應佔盈利	36,223	42,010	82,657
Charitable donations	慈善捐款	_	487	12
Economic Value Retained	留存的經濟價值			
Retained for Everbright Water's sustainable operation and development	留存作光大水務的可持續運營和發展	1,180,880	1,036,688 (Restated) (經重列)	1,163,893 (Restated) (經重列)

Key Statistics 主要數據

Operational Performance (3)

運營表現(3)

			2023	2022	2021
Total Designed Capacity	—————————————————————————————————————				
Waste water treatment	污水處理	m³/day 立方米/日	6,301,000	6,098,100	5,690,000
Reusable water	中水回用	m³/day 立方米/日	315,600	300,600	250,600
Water supply	供水	m³/day 立方米/日	250,000	250,000	250,000
Raw water protection	原水保護	m³/day 立方米/日	600,000	600,000	600,000
Business Performance	業務表現				
Waste water treatment	污水處理	m³ 立方米	1,749,241,000	1,770,260,000	1,698,710,000
COD reduction	COD減排	tonne 噸	434,053	433,453	417,371
Reusable water	中水回用	m³ 立方米	45,523,000	43,629,000	28,530,000
Screenings removed from waste water	從污水中移除的隔濾物量	tonne 噸	8,937	10,931	12,395
Grits removed from waste water	從污水中移除的沙礫量	tonne 噸	6,722	7,759	10,363
Suspended solids (SS) removed from waste water	從污水中移除的懸浮固體量	tonne 噸	371,940	377,531	370,046
Biochemical oxygen demand (BOD) removed from waste water	從污水中移除的生化需氧量	tonne 噸	156,148	191,573	188,003
Total phosphorus (TP) removed from waste water	從污水移除的總磷量	tonne 噸	6,634	6,491	6,906
Total nitrogen (TN) removed from waste water	從污水中移除的總氮量	tonne 噸	51,944	50,173	50,908
Ammoniacal nitrogen (NH ₃ -N) removed from waste water	從污水中移除的氨氮量	tonne 噸	57,210	50,129	50,593
Greenhouse Gas Emissions (4),(5),(6)	溫室氣體排放 ⑷,⑸,⑹				
Scope 1 (Direct emissions)	範疇一(直接排放)	tCO2e 噸二氧化碳當量	31,198	35,490	43,189
Scope 2 (Energy indirect emissions)	範疇二(能源引致的間接排放)	tCO2e 噸二氧化碳當量	422,777	425,933	392,120
Scope 3 (Other indirect emissions)	範疇三(其他間接排放)	tCO2e 噸二氧化碳當量	29,605	26,728	25,120
Total greenhouse gas emissions	溫室氣體排放總量	tCO2e 噸二氧化碳當量	483,579	488,151	460,429
Greenhouse gas emission intensity	溫室氣體排放強度	kgCO ₂ e/m³ of waste water treated 公斤二氧化碳當量/ 立方米 (污水處理)	0.28	0.28	0.27
Greenhouse gas emissions avoidance	溫室氣體避免量	tCO2e 噸二氧化碳當量	118,085	113,321	111,865
Remaining greenhouse gas emissions	剩餘溫室氣體排放量	tCO2e 噸二氧化碳當量	365,494	374,830	348,564
Remaining greenhouse gas intensity	剩餘溫室氣體排放強度	kgCO ₂ e/m³ of waste water treated 公斤二氧化碳當量/ 立方米 (污水處理)	0.21	0.21	0.21

			2023	2022	2021
Energy Consumption (7)	能源消耗 ⑺				
Non-renewable electricity	非再生能源電力	GJ 吉焦	2,584,837	2,542,610	2,290,658
Renewable electricity	再生能源電力	GJ 吉焦	40,387	25,417	41,224
Natural gas	天然氣	GJ 吉焦	282	0	0
Diesel	柴油	GJ 吉焦	1,416	40,710	1,152
Gasoline	汽油	GJ 吉焦	5,319	15,842	39,194
Total energy consumed	總能源消耗	GJ 吉焦	2,632,241	2,624,579	2,372,227
Energy intensity	能源強度	kJ/m³ 千焦/立方米	1,504	1,483	1,396
Emission factor of greenhouse gas emissions due to electricity used for treating waste water	用於處理污水的電力消耗 導致的溫室氣體排放的 排放因子	kgCO ₂ e/m³ of waste water treated 公斤二氧化碳當量/ 立方米 (污水處理)	0.24	0.23	0.23
Water Consumption (8)	耗水 (8)				
Total freshwater consumed	總淡水消耗量	m³ 立方米	1,260,415	1,527,682	Data not available 沒有相關數據
Freshwater intensity	淡水消耗強度	m³/1,000 m³ 立方米/千立方米	0.72	0.86	Data not available 沒有相關數據

		Unit	2023	2022	2021
Key Materials Used	所用主要物料	單位			
Function 用途	Material 物料				
Absorbent 吸附劑	Pulverised coal ash 粉煤灰	Tonne 噸	0	0	0
Biological treatment 生物處理	Magnetic powder 磁粉	Tonne 噸	136	191	370
Carbon source 碳源	Manure 糞土		0	0	0
	Refined methanol 精甲醇		621	918	897
	Sodium acetate 乙酸鈉		0	84,642	145,171
	Waste methanol 廢甲醇		0	0	0
	Glucose 葡萄糖	Tonne 噸	19,297	30,146	29,344
	Activated carbon 活性碳		503	91	98
	Compound carbon source 複合碳源		195,660	75,505	12,168
	Xylose 木糖		0	0	3,629
	Brown sugar 紅糖		0	0	0
Chemical oxidiser 化學氧化劑	Hydrogen peroxide 雙氧水		5,991	7,996	11,184
	Calcium hypochlorite 次氯酸鈣	Tonne 噸	0	0	2,653
	Liquid oxygen 液氧		18,605	16,627	19,394
Coagulant & flocculant 凝結劑及絮凝劑	Ferrous sulphate 硫酸亞鐵		5,582	10,927	14,520
	Iron (III) chloride 三氯化鐵		23,877	26,824	66.559
	PAFC 聚合氯化鋁鐵		10,709	13,076	12.570
	PFC 聚合氯化鐵		0	61,928	10,382
	PFS 聚合硫酸鐵	Tonne 噸	15,399	17,809	16,735
	Flocculant 絮凝劑		1,416	2,086	1,369
	PAC 聚合氯化鋁		43,694	39,315	54,343
	Iron (II) chloride 改性氯化亞鐵		3,149	2,387	1,324
	Aluminium sulfate 硫酸鋁		4,095	4,120	Data not available 沒有相關數據

		Unit	2023	2022	2021
Key Materials Used	所用主要物料 / · ·	單位			
Function 用途	Material 物料				
Disinfectant 消毒劑	Hypochlorous acid 次氯酸		0	0	0
	Sodium hypochlorite 次氯酸鈉		27,444	26,757	26,257
	Liquid chlorine 液氯		0	0	0
	Sodium chlorate 氯酸鈉		0	0	0
	Disinfectant 消毒劑	Tonne 噸	0	25	26
	Non-oxidising biocide 非氧化殺菌劑		0	0	0
	Sodium dodecyl benzene sulphonate 十二烷基苯磺酸		0	0.033	0.09
	EDTA 乙二胺四乙酸		0	47	0
pH adjustment 酸鹼調整	Citric acid 檸檬酸		270	101	86
	Sodium carbonate 碳酸鈉		59	230	0
	Sodium bicarbonate 碳酸氫鈉		0	0	0
	Sodium phosphate 磷酸鈉	Tonne 噸	0	0	0
	Sulphuric acid 硫酸		766	133	670
	Lime 石灰		30,333	25,938	25,227
	Sodium hydroxide 氫氧化鈉		0	3,139	6,997
	Hydrochloric acid 鹽酸		0	196	183
	Sodium tripolyphosphate 三聚磷酸鈉		0	0.20	72
	Caustic soda 液堿		4,342	246	465
Others 其他		Tonne 噸	158	274	2,489
Non-hazardous Wastes Generated		FBR			
Sludge generated from waste water treatment projects 污水處理項目所產生的污泥		Tonne 噸	1,055,552	1,039,832	1,068,207
Intensity 污泥產生強度		Tonne/1,000 m³ of waste water treated 噸/千立方米 (污水處理)	0.60	0.59	0.63
General wastes generated from office	辦公室一般廢棄物產生量	Tonne 噸	215	336	1,362
Total amount of non-hazardous wastes generated	無害廢棄物產生總量	Tonne 噸	1,055,767	1,040,168	1,069,291

Water Withdrawal, Water Discharge and Water Consumption in 2023

二零二三年取水量、排水量及耗水量

		€ GRI 303-3 € GRI	303-4 GRI 303-5
Water Intake ⁽⁹⁾ 進水量 ⁽⁹⁾			
		All Areas 所有地區	Areas with Water Stress 具水資源壓力的地區
Water intake by source and project nature (m³)	Water Supply Projects/Reusable Water Projects 供水項目/中水回用項目		
按來源及項目類型劃分的進水量 (立方米)	Surface Water 地表水	15,502,143	14,994,347
(117)	Groundwater 地下水	0	0
	Seawater 海水	0	0
	Third-party water 第三方的水	23,195	1,380
	Sub-total 分總	15,525,338	14,995,727
	Municipal/Industrial Waste Water Treatment Project 生活/工業污水處理項目	ts	
	Surface Water 地表水	21,817,409	19,034,242
	Groundwater 地下水	170,096	170,096
	Seawater 海水	0	0
	Third-party water 第三方的水	1,070,599	699,262
	Sub-total 分總	23,058,104	19,903,600
	River-basin Ecological Restoration Projects/Raw Wai 流域治理/原水保護項目	ter Protection Projects	
	Surface Water 地表水	13,147,676	10,872,000
	Groundwater 地下水	0	0
	Seawater 海水	0	0
	Third-party water 第三方的水	67,923	13,344
	Sub-total 分總	13,215,599	10,885,344
	Total Freshwater Intake (m³) 總淡水取水量 (立方米)	51,799,040	45,784,671
	Total Waste Water intake (m³) 總污水處理量 (立方米)	1,749,241,000	1,306,523,004
Total Water Intake (m³) 總進水量 (立方米)	Freshwater intake + Waste water intake 淡水取水量+污水進水量	1,801,040,040	1,352,307,674

€ GRI 303-3 € GRI 303-4 €	GRI 303-5
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Water	Sun	plied	/Discl	harged	
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		All Areas 所有地區	Areas with Water Stress 具水資源壓力的地區
Water discharge by destination and project nature (m³)	Water Supply Projects/Reusable Water Projects 供水項目/中水回用項目		
依終點及項目類型劃分排水量 (立方米)	Surface Water 地表水	30,662,773	0
(47)	Groundwater 地下水	0	0
	Seawater 海水	10,222,012	10,222,012
	Third-party water (Total) 第三方的水 (總量)	9,953,277	9,232,056
	Third-party water sent for use to other organisations 供其他組織使用的第三方的水	9,953,277	9,232,056
	Municipal/Industrial Waste Water Treatment Projects 生活/工業污水處理項目		
	Surface Water 地表水	1,122,788,540	892,393,437
	Groundwater 地下水	0	0
	Seawater 海水	129,601,317	129,601,317
	Third-party water (Total) 第三方的水 (總量)	102,563,111	93,473,470
	Third-party water sent for use to other organisations 供其他組織使用的第三方的水	54,648,943	45,559,302
	River-basin Ecological Restoration Projects/Raw Water F 流域治理/原水保護項目	Protection Projects	
	Surface Water 地表水	9,800,244	0
	Groundwater 地下水	0	0
	Seawater 海水	0	0
	Third-party water (Total) 第三方的水 (總量)	79,924,173	10,494,344
	Third-party water sent for use to other organisations 供其他組織使用的第三方的水	69,429,635	0
	Total Water Discharged 總排水量	1,495,515,447	1,145,416,636
Water Consumption 耗水量			
Total Water Consumption (m³) 總耗水量 (立方米)		305,524,190	206,891,038

Waste Generation, Disposal and Recycling in 2023 二零二三年廢棄物產生、處置量和回收量

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Waste Generation 廢棄物產生					
Office and Domestic Waste	辦公及生活廢棄物類別	Unit 單位	Waste Generation 廢棄物產生量	Waste Disposal 廢棄物處置量	Waste Recycling 廢棄物回收量
A. Waste paper (e.g. newspapers and periodicals, office paper, cardboard)	A. 廢紙 (如報紙書刊、辦公室 用紙、紙皮等)		25	23	2
B. Metals (e.g. iron/aluminium cans, food containers)	B. 金屬(如鐵/鋁罐、食品容 器)		42	39	:
C. Plastics (e.g. water bottles, beverage bottles, personal care bottles)	C. 塑料 (如瓶裝水、飲品塑料瓶、個人護理用品瓶等)		6	3	:
D. Glass (e.g. beverage bottles, cooking oil/condiment bottles, etc.)	D. 玻璃(如飲品玻璃瓶、食油/ 調味醬料玻璃瓶等)		8	4	
E. Electrical appliances (e.g. phones, computers, printers, air conditioners washing machines, TVs)	E. 電器 (如電話、電腦、打印 , 機、冷氣機、洗衣機、電視機 等)	tonne 噸	2	1	
F. Batteries (including individual batteries and batteries attached to electrical appliances)	F. 充電池 (包括一般獨立充電 池及電器附設充電池)		2	0	
G. Kitchen waste	G. 廚餘		58	47	1
H. Used clothing (clothing, accessories, textiles)	H. 舊衣物 (衣服、飾物、紡織物)		2.5	1.3	1.:
I. Others	I. 其他		69	69	
Sludge	污泥	Unit 單位	Waste Generation 廢棄物產生量	Waste Disposal 廢棄物處置量	Waste Recycling 廢棄物回收量
A. Hazardous waste	A. 有害廢棄物	tonne	226	226	
B. Non-hazardous waste	B. 無害廢棄物	頓	1,055,552	581,945	473,60
Other Waste	其他廢棄物		Waste Generation 廢棄物產生量	Waste Disposal 廢棄物處置量	Wast Recyclin 廢棄物回收量
Hazardous waste (such as waste acid, waste alkali, waste organic solvent, waste liquid, waste reagent, waste engine oil, etc.)	有害廢棄物(例如廢酸、廢鹼、 廢有機溶劑、廢液、廢試劑、 廢機油等)	tonne 噸	231	209	2
Total waste	廢棄物總量	tonne 噸	1,056,225	582,569	473,65

		Unit 單位	On-site 現場	Off-site 離場	Tota 總量
Hazardous Wastes	有害廢棄物				
Prepared for recycling	再使用準備		0	0	(
Recycling	再生利用	tone 噸	0	22	22
Other recycling operations	其他回收作業		0	0	C
Total	總量		0	22	22
Non-hazardous Wastes	非有害廢棄物				
Prepared for recycling	再使用準備		0	1,291	1,291
Recycling	再生利用	tone	5	1,584	1,589
Other recycling operations	其他回收作業	噸	0	470,754	470,754
Total	總量		5	473,629	473,634
Prevention of Waste Generation	避免廢棄物處置				
Prevention of waste generation	避免廢棄物處置	tone 噸			473,656

		Unit 單位	On-site 現場	Off-site 離場	Tota 總量
Hazardous Wastes	有害廢棄物				
Incineration (including energy recovery)	焚化 (含能源回收)		0	4	2
Incineration (excluding energy recovery)	焚化 (不含能源回收)		0	367	367
Landfill	填埋	tone 噸	0	0	(
Other disposal operations	其他處置作業	· »X	0	64	64
Total	總量		0	436	436
Non-hazardous Wastes	非有害廢棄物				
Incineration (including energy recovery)	焚化 (含能源回收)		0	308,389	308,389
Incineration (excluding energy recovery)	焚化 (不含能源回收)		0	146,513	146,513
Landfill	填埋	tone 噸	0	93,662	93,662
Other disposal operations	其他處置作業	· »X	64	33,505	33,569
Total	總量				582,133

Social Performance⁽³⁾

社會表現(3)

Employee Profile(10)

員工概況(10)

			2023	2022	2021
Total Number of Employees	員工總數 ———————————		1,759	2,300	2,328
By Gender	按性別劃分				
Male	男性		1,235	1,619	1,651
Female	女性		524	681	677
By Age	按年齡劃分				
30 and below	30歲及以下		268	433	458
31-40	31-40歲		779	1,049	1,079
41-50	41-50歲		510	581	567
51 and above	51歲及以上		202	237	224
By Employee Ranking	按員工職級劃分				
Senior management	高級管理人員		124	110	110
Middle-level management	中層管理人員		366	460	423
General and technical staff	一般及技術員工		1,269	1,730	1,795
By Geographical Region	按地區劃分				
Hong Kong	香港		10	8	6
Singapore	新加坡		4	3	4
Mainland China	中國內地		1,745	2,289	2,318
Including: Local employees (11)	其中:本地員工[1]		1,535	2,070	2,079
Non-local employees (11)	外地員工(11)		224	230	249
By Ethnicity	按民族劃分				
Han	漢族		1,704	2,223	2,248
Ethnic minorities	少數族裔		55	77	80
By Employment Contract	按合約類別劃分				
Permanent Contract	長期合約	Male 男性	676	867	826
		Female 女性	266	328	335
		Mainland China 中國內地	929	1,184	1,151
		Hong Kong 香港	10	8	6
		Singapore 新加坡	3	3	4
Temporary/Fixed-term Contract	臨時/定期合約	Male 男性	559	744	825
		Female 女性	258	361	342
		Mainland China 中國內地	816	1,105	1,167
		Hong Kong 香港	0	0	0
		Singapore 新加坡	1	0	0

New Employees and Employee Turnover

新聘及離職員工

		2d Total Number 總人數	Percentage of employees in this category (%) 佔該類別員 工百分比(%)	20 Total Number 總人數	Percentage of employees in this category (%) 佔該類別員 工百分比(%)	20 Total Number 總人數	Percentage of employees in this category (%) 佔該類別員 工百分比(%)
Total Number of New Hires	新聘員工總數	38	2	108	5	132	6
By Gender	按性別劃分						
Male	男性	28	74	63	4	80	5
Female	女性	10	26	45	7	52	8
By Age	按年齡劃分						
30 and below	30歲及以下	17	45	55	13	80	17
31-40	31-40歲	16	42	40	4	40	4
41-50	41-50歲	4	11	13	2	8	1
51 and above	51歲及以上	1	3	0	0	4	2
By Geographical Region	按地區劃分						
Hong Kong	香港	0	0	0	0	2	33
Singapore	新加坡	0	0	0	0	1	25
Mainland China	中國內地	38	100	108	5	129	6
Including: Local employees(11)	其中:本地員工(11)	34	89	95	5	113	5
Non-local employees(11)	外地員工(11)	4	11	13	6	19	8
Total Number of Employee Turnover (Resignation/Retirement)	員工流失總數(離職/退休)	411	23	182	8	193	8
By Gender	按性別劃分						
Male	男性	293	71	116	7	138	8
Female	女性	118	29	66	10	55	8
By Age	按年齡劃分						
30 and below	30歲及以下	58	14	61	14	76	17
31-40	31-40歲	187	45	76	7	78	7
41-50	41-50歳	109	27	27	5	24	4
51 and above	51歲及以上	57	14	18	8	15	7
By Geographical Region	按地區劃分						
Hong Kong	香港	0	0	0	0	2	33
Singapore	新加坡	0	0	1	33	1	25
Mainland China	中國內地	411	100	181	8	190	8

Training and Development

培訓及發展

		2023	2022	2021
Total Training Hours	總培訓時數	141,265	139,296	245,454
Average Training Hours Per Employee	員工平均培訓時數	80	61	105
By Gender	按性別劃分			
Male	男性	85	60	115
Female	女性	68	63	83
By Employee Ranking	按員工職級劃分			
Senior management	高級管理人員	73	40	72
Middle-level management	中層管理人員	166	52	133
General and technical staff	一般及技術員工	56	64	106

Health and Safety

健康與安全

		2023	2022	2021
Employee	員工			
Number of work-related fatalities	因工死亡個案	0	0	0
Rate of work-related fatalities (12)	因工死亡率(12)	0	0	0
Number of occupational disease cases	職業病個案	0	0	0
Number of high-consequence work-related injuries (excluding fatalities) (13)	嚴重工傷個案 (不包括死亡個案)(13)	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities) (14)	嚴重工傷率(不包括死亡個案)(14)	0	0	0
Number of work-related injuries (15)	工傷個案(15)	0	0	0
Rate of work-related injuries (16)	工傷率(16)	0	0	0
Days of absence from work due to work-related injury	因工傷缺勤日數	0	0	0
Third Party Contractors and Subcontractors 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	0
Rate of work-related fatalities (11)	因工死亡率(11)	0	0	0
Number of occupational disease cases	職業病個案	0	0	0
Number of high-consequence work-related injuries (excluding fatalities) (13)	嚴重工傷個案 (不包括死亡個案) [13]	0	0	0
Rate of high-consequence work-related injuries (excluding fatalities) (14)	嚴重工傷率(不包括死亡個案)(14)	0	0	0
Number of work-related injuries (15)	工傷個案(15)	0	0	0
Rate of work-related injuries (16)	工傷率(16)	0	0	0
Days of absence from work due to work-related injury	因工傷缺勤日數	0	0	0

Remuneration 薪酬

		2023	2022	2021
Annual Total Remuneration and Ratio Figures	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 (港元)	2,778,000	3,395,000	4,908,978
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) (港元)	102,406	97,762	103,269
The 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	27	35	48
Ratio of the annual percentage increase in total remuneration of the highest-paid individual to the median percentage increase 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 增長與全體員工(不包括最高薪 人士)薪酬總額中位數的年度 百分比增長的比例	(4)	6	99.66
The Average Remuneration by Employee Ranking (HK\$)	各級員工職級的平均薪酬 (港元)			
Senior management (male)	高級管理人員(男)	589,609	513,316	578,346
Senior management (female)	高級管理人員(女)	373,331	279,463	425,776
Middle-level management (male)	中層管理人員(男)	204,906	212,939	238,567
Middle-level management (female)	中層管理人員(女)	208,388	203,412	217,359
General and technical staff (male)	一般及技術員工(男)	126,012	118,278	114,777
General and technical staff (female)	一般及技術員工(女)	127,081	103,620	104,199

Notes:

- (1) Represents other costs but excludes depreciation, amortisation and charitable donations for the year.
- (2) Represents current income tax but excludes deferred tax for the year.
- (3) Due to rounding, there may be a slight discrepancy between the items of the statistics table and the relevant analysed data as shown in other chapters of this Report.
- (4) The calculation of scope 1 emissions covers all of the operating waste water treatment projects' fugitive methane emissions, nitrous oxide emissions from biological treatment process and direct emissions released from the direct use of fuel.

The calculation of scope 2 emissions includes the indirect emissions from purchased electricity consumption. The calculation boundary of scope 2 emissions covers all waste water treatment projects, reusable water projects, waste water source heat pump projects, sludge treatment and disposal projects, water supply projects, leachate treatment project and water environment management projects that were under construction and operation.

附註:

- (1) 代表該年度的其他成本,但不包括該年度的折 舊、攤銷及慈善捐款。
- (2) 代表該年度所得稅,但不包括該年度的遞延稅 項。
- (3) 由於捨入關係,數據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。
- (4) 範疇一的計算包括所有運營中的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及經直接使用燃料而產生的直接排放。

範疇二的計算為使用外購電力而產生的間接 排放。範疇二的計算邊界包括所有在建與運營 中的污水處理、中水回用、污水源熱泵、污泥 處理處置、供水、滲濾液處理項目與水環境治 理項目。

- (5) The calculation of greenhouse gas emissions from operating waste water treatment projects is referenced to CDM methodology AM0080: Mitigation of Greenhouse Gases Emissions with Treatment of Wastewater in Aerobic Wastewater Treatment Plants (Version 1.0).
- (5) 運營污水處理項目的溫室氣體排放計算參照 CDM方法《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)》。
- (6) The calculation of scope 3 emissions includes fuel consumption for the transportation of sludge by third parties, indirect emissions from air travel by employees and nitrous oxide released from effluent. Greenhouse gas emissions from air travel are calculated by ICAO Carbon Emissions Calculator.
- (6) 範疇三的計算包括第三方運送污泥的燃料消耗、員工飛機差旅的間接排放及從出水中釋放的氧化亞氮。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。
- (7) Energy consumption is calculated based on the reference coefficients as stated in *China Energy Statistical Yearbook 2022*.
- (8) Total freshwater consumption and intensity have been revised to apply only to the Group's municipal waste water treatment projects, industrial waste water treatment projects, leachate treatment projects and sludge treatment and disposal projects. This is with due consideration that other projects' key objectives are to purify freshwater for use by the public/clients, therefore the freshwater withdrawn is not considered as consumed.
- (8) 淡水總消耗量及強度經修訂後僅適用於本集 團的市政污水處理項目、工業廢水處理項目、 滲濾液處理項目及污泥處理處置項目。這是考 慮到其他項目的主要目標是淨化淡水供公眾/ 客戶使用,因此,所抽取的淡水不被視為被消 耗。
- (9) All project water intake in the reporting year had a biological oxygen demand (BOD) level of ≤ 300 mg/L, meeting Grade 3 standard of the *Integrated Wastewater Discharge Standard* (GB 8978-1996).
- (9) 報告年度內所有項目的進水水質均滿足生化 需氧量 (BOD) 水平≤ 300 mg/L,符合《污水綜合 排放標準》(GB 8978-1996) 三級要求。

(10) As at 31 December 2023.

- (10) 截至二零二三年十二月三十一日。
- (11) 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.
- (11) 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。
- (12) Rate of work-related fatalities = (Total number of work-related fatalities/Total working hours) \times 200,000
- (12) 因工死亡率=(因工死亡個案總計/工作總時 數)×200,000
- (13) 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.
- (13) 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。
- (14) Rate of high-consequence work-related injuries (excluding fatalities) = (Total number of high-consequence work-related injuries (excluding fatalities)/Total working hours) × 200,000
- (14) 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
- (15) Work-related injuries also include work-related fatalities and high-consequence work-related injuries.
- (15) 工傷亦包含因工死亡及嚴重工傷。
- (16) Rate of work-related injuries = (Total number of work-related injuries/Total working hours) \times 200,000
- (16) 工傷率=(工傷個案總計/工作總時數)× 200,000

version of this Report.



Everbright Water has reported in accordance with the GRI Standards for the period 1 January 2023 to 31 December 2023. 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

光大水務已根據GRI準則針對二零二三年一 月一日至二零二三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。

Disclos 披露編		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 基礎 2021		
GRI 2:	General Disclosures 一般披露 202	1	
	The Organiza	ation and its Reporting Practices 組織及其報告做法	
2-1	Organizational details 組織詳細資訊	About This Report 關於本報告 About Everbright Water 關於光大水務 Annual Report 2023 – Notes to the Financial Statements 二零二三年度報告一財務報表附註	P.12-25 P.26-41
2-2	Entities included in the organization's sustainability reporting 納入組織可持續發展報告的實體	About Everbright Water 關於光大水務 Annual Report 2023 – Notes to the Financial Statements 二零二三年度報告-財務報表附註	P.26-41 -
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	P.12-25
2-4	Restatements of information 信息重述	Restated information are annotated clearly in this 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 this Report and the external assurance report before publication. 董事會在發佈前審查本報告和外部鑑證報告。	P.202-212

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
2-6	Activities, value chain and other business relationships	Chairman's Statement 董事長致辭	P.1-4
	活動、價值鏈和其他業務關係	Message from CEO 總裁致辭	P.6-11
		About Everbright Water 關於光大水務	P.26-41
		Stakeholder Engagement 持份者參與	P.162-179
		Annual Report 2023 – Chief Executive Officer's Report, Directors' Statement 二零二三年度報告一總裁報告、董事會聲明	-
2-7	Employees	Talent Development	P.138-161
	員工	人才發展 Key Statistics 主要數據	P.213-226
2-8	Workers who are not employees	Talent Development 人才發展	P.138-161
	員工之外的工作者	Key Statistics 主要數據	P.213-226
		Governance 管治	
2-9	Governance structure and composition	Sustainability Governance 可持續發展管治	P.42-61
	管治架構和組成	Annual Report 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告 None of the members of the highest governance body is from an under-represented 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 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告	-
2-11	Chair of the highest governance body 最高管治機構的主席	Annual Report 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告	-
2-12	Role of the highest governance body in overseeing the	Sustainability Governance 可持續發展管治	P.42-61
	management of impacts 在管理影響方面,最高管治機 構的監督作用	Annual Report 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告	-
2-13	Delegation of responsibility for managing impacts	Sustainability Governance 可持續發展管治	P.42-61
	為管理影響的責任授權	Annual Report 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告	-

Disclos 披露編号		Relevant Chapter(s) or Other Reference/Explanation 相關章節或其他參考/解釋	Page Number 頁數
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	Chairman's Statement 董事長致辭 Message from CEO 總裁致辭 Sustainability Governance 可持續發展管治	P.1-4 P.6-11 P.42-61
2-15	Conflicts of interest 利益衝突	Sustainability Governance 可持續發展管治 Annual Report 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告	P.42-61 –
2-16	Communication of critical concerns 重要關切問題的溝通	Sustainability Governance 可持續發展管治 Annual Report 2023 – Corporate Governance Report – Risk Management and Internal Controls 二零二三年度報告一企業管治報告—風險管理和內部控制	P.42-61 -
2-17	Collective knowledge of the highest governance body 最高管治機構的共同知識	Annual Report 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告	-
2-18	Evaluation of the performance of the highest governance body 最高管治機構的績效評估	Annual Report 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告	-
2-19	Remuneration policies 薪酬政策	Annual Report 2023 – Corporate Governance Report – Remuneration Matters 二零二三年度報告一企業管治報告一薪酬事項與薪酬委員會	-
2-20	Process to determine remuneration 確定薪酬的程序	Annual Report 2023 – Corporate Governance Report – Remuneration Matters 二零二三年度報告一企業管治報告—薪酬事項與薪酬委員會 The Group seeks the opinions of the employee representative assembly in the formulation of remuneration policy. 本集團在制定薪酬政策時徵求職工代表大會的意見。	-
2-21	Annual total compensation ratio 年度總薪酬比率	Key Statistics 主要數據 The Group's main operation involves over 95% of employees originate from mainland China, therefore the Group does not disclose remuneration data by region. 本集團主營業務涉及95%以上的員工來自中國內地,因此本集團不 披露按地區劃分的薪酬數據。	P.213-226

Disclosu 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 策略、政策及常規							
2-22	Statement on sustainable development strategy 關於可持續發展戰略的聲明	Chairman's Statement 董事長致辭 Message from CEO	P.1-4				
	懒水 可行模 较 依 乳 哈 的 耳 的	總裁致辭	P.O-11				
2-23	Policy commitments 政策承諾	Sustainability Governance 可持續發展管治	P.42-61				
		Sustainable Development Strategies to Address Climate Change Risks 廣料与保險化同學的可持續及同學的	P.62-105				
		應對氣候變化風險的可持續發展策略 Environmental Responsibility 環境責任	P.106-137				
		Annual Report 2023 – Sustainability Report 二零二三年度報告—可持續發展報告	_				
2-24	Embedding policy commitments 融入政策承諾	Sustainability Governance 可持續發展管治	P.42-61				
2-25	Processes to remediate negative impacts 補救負面衝擊的程序	Sustainability Governance 可持續發展管治 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 or Everbright E-letter public platform. 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,可通過意見箱或光大E信公眾平台進行反饋。	P.42-61				
2-26	Mechanisms for seeking advice and raising concerns 尋求建議和提出關切的機制	Sustainability Governance 可持續發展管治 Annual Report 2023 – Corporate Governance Report 二零二三年度報告一企業管治報告	P.42-61				
2-27	Compliance with laws and regulations	Sustainability Governance 可持續發展管治	P.42-61				
	遵守法律法規	Appendix III – Compliance with Relevant Laws and Regulations that have a Significant Impact on Everbright Water 附錄III一對光大水務有重大影響的相關法律及規例的遵守情況	P.247-252				
		There were no fines or non-monetary sanctions for non-compliance during the reporting period. 報告期內沒有因違規而受到罰款或非金錢制。	_				

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
2-28	Membership associations 協會的成員資格	Major Recognitions, Awards and Memberships 主要嘉許、獎項及會籍	P.198-201
		Stakeholder Engagement 持份者參與	
2-29	Approach to stakeholder engagement 利益相關方參與的方法	About This Report – Communicate with Stakeholders 關於本報告一與持份者溝通 Stakeholder Engagement 持份者參與	P.17-20 P.162-179
2-30	Collective bargaining agreements 集體談判協議	There are no collective bargaining agreements. 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. 沒有集體談判協議。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: N	Naterial Topics 實質性議題 2021		
3-1	Process to determine material topics 確定實質性議題的過程	About This Report – Materiality Assessment 關於本報告一實質性評估	P.21-25
3-2	List of material topics 實質性議題清單	About This Report - Materiality Assessment 關於本報告一實質性評估	P.21-25
		Economic Performance 經濟績效	
GRI 3: N	laterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Sustainability Governance 可持續發展管治	P.12-25 P.42-61
GRI 201	: Economic Performance 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	P.213-226
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	Sustainable Development Strategies to Address Climate Change Risks 應對氣候變化風險的可持續發展策略 The Group is actively evaluating and measuring the financial impact of climate change risks on its business and will add climate-related financial disclosures in the near future. 本集團正在積極評估和衡量氣候變化風險對其業務的財務影響,並將在不久的將來增加與氣候相關的財務披露。	P.62-105

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	
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畫	Talent Development 人才發展 Annual Report 2023 – Directors' Statement 二零二三年度報告一董事會聲明	P.138-161 -	
201-4	Financial assistance received from government 政府給予的財務補貼	Annual Report 2023 – Other Income and (losses)/gains, net 二零二三年度報告—其他收入及(虧損)/收益淨額	-	
		Anti-corruption 反貪腐		
GRI 3: IV	laterial Topics 實質性議題 2021			
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Sustainability Governance	P.12-25	
		可持續發展管治	1.42 01	
GRI 205	: Anti-corruption 反腐敗 2016			
205-1	Operations assessed for risks related to corruption 已進行貪腐風險評估的營運據點	Annual Report 2023 – Audit Committee 二零二三年度報告一審計委員會 The risk assessments and internal control conducted by the Group for all operating projects have already included risks of corruption. 本集團對所有經營項目進行的風險評估和內部控制均已將腐敗風險納入其中。	-	
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	Sustainability Governance 可持續發展管治 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): 19 (4.18%) - 高管員工人數 (百分比): 19 (4.18%) - Number of middle-level management (percentage): 109 (24.01%) - 中層員工人數 (百分比): 109 (24.01%) - General and technical staff (percentage): 326 (71.8%) - 一般及技術員工 (百分比): 326 (71.8%) In 2023, 5 out of 7 of the then Directors participated in anti-corruption training. 二零二三年,當時七位董事中的五位已接受反貪腐培訓。 All trained employees are located within mainland China. 所有培訓員工均位於中國內地。	P.42-61	
205-3	Confirmed incidents of corruption and actions taken 經確認的腐敗事件和採取的行動	Appendix III – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Water 附錄III — 對光大水務有重大影響的相關法律及規例的遵守情況	P.247-252	

Disclosu 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
	ı	Anti-Competitive Behaviour 反競爭行為	
GRI 3: IV	laterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Sustainability Governance 可持續發展管治	P.12-25 P.42-61
GRI 206	: Anti-competitive Behavior 反競	爭行為 2016	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices 針對不當競爭行為、反托拉斯和反壟斷實踐的法律訴訟	Appendix III – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Water 附錄III一對光大水務有重大影響的相關法律及規例的遵守情況	P.247-252
		Energy Efficiency 能源效益	
GRI 3: N	laterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Environmental Responsibility 環境責任	P.12-25 P.106-137
GRI 302	: Energy 能源 2016		
302-1	Energy consumption within the organisation 組織內部的能源消耗量	Environmental Responsibility 環境責任 Key Statistics 主要數據	P.106-137 P.213-226
302-2	Energy consumption outside of the organisation 組織外部的能源消耗量	The products and services of Everbright Water's core business will not cause additional energy consumption to customers. 光大水務核心業務的產品和服務不會對客戶造成額外的能源消耗。	-
302-3	Energy intensity 能源強度	Key Statistics 主要數據	P.213-226
302-4	Reduction of energy consumption 減少能源消耗量	Key Statistics 主要數據	P.213-226
302-5	Reductions in energy requirements of products and Services 降低產品和服務的能源需求	Key Statistics 主要數據	P.213-226

Disclosu 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 R	esources, Waste Water Treatment 水資源消耗、污水處理	
GRI 3: IV	laterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Environmental Responsibility 環境責任	P.12-25 P.106-137
GRI 303	Water and Effluents 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 Responsibility 環境責任	P.106-137
303-2	Management of water discharge-related impacts 管理與排水相關的影響	Environmental Responsibility 環境責任	P.106-137
303-3	Water withdrawal 取水	Key Statistics 主要數據	P.213-226
303-4	Water discharge 排水	Key Statistics 主要數據	P.213-226
303-5	Water Consumption 耗水	Key Statistics 主要數據	P.213-226
	GHG Managemen	t and Climate Mitigation 溫室氣體管理及氣候變化的應對	
GRI 3: IV	laterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Sustainable Development Strategies to Address Climate Change Risks	P.12-25 P.62-105
		應對氣候變化風險的可持續發展策略 Environmental Responsibility 環境責任	P.106-137

Disclosi 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 305	: Emissions 排放 2016		
直接(範疇一)溫室氣體排放 R		Sustainable Development Strategies to Address Climate Change Risks 應對氣候變化風險的可持續發展策略	P.62-105
		Key Statistics 主要數據 Calculations are based on the global warming potentials published in the IPCC Sixth Assessment Report (AR6); calculation of GHG emissions include carbon dioxide (CO ₂), methane (CH ₄) and nitrous oxides (N ₂ O). 計算參考IPCC《第六次評估報告》(AR6)中發佈的相對全球變暖潛 能。計算的溫室氣體排放量包括二氧化碳(CO ₂)、甲烷(CH ₄)及氧化亞 氮(N ₂ O)。 GHG emissions by biogenic/non-biogenic source: Biogenic emissions: 30,616 tonnes CO ₂ equivalent 由生物活動所產生的溫室氣體排放:30,616噸二氧化碳當量 Non-biogenic emissions: 582 tonnes CO ₂ equivalent	P.213-226
305-2	Energy indirect (Scope 2) GHG emissions 能源間接 (範疇二) 溫室氣體排 放	由非生物活動所產生的溫室氣體排放:582噸二氧化碳當量 Sustainable Development Strategies to Address Climate Change Risks 應對氣候變化風險的可持續發展策略 Key Statistics	P.62-105 P.213-226
305-3	Other indirect (Scope 3) GHG emissions	主要數據 Sustainable Development Strategies to Address Climate Change Risks	P.62-105
	其它間接 (範疇三) 溫室氣體排放	應對氣候變化風險的可持續發展策略 Key Statistics 主要數據 Calculations are based on the global warming potentials published in the IPCC Sixth Assessment Report (AR6); calculation of GHG emissions include carbon dioxide (CO2), methane (CH4) and nitrous oxides (N2O) 計算參考IPCC《第六次評估報告》(AR6)中發佈的相對全球變暖潛能。計算的溫室氣體排放量包括二氧化碳(CO2)、甲烷(CH4)及氧化亞氮(N2O)。 GHG emissions by biogenic/non-biogenic source: Biogenic emissions: 23,641 tonnes CO2 equivalent 由生物活動所產生的溫室氣體排放:23,641噸二氧化碳當量 Non-biogenic emissions: 5,964 tonnes CO2 equivalent 由非生物活動所產生的溫室氣體排放:5,964噸二氧化碳當量	P.213-226
305-4	GHG emissions intensity 溫室氣體排放強度	Sustainable Development Strategies to Address Climate Change Risks 應對氣候變化風險的可持續發展策略	P.62-105
		Key Statistics 主要數據	P.213-226

Disclosu 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
305-5	Reduction of GHG emissions 溫室氣體減排量	Sustainable Development Strategies to Address Climate Change Risks 應對氣候變化風險的可持續發展策略 Key Statistics 主要數據	P.62-105 P.213-226
305-6	Emissions of ozone-depleting substances (ODS) 臭氧消耗物質(ODS)的排放	The Group's operation does 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 (NOx), sulfur oxides (SOx), and other significant air emissions 氮氧化物(NOx)、硫氧化物 (SOx),和其它重大氣體排放	Environmental Responsibility 環境責任 The Group does not keep an inventory of volatile organic compounds (VOCs) and odour emissions as they are fugitive in nature. Nevertheless, the amount of VOCs emissions is negligible, while the Group strictly complies with prevailing local standards in odour emissions control. 本集團沒有保留揮發性有機化合物(VOC)及氣味排放的紀錄,因為 它們是無組織的排放。儘管如此,VOC的排放量極微,與此同時本 集團嚴格遵守氣味控制方面的現行當地標準。	P.106-137
		Waste Management 廢物管理	
GRI 3: IV	laterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Environmental Responsibility 環境責任	P.12-25 P.106-137
GRI 306	: Waste 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 Responsibility 環境責任	P.106-137
306-2	Management of significant waste-related impacts 廢棄物相關重大影響的管理	Environmental Responsibility 環境責任	P.106-137
306-3	Waste generated 產生的廢棄物	Environmental Responsibility 環境責任	P.106-137
		Key Statistics 主要數據	P.213-226

Disclosu 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
306-4	Waste diverted from disposal 從處置中轉移的廢棄物	Environmental Responsibility 環境責任 Key Statistics 主要數據	P.106-137 P.213-226
306-5	Waste directed to disposal 進入處置的廢棄物	Environmental Responsibility 環境責任 Key Statistics 主要數據	P.106-137 P.213-226
	Оссі	ıpational Health and Safety 職業健康與安全	
GRI 3: IV	Taterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Talent Development 人才發展	P.12-25 P.138-161
GRI 403	: Occupational Health and Safet	y 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	Sustainability Governance 可持續發展管治 Talent Development 人才發展 The Group's ESHS management system was formulated in accordance to the Labour Law of the PRC, Work Safety Law of the PRC, Criminal Law of the PRC, the Social Insurance Law of the PRC, Occupational health and safety management systems— Requirements with guidance for use (GB/T 45001-2020), Environmental management systems — Requirements with guidance for use (GB/T 24001-2016), etc. 本集團的ESHS管理體系乃依據《中華人民共和國勞動法》、《中華人 民共和國安全生產法》、《中華人民共和國刑法》、《中華人民共和 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。	P.42-61 P.138-161
403-2	Hazard identification, risk assessment, and incident Investigation 危害識別、風險評估及事件調查	Talent Development 人才發展	P.138-161
403-3	Occupational health services 職業健康服務	Talent Development 人才發展	P.138-161

Disclosu 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
403-4	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	Talent Development 人才發展	P.138-161
403-5	Worker training on occupational health and safety 工作者職業健康安全培訓	Talent Development 人才發展	P.138-161
403-6	Promotion of worker health 促進工作者健康	Talent Development 人才發展	P.138-161
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	Talent Development 人才發展	P.138-161
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	Talent Development 人才發展 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管理體系進行內部審核,但暫未進行外部審核。	P.138-161
403-9	Work-related injuries 工傷	Talent Development 人才發展 Key Statistics 主要數據 The major risks of work-related injuries in the water industry include slips and falls, and hearing loss. 水務行業的主要工傷風險則包括滑倒、跌倒、及聽力損害。	P.138-161 P.213-226
403-10	Work-related ill health 工作相關的健康問題	Talent Development 人才發展 Key Statistics 主要數據 The major risks of work-related ill health in the water industry include waterborne diseases, airborne infections, and skin ailments. 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。	P.138-161 P.213-226

Disclosu 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
		Staff Training 員工培訓	
GRI 3: M	laterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Talent Development 人才發展	P.12-25 P.138-161
GRI 404	: Training and Education 培訓與孝	收育 2016	
404-1	Average hours of training per year per employee 每名員工每年接受培訓的平均小時數	Talent Development 人才發展 Key Statistics 主要數據	P.138-161 P.213-226
404-2	Programs for upgrading employee skills and transition assistance programs 員工技能提升方案及過渡協助方案	Talent Development 人才發展	P.138-161
404-3	Percentage of employees receiving regular performance and career development reviews 定期接受績效和職業發展考核的員工百分比	Talent Development 人才發展	P.138-161
	Child	Labour and Forced Labour 童工與強制勞工	
GRI 3: M	laterial Topics 實質性議題 2021		
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Talent Development 人才發展	P.12-25 P.138-161
GRI 408	: Child Labor 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	Talent Development 人才發展 Sustainability Governance 可持續發展管治	P.138-161 P.42-61

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 409	Forced or Compulsory Labor 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	Talent Development 人才發展 Sustainability Governance 可持續發展管治	P.138-161
GRI 3: N	Disaster and Er aterial Topics 重大主題 2021	nergency Planning and Response 災難及應急預案規劃	
3-3	Management of material topics 實質性議題的管理	About This Report 關於本報告 Sustainable Development Strategies to Address Climate Change Risks 應對氣候變化風險的可持續發展策略 Environmental Responsibility	P.12-25 P.62-105 P.106-137
		環境責任 Talent Development 人才發展	P.138-161

ESG Aspects ESG層面	Requirement 描述	Relevant Chapter(s) and/or Explanation 報告章節/聲明
	A. Environmental 環境	
A1: Emission 層面A1:排放物	7	
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 Responsibility 環境責任 Appendix III – Compliance with Relevant Laws and Regulations That Have a Significant Impact on Everbright Water 阶錄III—對光大水務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 Responsibility 環境責任 The Group's operations do not generate significant emissions. 本集團的運營不涉及顯著的大氣排放。
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)。	Sustainable Development Strategies to Address Climate Risks 應對氣候變化風險的可持續發展策略 Key Statistics 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)。	The Group's operations do not generate significant amount of hazardous waste 環境責任 Key Statistics 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 Responsibility 環境責任 Key Statistics 主要數據
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 Responsibility 環境責任 Devoted to Achieving Sustainable Development Goals 致力實踐可持續發展目標 As explained above (KPI A1.1), the vast majority of the Group's projects does not involve stationary fuel combustion, therefore no quantitative emission targets are set by the Group. 如上文(KPI A1.1)所述,由於本集團絕大多數項目都不涉及固定燃料燃燒,因此本集團並無訂立量化排放目標。
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 Responsibility 環境責任 Devoted to Achieving Sustainable Development Goals 致力實踐可持續發展目標 The Group's operations do not generate significant amount of hazardous waste, hence no targets were set for hazardous wastes reduction. 本集團的運營不會產生顯著數量的有害廢棄 物,故此沒有訂立有害廢棄物減廢目標。

ESG Aspects ESG層面	Requirement 描述	Relevant Chapter(s) and/or Explanation 報告章節/聲明		
	A. Environmental 環境			
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 Responsibility 環境責任		
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 Responsibility 環境責任 Key Statistics 主要數據		
KPI A2.2	Water consumption in total and intensity (e.g. 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 Responsibility 環境責任 Key Statistics 主要數據		
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 Responsibility 環境責任 Devoted to Achieving Sustainable Development Goals 致力實踐可持續發展目標		
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 Responsibility 環境責任 Regarding water sourcing, all of the Group's projects have obtained the respective environmental impact assessment approvals and water-drawing permits. There are no associated issues in sourcing water that is fit for purpose. 在取水方面,本集團的所有項目均獲得相關 的環評批覆及取水證,我們在獲得適用水源 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 Group's main products are clean drinking water and treated waste water, which does not involve packaging material usage. 本集團的主要產品為已潔淨的飲用水及已處理的污水,並不涉及使用包裝物料。		
A3: The Environment III	onmental and Natural Resources 及天然資源			
General Disclosure 一般披露	Policies on minimising the issuer's significant impacts 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 Responsibility 環境責任		
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them. 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 Responsibility 環境責任		
A4: Climate Cl 層面A4:氣候				
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。	Sustainable Development Strategies to Address Climate Risks 應對氣候變化風險的可持續發展策略		
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。	Sustainable Development Strategies to Address Climate Risks 應對氣候變化風險的可持續發展策略		

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ESG Aspects ESG層面	Requirement 描述	Relevant Chapter(s) and/or Explanation 報告章節/聲明
	B. Social 社會	
	Employment and Labour Practices 僱傭及勞工常規	
B1: Employme 層面B1:僱傭	int	
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 揭入 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 人才發展 Appendix III – Compliance with Relevant Laws and Regulations That Have a Significant Impact on Everbright Water 附錄III一對光大水務有重大影響的相關法律 及規例的遵守情况
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 人才發展 Key Statistics 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 人才發展 Key Statistics 主要數據
B2: Health and 層面B2:健康與		
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。	Talent Development 人才發展 Appendix III – Compliance with Relevant Laws and Regulations That Have a Significant Impact on Everbright Water 附錄III—對光大水務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。	Talent Development 人才發展 Key Statistics 主要數據
KPI B2.2	Lost days due to work injury. 因工傷損失工作日數。	Talent Development 人才發展 Key Statistics 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。	Talent Development 人才發展
B3: Developme 層面B3:發展及	ent and Training 全	
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: 100% 男: 100% Female: 100% 女: 100% Senior management: 100% 高級管理人員: 100% Middle-level management: 100% 中層管理人員: 100% General and technical staff: 100% 一般及技術員工: 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 人才發展 Key Statistics 主要數據

ESG Aspects ESG層面	Requirement 描述	Relevant Chapter(s) and/or Explanation 報告章節/聲明			
	B. Social 社會				
	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 人才發展 Appendix III – Compliance with Relevant Laws and Regulations That Have a Significant Impact on Everbright Water 附錄III—對光大水務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 the 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 於有關避免董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 and such violation (if any) will be subject to internal disciplinary actions or handled by relevant authorities. 本集團並不容忍止違規情況。如有發現,將根據內部處分或交給有關部門處理。			
	Operating Practices 運營慣例				
B5: Supply Ch 層面B5:供應針	ain Management 建管理				
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。	Sustainability Governance 可持續發展管治			
KPI B5.1	Number of suppliers by geographical region. 按地區劃分的供應商數目。	Sustainability Governance 可持續發展管治			
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and 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。	Sustainability Governance 可持續發展管治			
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。	Sustainability Governance 可持續發展管治			
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。	Sustainability Governance 可持續發展管治			

ESG Aspects ESG層面	Requirement 描述	Relevant Chapter(s) and/or Explanation 報告章節/聲明
	B. Social 社會	
B6: Product Re 層面B6:產品責		
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、標籤及私隱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。	Sustainability Governance 可持續發展管治 Environmental Responsibility 環境責任 Appendix III – Compliance with Relevant Laws and Regulations That Have a Significant Impact on Everbright Water 附錄III — 對光大水務有重大影響的相關法律及規例的遵守情況 There is no law or regulation that has a significant impact on the Group regarding advertising, labelling and privacy matters relating to products and services provided by the Group. 本集團並無有關所提供產品和服務的廣告、標籤及私穩事宜的相關法律或規例對其構成重大影響。 The Group has not identified concerns in its operations regarding advertising and labelling, 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。
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 did not have any products recalled for safety and health reasons in 2023. 本集團於二零二三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。	The Group did not receive complaints relating to products and service in 2023. 本集團於二零二三年沒有接獲關於產品及服務的投訴。
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。	Sustainability Governance 可持續發展管治
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。	Environmental Responsibility 環境責任 Due to the specific nature of the Group's water environment management business, recall procedures are not applicable to its products and services provided. 本集團業務性質為水環境綜合治理,當中並 沒有適用的產品及服務回收程序。
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored. 描述消費者資料保障及私隱政策,以及相關執行及監察方法。	Sustainability Governance 可持續發展管治

ESG Aspects ESG層面	Requirement 描述	Relevant Chapter(s) and/or Explanation 報告章節/聲明			
	B. Social 社會				
B7: Anti-corrup 層面B7:反貪污	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。	Sustainability Governance 可持續發展管治 Appendix III – Compliance with Relevant Laws and Regulations That Have a Significant Impact on Everbright Water 附錄III—對光大水務有重大影響的相關法律 及規例的遵守情況			
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。	Appendix III – Compliance with Relevant Laws and Regulations That Have a Significant Impact on Everbright Water 附錄III-對光大水務有重大影響的相關法律 及規例的遵守情況			
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。	Sustainability Governance 可持續發展管治 Talent Development 人才發展			
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。	Sustainability Governance 可持續發展管治			
	Community 社區				
	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。	Stakeholder Engagement 持份者參與			
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)。	Stakeholder Engagement 持份者參與			
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)。	Stakeholder Engagement 持份者參與			

Appendix III – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Water 附錄III – 對光大水務有重大影響的相關法律及規例的遵守情況

Aspect A1: Emissions

In order to protect and improve the environment, prevent pollution and other public hazards, safeguard public health, promote the development of ecological conservation, and promote sustainable economic and social development, China has enacted a large number of laws to protect environmental resources. Key laws and regulations applicable to the Group include the Environmental Protection Law of the PRC, The Environmental Impact Assessment Law of the PRC, Water Pollution Prevention and Control Law of the PRC, Marine Environment Protection Law of the PRC, Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste, Law of the PRC on Prevention and Control of Environmental Noise Pollution and Atmospheric Pollution Prevention and Control Law of the PRC. 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 shall comply with all the above laws and regulations, otherwise it may be subject to penalties, suspension of operation, and/or legal actions against the Group by regulatory authorities.

In 2023, 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 chapter entitled "Environmental Responsibility" of this Report on how Everbright Water ensures compliance with the applicable environmental laws and regulations.

層面A1:排放物

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。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 國固體廢物污染環境防治法》、《中華人民共 和國環境噪聲污染防治法》及《中華人民共 和國大氣污染防治法》。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。本集團必須遵循以上相關的環境法 律法規,否則監管機構有權對本集團作出罰 款、勒令停運及/或採取法律行動。

二零二三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 解更多光大水務遵守相關環境法律法規的情 況,請參閱本報告的「環境責任」一章。

Appendix III – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Water 附錄III — 對光大水務有重大影響的相關法律及規例的遵守情況

Aspect B1: Employment

The Labour Law of the PRC, Labour Contract Law of the PRC, the Employment Ordinance (Chapter 57, Laws of Hong Kong) and the *Employment Act* of Singapore 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 care 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 2023, 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 chapter entitled "Talent development" of this Report on how Everbright Water ensures compliance with the 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》、香港《僱傭條例》及《新加坡僱傭法》提供了全面的僱傭保障和福利,涵蓋對薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他的選及福利方面的要求,明確了僱主的法定的法定了疾病、工傷、生育、醫療、退休及死可疾病、工傷、生育、醫療、退休及死死險,並釐清了僱主的相關法律責任。中國《住房公積金管理條例》則維護了住房公積金門與金工提供相關保障,保護員工的合法權益。以上法律法規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規,保障本集團最實貴的財富一員工。

二零二三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 光大水務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。

Appendix III – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Water 附錄III – 對光大水務有重大影響的相關法律及規例的遵守情況

Aspect B2: Health and Safety

The Labour Law of the PRC, and Work Safety Law of the PRC commit to the protection of labour safety and production safety, and require manufacturing organisations 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 care insurance, retirement insurance, and death insurance, and also clarifies the legal liabilities of the employers. Compliance with these laws and regulations is the Group's top priority as workplace safety is of critical importance to each and every employee of the Group. As a socially responsible enterprise, the Group complies with the relevant health and safety laws to provide employees with a safe workplace and suitable insurance.

In 2023, 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 chapter entitled "Talent Development" of this Report on how Everbright Water ensures compliance with the applicable laws and regulations relating to health and safety.

層面B2:健康與安全

《中華人民共和國勞動法》及《中華人民共和國安全生產法》旨在維護勞動安全衛生及生產安全,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》則規定了疾統工傷、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,因為工作場所的工程,與企業的實踐,本集團會嚴守相關健康與安全法律法規。

二零二三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。如欲了解更多光大水務遵守相關健康與安全法律法規的情況,請參閱本報告的「人才發展」一章。

Appendix III – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Water 附錄III — 對光大水務有重大影響的相關法律及規例的遵守情況

Aspect B4: Labour Standards

The Labour Law of the PRC, the Employment Ordinance (Chapter 57, Laws of Hong Kong) and the Employment Act of Singapore set out clear rules for preventing child labour and forced labour, and provide the legal liabilities of employers who violate the relevant laws and regulations. Everbright Water highly values human rights and aims to demonstrate its "People-Oriented" corporate spirit through strictly complying with the relevant labour standards.

In 2023, 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 chapter entitled "Talent Development" of this Report on how Everbright Water ensures compliance with the applicable laws and regulations relating to labour standards.

層面B4:勞工準則

《中華人民共和國勞動法》、香港《僱傭條例》及《新加坡僱傭法》對防止童工和強制勞工列有明確規定,並詳細地闡述了違反相關法律及法規的僱主的法律責任。光大水務高度重視人權,透過遵守相關勞工準則,充分反映其「以人為本」的企業精神。

二零二三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 解更多光大水務遵守相關勞工法律法規的情 況,請參閱本報告的「人才發展」一章。

Appendix III – Compliance with Relevant Laws and Regulations that Have a Significant Impact on Everbright Water 附錄III – 對光大水務有重大影響的相關法律及規例的遵守情況

Aspect B6: Product Responsibility

The *Product Quality Law of the PRC* is formulated with the aim of strengthening product quality monitoring, improving product quality, specifying product quality responsibility, safeguarding legal rights of customers, as well as protecting social and economic order. These laws and regulations provide clear requirements on health and safety matters and remedial methods relating to products and services provided. The Group complies with the relevant laws and regulations in relation to product responsibility to ensure customers receive safe, reliable and private service.

The Water Pollution Prevention and Control Law of PRC stipulated the specific requirements on effluent. The Group is a leading integrated water environment management enterprise in China that provides integrated water environment management services. The Group ensures that all of its effluents undergo high efficiency waste water treatment and strictly comply with prevailing requirements on effluents.

In 2023, 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 chapter entitled "Environmental Responsibility" of this Report on how Everbright Water ensures compliance with the applicable laws and regulations relating to product responsibility.

層面B6:產品責任

《中華人民共和國產品質量法》的制定旨在加強對產品質量的監督管理,提高產品質量水準,明確產品質量責任,保護消費者的合法權益,維護社會經濟秩序。該等法律對產品和服務的健康與安全事宜以及救濟方式提供了明確的要求。本集團遵循相關的產品責任法律法規以確保顧客獲得安全可靠及私隱的服務。

《中華人民共和國水污染防治法》對排放水方面提供了明確要求。本集團作為領先的水環境綜合治理企業,業務主要為提供水環境綜合治理服務。本集團確保其水治理服務的排放水均經過高效的污水處理,並嚴格遵從相關排放要求。

二零二三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 解更多光大水務遵守相關產品責任法律法規 的情況,請參閱本報告的「環境責任」一章。

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Aspect B7: Anti-corruption

The Anti-Unfair Competition Law of the PRC, the Prevention of Bribery Ordinance (Chapter 201, Laws of Hong Kong) and the Prevention of Corruption Act of Singapore 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 the relevant anti-corruption laws and regulations to maintain a good reputation and enhance its competitiveness.

In 2023, there was no confirmed case of non-compliance in relation to anti-corruption practices that would have a significant impact on the Group, and there was no legal case related to corruption raised and trial concluded towards the Group or its employees. Please refer to the chapter entitled "Talent Development" of this Report on how Everbright Water ensures compliance with the applicable laws and regulations relating to anti-corruption practices.

層面B7:反貪污

《中華人民共和國反不正當競爭法》、香港《防止賄賂條例》及《新加坡防止賄賂條例》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,保護服務提供者和消費者的合法權益。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公司競爭力。

二零二三年並無任何與貪污及反競爭相關並 對本集團有重大影響的已確認違規事件,亦 沒有對本集團或其僱員提出及審結的貪污訴 訟案件。如欲了解更多光大水務遵守相關反 貪污法律法規的情況,請參閱本報告的「人 才發展」一章。

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CHINA EVERBRIGHT WATER LIMITED 中國光大水務有限公司



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