

DONGJIANG ENVIRONMENTAL COMPANY LIMITED*

東江環保股份有限公司

(a joint stock limited company incorporated in the People's Republic of China) (於中華人民共和國註冊成立之股份有限公司) Stock Code 股份代號: 00895

Environmental, Social and Governance Report **2016** 環境、社會及 管治報告

* For identification purpose only 僅供識別

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The environmental, social and governance report (**"ESG Report**") provides detailed information on the various works of Dongjiang Environmental Company Limited* (the **"Company**") and its subsidiaries (the **"Group**") in full implementation of the concept of sustainability and fulfilment of corporate social responsibility as well as the performance in corporate governance throughout 2016.

Reporting Scope

The ESG Report focuses on the environmental and social performance of the core business segments of the Group on Mainland China from 1 January 2016 to 31 December 2016 (the "**Reporting Period**"). For details on corporate governance, please refer to the "Corporate Governance Report" on page 40 of the annual report.

Reporting Standard

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The ESG Report has been prepared in accordance with Appendix 27 "Environmental, Social and Governance Reporting Guide" of the Main Board Listing Rules of The Stock Exchange of Hong Kong Limited.

本環境、社會及管治報告(「ESG報 告」)詳述東江環保股份有限公司(「本 公司」)及包含子公司(「本集團」)在 2016年內全面實踐可持續發展理念 並履行企業公民責任所推行的各項 工作,以及在企業管治方面的表現。

報告範圍

ESG報告的內容主要集中於本集團 在中國內地的核心業務,於2016年1 月1日至2016年12月31日(「**報告期內**」) 在環境及社會層面的表現。有關企 業管治的內容,請參閱於年報第40 頁的《企業管治報告》。

報告準則

ESG報告依照香港聯合交易所有限 公司《主板上市規則》附錄27《環境、 社會及管治報告指引》所編寫。





Stakeholder Engagement

The Group has engaged its staff from different divisions in the preparation of the ESG Report to help better understand where it is with environmental and social performance. The information collected for the ESG Report not only summarises the environmental and social initiatives of the Group in 2016, but also forms the basis of its short-term and long-term sustainability strategy.

Information and Feedback

For detailed information about the work of the Group in environmental protection and corporate governance, please refer to its official website (http://www.dongjiang.com.cn/) and annual report. The Group values your opinions on this report. Should you have any advices or suggestions, please email us via ir@dongjiang.com.cn.

持份者參與

ESC報告的編寫,得到各部門同事 的共同參與,促使本集團更清晰目 前在環境和社會層面的發展水平。 ESC報告收集的資料,既是本集團於 2016年開展環境和社會相關工作的 總結,也是本集團制定短期和長期 可持續發展策略的基礎。

信息及反饋

有關本集團環境及企業管治的詳細信息,請參閱本集團的官方網站(http://www.dongjiang.com.cn/)及年報。本集團重視您對此份報告的看法,若 閣下有任何意見或建議, 歡迎以電郵形式發送至以下郵箱: ir@dongjiang.com.cn。

Message from the Chairman 董事長致辭



The Group publishes the first ESG report in this year.

It is our belief that identifying risks associated with ESG drives the long-term success of the Group. This report not only allows us to reflect on the sustainability performance of the Group, but also promotes transparency and accountability in its ESG disclosure.

The reputation of the Group, smooth business operations and the harmony among enterprises, society and nature stem from our commitment to ESG responsibility. As the only environmental enterprise listed on the Hong Kong Stock Exchange and Shenzhen Stock Exchange, the Group has made continuous effort in creating economic benefit and undertaking the social responsibilities while performing the corporate mission of "Make the world no waste!" and the corporate vision of "Becoming a respectable leader in the environmental protection industry".

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今年為本集團首次編製環境、社會 及管治報告。

我們相信,正視有關環境、社會和管 治風險有助企業獲取長遠成功。本 報告不僅反映本集團在可持續發展 的表現,亦會使本集團在環境、社會 和管治層面上保持透明度和問責。

切實履行環境、社會及管治責任, 關係著本集團品牌形象的塑造、業 務的暢順運營、企業、社會與自然 的和諧共存。本集團作為唯一深港 兩地上市環保企業,一直堅持在創 造經濟效益的同時,兼顧社會責任, 履行[讓世界沒有垃圾]的企業使命 及「做受人尊敬的環保產業領跑者」 的企業願景。 Leveraging its well-established advantages and profound experience over the years while taking into account the future development trend of the green industry, the Group adopted the approach of developing into "China's leading one-stop integrated environmental service provider driven by technological innovation and based on hazardous waste treatment". It also formulated the strategy implementation plan and mapped out the strategic missions on marketing, technology and talent development. This guarantees the long-term prosperity and enhances the quality of the environmental services of the Group.

We sincerely hope that this report will enhance public understanding and support of the development of the Group. We will strive to achieve internal unity among economic, safety and social responsibilities within the Group, uphold high standard and quality requirements in performing obligations, and satisfy public expectation with high quality products and services.

It is a persistent process that demands ongoing efforts to perform its social responsibility. In this regard, the Group has made a firm commitment to create a better community while delivering good returns to the shareholders.

By Order of the Board

Liu Ren Chairman

26 July 2017

根據多年來的發展優勢及經驗,結 合未來環保產業發展態勢,本集團 明確了「以技術創新為導向、以危 廢為基礎的中國領先一站式綜合環 保服務提供者」的發展戰略,制訂 了戰略實施路徑,明確了進一步落 實市場業務戰略、技術戰略、人才 戰略等分項職能戰略任務。既保障 本集團環保服務水平。

我們衷心希望社會各界借助此報 告,能進一步瞭解並支持本集團的 發展。我們將努力做到經濟責任、 安全責任、社會責任的內在統一, 堅持高標準、高質量履行各項義務, 用優質的產品和服務滿足社會需求。

企業履行社會責任是一個需要持之 以恆的、不斷付諸努力的過程,本 集團在這方面已作出堅定的承諾, 在不斷為股東創造良好回報的同 時,致力於讓社會更加美好。

承董事會命

董事長 劉**韌**

2017年7月26日

Treatment of industrial waste 工業廢物處理 Disposal and recycling of industrial

工業廢物處置與資源化利用

Treatment of municipal waste 市政廢物處理

- Disposal and recycling of municipal waste
- 市政廢物處置及資源化利用 Waste-to-energy 垃圾發電

Environmental engineering service 環保工程服務

- Sewage treatment
- 污水處理
- Construction and operation of environmental engineering projects 環保工程建設及運營

Value-added services 増值性服務

- Environmental testing
- 環境檢測 ・ Environmental restoration
- 環境修復
- Environmental remediation
- 環境救援 ・ Trading of chemical products
- 化工產品貿易

Established in 1999, Dongjiang Environmental Company Limited is a holding subsidiary of Guangdong Rising Assets Management Co., Ltd., which is a company owned by the Guangdong Provincial Government. It is also the only PRC environmental enterprise listed in both Shenzhen and Hong Kong (stock code: HK00895, SZ002672). The Group is committed to the recycling and harmlessness treatment of industrial and municipal waste, accompanied by environmental engineering services such as auxiliary development of sewage treatment and value-added services including environmental testing, restoration and remediation. It has established a comprehensive industrial chain targeting the reduction, harmlessness and recycling of solid waste, which covers the collection, recycling and, treatment and disposal of industrial waste, the management of landfills for municipal waste, landfill gas power generation and operation of clean development mechanism ("CDM") projects, and the treatment of kitchen waste and municipal sludge. The Group aims at building a multi-layered green service platform centring on waste recycling, thereby providing one-stop environmental services customized to different developmental stages of enterprises and offering comprehensive solutions of waste management to various cities.

東江環保股份有限公司創立於1999年, 是廣東省屬企業廣東省廣晟資產經 營有限公司的控股子公司,國內唯 一深港兩地上市環保企業(HK00895, SZ002672)。本集團致力於工業和市政 廢物的資源化利用與無害化處理, 配套發展污水處理等環保工程服務 以及環境檢測、修復、救援等增值性 服務。從工業廢物的收集、資源化利 用到處理處置,生活垃圾填埋場的 管理、填埋氣發電到清潔生產機制 (Clean Development Mechanism, 縮寫CDM) 項目運營,餐廚垃圾處理到市政污 泥處理,本集團已建立一套針對固 體廢物減量化、無害化、資源化處理 的完整產業鏈,鑄造以廢物資源化 為核心的多層次環保服務平台,為 企業的不同發展階段定制和提供一 站式環保服務,並為城市廢物管理 提供整體解決方案。

Leveraging its leading technological advantages and extensive industrial experience, the Group was recognized as the "National Key Environmental Enterprise", "National Major Demonstration Projects in Resources Saving and Environmental Protection", "First Batch of Circular Economy Pilot Enterprises" and "National High and New Technology Enterprise". The Group was also among one of China's Potential 100 (中國潛力100榜) selected by Forbes from 2005 to 2009 and received the second-class award of the 2016 National Science and Technology Progress Award.

Currently, the Group has an annual capacity of over 3.7 million tonnes in comprehensive recycling, treatment and disposal of industrial and municipal waste. It has a treatment and disposal capacity for industrial waste of over 1.4 million tonnes and the operating qualifications for 44 types of hazardous waste. The Group has achieved a comprehensive utilization rate of over 90% for solid waste, as well as a recycling and utilization rate of 95% for reusable resources. With more than 60 subsidiaries and a business network spanning across the core regions of the hazardous waste industry including the Pearl River Delta, Yangtze River Delta, Beijing-Tianjin-Hebei, Bohai Economic Rim and central and western China, the Group serves over 15,000 customers and becomes the leading hazardous waste treatment and disposal enterprise in the PRC. 憑藉領先的技術優勢和資深的行業 經驗,本集團先後被評為「國家環 保骨幹企業」、「國家資源節約與環 境保護重大示範工程單位」、「國家 首批循環經濟試點單位」和「國家高 新技術企業」等,2005~2009年度連續 入選《福布斯》「中國潛力100榜」,2016 年獲國家科學技術進步二等獎。

目前,本集團每年工業及市政廢物 綜合利用與處理處置能力逾370萬 噸,工業廢物處理與處置量超過140 萬噸,具備44類危險廢物經營資質; 固體廢物綜合利用率達90%以上, 再生資源回收利用率達95%。本集 團下設60餘家附屬公司,業務網絡 覆蓋中國珠三角、長三角、京津冀、 環渤海及中西部市場等危險廢物行 業核心區域,服務客戶超過1.5萬家, 是國內領先的危險廢物處理處置 企業。



Tackling climate change, reducing resources consumption and protecting the ecosystem are not only the duties and obligations of every corporate citizen, but also the inherent missions of all environmental enterprises. As a forerunner in the environmental industry, the Group endeavours to achieve its objective, which is to "Make the world no waste". In order to promote harmony and mutual win between human and nature, the Group adheres to the principles of reduction, harmlessness and recycling in waste treatment while capitalizing on its technological edge in developing new technology and techniques of waste disposal, thereby making active contribution to environmental governance and protection.

Environmental Protection Business

The principal businesses of the Group include the recycling and harmlessness treatment of industrial and municipal waste, accompanied by environmental engineering services such as sewage treatment and environmental remediation service. By fulfilling environmental responsibility in daily operation, the Group devotes continuous efforts to environmental protection while pursuing business growth. 應對氣候變化、減少資源消耗、保 護生態環境不僅是每一個企業公民 的責任和義務,亦是每一個環保企 業所肩負的天然使命。身為環保行 業的重要實踐者,本集團秉承「讓 世界沒有垃圾」的企業使命,堅 行 酸物處則,充分發揮技術優勢,積 股身環境治理和環境保護,不斷開 拓廢物處置的新技術和新工藝, 力於實現人與環境的和諧共贏。

環保業務

本集團的主要業務包括工業和市政 廢物的資源化利用與無害化處理, 配套發展污水處理等環保工程服務 以及環境救援等服務。本集團將環 保責任融入日常生產運營,通過推 動業務發展持續為環境保護事業做 出貢獻。



Treatment, disposal and recycling of industrial waste

The industrial waste treatment business of the Group primarily involves the reduction and harmlessness of toxic and hazardous waste liquid, sludge and waste residues generated from industrial enterprises by chemical, physical and biological means, and the manufacture of recycled products using reusable materials from the waste.

工 業 廢 物 處 理 處 置 及 資 源 化 利 用

本集團的工業廢物處理業務主要是 通過化學、物理和生物等手段對工 業企業產生的有毒有害廢液、污泥 及廢渣等廢物進行減量化處理和無 害化處置,並將廢物中具有再利用 價值的物質轉化為資源化產品。



Waste liquid and sludge in industrial waste containing heavy metals are essential raw materials in the manufacture of industrial waste recycled products. The Group collects industrial waste from industrial enterprises and transports such materials to the recycling base for subsequent treatment and deep-processing, where useful contents in various types of waste are transformed to valuable products for sale. This not only reduces pollution, but also facilitates efficient utilization of resources. The Group produces over 70,000 tonnes of recycled products such as copper salt products, nickel salt products, tin salt products, organic solvents and mineral oils every year. Its products exceed the national quality standards and are sold primarily to chemical enterprises and feed additive manufacturers. 工業廢物中的含重金屬廢液和污泥 是工業廢物資源化產品的重要基礎 原料。本集團通過收集工業企業產 生的工業廢物並運輸至本集團的資 源化生產基地進行後續處理和深加 工,將不同種的資源化產品後對加 式。將不同值的資源化產品後對外 銷售的有價值的資源化產品後對外 銷售的有效利用。本集團生產的資 源化產品包括銅鹽產品、寬覽 系列產品、錫鹽產品、有機溶劑、 礦物油等,年產量7萬餘噸,產品質 量高於國家標準,主要銷售給化工 和飼料添加劑生產企業。

Fulfilment of Environmental Responsibility 踐行環保責任

Treatment of municipal waste and utilization of renewable energy

The municipal waste treatment business of the Group involves transportation and sanitary landfilling of municipal waste, and treatment of landfill leachate to meet the standards for discharge, stabilization/solidification and modification landfilling of sludge from sewage treatment, treatment and comprehensive recycling of construction waste and kitchen waste, and power generation using landfill gas from municipal waste landfills.

市政廢物處理及再生能源利用

本集團的市政廢物處理業務包括對 城市生活垃圾進行清運和衛生填 埋,並對生活垃圾填埋滲濾液進行 處理使其達標排放;對市政污水處 理產生的污泥進行穩定化/固化改 性填埋;對建築廢棄物和餐廚垃圾 進行處理及綜合利用;利用生活垃 圾填埋場所產生的填埋氣進行發電。



The Group has invested substantial technological resources and funds to explore business and conduct research on new technology in the fields of renewable energy and waste recycling. In recent years, it has constructed five landfill gas power plants with an aggregate installed capacity of 24MW. These plants produce approximately 150 million kWh of power from biogas every year, representing the power consumed by around 150,000 households annually. At the same time, it reduces the pollution to the atmosphere caused by 138 million cubic meters of landfill gas.

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本集團先後投入大量技術力量和資 金致力於再生能源和廢物資源化 綜合利用領域業務的開拓和技術研 發,近年來開發建設的5個填埋氣 電廠總裝機容量達24兆瓦,每年利 用沼氣產生電能約1.5億度,可供約 15萬戶居民全年使用,同時可削減 1.38億立方米填埋氣對大氣環境的 污染。

Baoan Energy CDM Power Generation, Energy Saving and Emission Reduction Project

Shenzhen Baoan Dongjiang Environmental Renewable Energy Ltd. ("**Baoan Energy**"), the subsidiary of the Group, developed and operated the biogas comprehensive utilization CDM project at the Baoan Laohukeng Sanitary Landfill. The project generates power by burning landfill gas collected to partially replace the burning of fossil fuels and sells power surplus to the Shenzhen power grid of the China Southern Power Grid, which realizes clean and renewable power generation. The project has an average annual power generation capacity of 22,000 MWh and an average annual net on-grid power generation of 21,000 MWh. It cuts methane emission by 3,911 tonnes and carbon dioxide emission by 96,829 tonnes of carbon dioxide equivalents per annum in average. The carbon emission reduction for the Reporting Period is 122,172.82 tonnes of carbon dioxide equivalents.

寶安能源CDM發電節能減排項目

本集團附屬公司深圳寶安東江環保 再生能源有限公司(「**寶安能源**」), 於寶安區老虎坑垃圾衛生填埋場開 發經營的沼氣綜合利用CDM項目, 通過收集垃圾填埋氣燃燒發電,代 替部分化石燃料電廠的電量,產生 的淨電量銷售至南方電網中的深圳 電網,實現清潔再生能源發電。本 項目年均發電量22,000兆瓦時,年均減少 3,911噸甲烷的排放以及96,829噸二氧 化碳當量的碳排放,報告期內的碳 減排量達122,172.82噸二氧化碳當量。





Fulfilment of Environmental Responsibility 踐行環保責任



Installing Exhaust Gas Denitrification System at Power Generation Plants of Xiaping

To reduce the emission concentration of nitrogen oxides, the Company installed exhaust gas denitrification devices (selective catalytic reduction system or SCR) at the power generation units, which were used for treatment of exhaust gas from ten biogas internal combustion generators at Xiaping Solid Waste Landfill. As of the end of the Reporting Period, installation and testing of phase I of the denitrification system was completed, which facilitated the denitrification treatment of exhaust gas from five generating units. It is estimated that the emission of nitrogen oxides will decrease by 250 tonnes per annum upon completion of denitrification modification. By then, Baoan will be able to improve air quality of the surrounding environment while freeing up environmental capacity for the development of other industries.



下 坪 發 電 生 產 部 新 增 尾 氣 脱 硝 系 統

為降低氮氧化物排放濃度,本公司 通過新建發電機組尾氣脱硝裝置(SCR 選擇性催化還原系統)對下坪固體 廢棄物填埋場內10台沼氣內燃機發 電機組的尾氣進行處理。在報告期 內,本項目已完成一期脱硝系統安 裝及調試,實現5台發電機組尾氣 脱硝處理。本工程實施脱硝改造後, 每年預計削減250噸氮氧化物排放, 在改善區域環境空氣質量的同時, 也為其他行業的建設騰出環境容量。

Emergency response to environmental disasters

With the rapid growth of the industrial sector, environmental emergencies due to leakage, explosion and fire become increasingly common. Such incidents, if not dealt with and handled timely and effectively, will severely damage and threaten the soil, atmosphere, water sources and people's lives, health and safety. The Group attaches great importance to environmental emergency management. In 2004, it established the environmental emergency response team, which, after 13 years of development, has covered all cities in Guangdong Province. The team also has divisions in Jiangsu Province, Zhejiang Province, Jiangxi Province, Fujian Province and other provinces and cities. Equipped with the capabilities to collaborate with law enforcement agencies and perform flammable and explosive detections, leakage treatment, decontamination, absorption and transportation tasks in case of emergency, the team is highly experienced in on-site treatment and rescue in relation to the handling of dangerous goods including corrosives, poisons, inflammables and explosives.

Since 2012, the emergency team has worked with competent government authorities at different levels in approximately 500 emergency law enforcement operations and over 40 specific environmental emergency rescues, for which it earned the recognition from the public and local governments.

環境應急救援

隨著工業的高速發展,因洩露、爆 炸、火災等造成的突發環境事件日 趨增多。如突發環境事件未能得到 及時有效的處理和處置,將會對土 壤、大氣、水源、甚至人民生命健 康安全造成嚴重的破壞和威脅。本 集團高度重視環境應急管理工作, 於2004年成立了突發環境事件應急 隊伍,經過13年的發展,應急範圍 已覆蓋廣東省內各市,並在江蘇省、 浙江省、江西省、福建省等多個省 市內設立分隊。應急隊伍已具備配 合政府執法以及應對突發事件中的 易燃易爆偵測、洩漏處理、消洗、 吸收轉運等任務的能力,在處置危 險品包括腐蝕品、毒害品、易燃易 爆品等方面,取得了豐富的現場處 置救援經驗。

自2012年起,應急隊伍共配合各級政府主管部門完成應急執法活動近 500次,具體環境應急救援行動40多 次,受到了社會和地方政府的肯定 和表彰。

Fulfilment of Environmental Responsibility 踐行環保責任



From 20 October to 7 November 2016, the Environmental Protection Bureau of Deqing County, Zhaoqing City, engaged the emergency team to remove waste from unauthorized dumping by local enterprises. The operation involved 16 personnel and collected a total of 967.99 tonnes of waste liquid and residue. 2016年10月20日至11月7日受肇 慶市德慶縣環保局委託,清 理當地企業私自傾倒廢物現 場,出動人員16人次,共收集 廢液廢渣967.99噸。

From October to December 2016, the team joined hands with the local governments of Nanshan District, Luohu District and Baoan District of Shenzhen to combat the use of illegal oil. The operation involved 367 personnel and 88 vehicles, and disposed over 130 tonnes of illegal oil. 2016年10月至12月配合深圳市 南山區、羅湖區、寶安區政 府打擊「環保油」行動,出動 人員367人次,88車次,累計 清理「環保油」130多噸。





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In November 2016, at the request of the competent environmental authority, the team handled the leakage of chemicals caused by a traffic accident at Shaoguan-Lechang section of Lechang-Guangzhou Expressway, and safely removed 46 tonnes of waste liquid containing ethylbenzene. 2016年11月響應環保主管部門 號召,處理樂廣高速韶關樂 昌路段交通事故導致的化學 品洩漏,安全轉運46噸含乙 苯廢液。

Technology Research and Development and Technological Innovation

The Group regards innovation as its core competitiveness and the strong driving force for development of environmental business and fulfilment of environmental responsibility. Thus, it puts a great emphasis on technology research and development (R&D) and technological innovation. It has also established a multi-layered R&D system that integrates the construction of internal R&D platform, government R&D platform undertaking and building of external openended R&D platform.

Internal R&D Platform

Since its incorporation, the Group has established an independent R&D centre and a research team which mainly comprise engineers and technicians in the fields of environmental engineering, chemical engineering, biological engineering, metallurgy and mining, mechanics and other disciplines, and are led by industrial experts. The laboratory for small-scaled trials and R&D base for interim tests were set up under the R&D centre, with focuses on metal recycling, treatment and recycling of industrial waste liquid, heat treating, microorganism, environmental restoration and other fields, and the aim of achieving R&D breakthrough on issues of generic production technology and expanding technology reserve for new businesses.

技術研發和科技創新

創新是本集團的核心競爭力,也是 本集團得以發展環保業務、履行環 保責任的有力驅動。本集團高度重 視技術研發和科技創新,建立了集 內部研發平台建設、政府研發平台 承接、外部開放式研發平台搭建於 一體的多級研發體系。

內部研發平台

本集團於成立之初便設立了獨立的 研發中心,研發團隊主要由環境工 程、化工、生物工程、冶金採礦、機 械等多學科工程技術人員組成,研 發骨幹為行業內的專家。研發中心 已圍繞金屬資源回收、工業廢液處 理及回收、熱處理、微生物、環境 修復等多個領域建成小試實驗室及 中試研發基地,緊密圍繞生產共性 技術難題及新業務拓展技術儲備展 開技術攻關研發。





Government R&D Platform

The Group has built five government scientific research platforms at various levels and established the Heavy Metal Recycling and Control Technology Joint Research Centre in collaboration with Tsinghua University. On top of it, the Group has actively applied for the construction of the National Centre for Industrialization of Environmental Protection and Hazardous Waste Treatment and Disposal Technology in the Reporting Period. Furthermore, it has completed most of the goals as planned of the Shenzhen Engineering Laboratory for Hazardous Waste Liquid and Water Treatment, which had obtained construction approval in 2015.

政府科研平台

本集團已建成各級政府科研平台5 個,並與清華大學聯合成立了重金 屬資源化與控制技術聯合研究中 心。報告期內,本集團在此基礎上 積極申請建設國家環境保護危險廢 物處理處置產業化工程技術中心, 並按計劃完成於2015年獲批承建的 深圳市危險廢液廢水處理技術工程 實驗室的大部分預計目標。



Joint R&D Platform

The Group values the cooperation with renowned domestic and overseas universities and research institutes in different fields of environmental research. In the Reporting Period, it continued to strengthen the partnership with international organizations based on the needs of its business development. For instance, it set up the Sino-Australia Sponge City Research Centre with Monash University from Australia and other universities and institutions; jointly developed the Sino-Japan Joint Technology Cooperation Platform for Integrated Lake Watershed Governance with the Research Institute for Humanity and Nature of Japan, the National Institute for Environmental Studies of Japan and the Lake Biwa Museum of Shiga prefecture, Japan; carried out in-depth cooperation with the Research Centre for Eco-Environmental Sciences, Chinese Academy of Sciences on river basin governance and construction of water plant operating with new concepts; built the Hubei Province Academician Workstation with Huazhong University of Science and Technology; worked with the Southern University of Science and Technology to build the Integrated River Pollution Treatment and Ecological Restoration Engineering Research and Development Centre.

聯合研發平台

本集團注重與國內外知名高校和科 研院所在不同環境領域建立合作關 係。報告期內,本集團根據業務發 展 需 要,繼續加強國際領域合作。 例如,與澳大利亞莫納什大學等高 校和機構聯合成立中澳海綿城市研 究中心;與日本綜合地球環境學研 究所、日本國立環境研究所、日本 滋賀縣立琵琶湖博物館共建中日聯 合湖泊流域綜合治理技術合作平台; 與中科院生態環境研究中心在河道 流域治理及概念水廠建設領域開展 深入合作;與華中科技大學共建湖 北省院士工作站;與南方科技大學 建立河道污染綜合治理與生態修復 工程研發中心。

In the Reporting Period, the Group carried out a series of significant measures with the focuses on the construction of open R&D platforms, intellectual property construction, cooperation and exchange between domestic and overseas technology experts, collaboration between the industry, academia, and the research sector, undertaking of government R&D projects and application for science and technology awards, as well as intellectual property management, which achieved remarkable progress. The technological innovation business generated total revenue of RMB111.76 million, representing 19.3% of total revenue.

- 4 new subsidiaries accredited as National High-Tech Enterprises
- A total of 10 subsidiaries accredited as National High-Tech Enterprises
- Applied for a total of 71 invention patens and 110 utility model patents in the PRC
- Applied for one US patent

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- 30 new patents were granted, including 4 invention patents and 26 utility model patents
- A total of 114 patents have been acquired, including 36 invention patents and 78 utility model patents
- "Research on the Development and Application of Generic Technology in Development of Urban Circular Economy" received the second-class award of the National Science and Technology Progress Award
- Carried out over 10 research projects, including projects of the Science and Technology Support Program of the National Ministry of Science and Technology, "863" Project and the Application Demonstration Project of Shenzhen Science and Technology Innovation Commission
- Undertook the "Technology and Application of Rural Villages Water Supply and Drainage Integration in Drainage Network of Eastern China", a key R&D project under the national "13th Five-Year Plan"

報告期內,本集團圍繞開放式研發 平台建設、知識產權建設、海內外 技術合作與交流、產學研合作、政 府科研課題承接與科技獎項申報、 知識產權管理等領域開展了一系列 效果明顯的重要工作,科技創新業 務創造利潤總額為11,176萬元,佔利 潤總額的19.3%。

- 國家高新技術企業認定新 增4家
- 國家高新技術企業認定共10 家
- 累積申請專利國內發明專 利71項,實用新型110項
- 累積申請美國專利1項
- 新增30項專利,其中發明專 利4項,實用新型26項
- 累積授權114項專利,其中發 明專利36項,實用新型78項
- 國家科技進步二等獎「城市 循環經濟發展共性技術開 發與應用研究」
- 研發課題10餘項,包括科技 部科技支撐計劃課題、「863」
 課題及深圳市科創委應用 示範項目
- 承接國家「十三五」重點研 發項目「東部河網地區農村 供排水一體化技術及應用」





Research on the Development and Application of Generic Technology in Development of Urban Circular Economy

The project targeted the metabolism of a city in the full life-cycle, which covered production, circulation, consumption and recycling. It established the country's first operating system for regional renewable energy network + renewable resources recycling system technology and commercialization. It also adopted creative approach in developing core technology such as the mechanical and physical multi-layered dissembling technology for ordinary resources of "urban mines" and auxiliary equipment, thermal hydrolysis of organic waste with high water content and new multicomponent recycling technology and auxiliary equipment, and production technology of construction materials by co-processing and recycling of hard-to-treat residues. The project provided strong and solid technology support to the national strategy of building new smart cities.

城市循環經濟發展共性 技術開發與應用研究

該項目針對生產、流通、消費和回 收處理全生命週期的城市代謝過 程,首次在國內構建了區域再生資 源互聯網+再生資源回收系統技術 和商業化運營系統,創造性地研發 出典型的「城市礦產」資源的機械物 理多級拆解破碎技術及成套裝備, 高含水有機廢物濕熱水解及多組分 資源化新技術及成套裝備,難處 歸 鍵技術,對我國建設新型智慧城市 戰略形成強而有力的技術支撐。

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Quality Control

The Group has obtained the ISO9001:2008 quality management system certification on which it relied to implement the comprehensive quality management strategy. Based on different technical, product and service features, it has formulated the quality control procedure covering all staff and business segments, as well as suppliers and customers, with the view of maintaining stable and reliable technology, products and service quality.

Supply Chain Management

The Group adopted a centralized approach in the management of waste supplier and the waste collection system, so as to ensure the stable and timely collection of waste and procurement of auxiliary materials. For example, it puts the Market Management Department of the Company in charge of the supplier management and collection procedure for industrial waste in Guangdong region and Shenzhen Dongjiang Environmental Product Trading Co., Ltd. (深圳市東江環保產品貿易有限公司) is responsible for the procurement of auxiliary materials.

質量控制

本集團已獲得IS09001:2008質量管理 體系認證,並以之為平台實施了全 面的質量管理戰略,根據技術、產 品和服務不同階段的特點,制定覆 蓋全體員工和全部業務領域並向供 應商和客戶端延伸的質量控制流 程,從而有效保證技術、產品和服 務質量的穩定性和可靠性。

供應鏈管理

本集團實行廢物集中式供應商管 理模式和廢物收集制度,以保證廢 物收集和輔料採購的可靠性和及時 性。例如,廣東地區工業廢物的供 應商管理和收集工作統一由公司市 場管理部牽頭,輔料由深圳市東江 環保產品貿易有限公司採購。



Waste generating units 廢物產生單位



Collection and transportation 收集和運輸



Waste identification 廢物鑒別 The professional collection and transportation team of the Group collects and transports hazardous waste with designated transport vehicles. The team possesses relevant certificates and carries out seamless GPS monitoring of the whole process. The Group performs comprehensive tests on the components of waste collected and executes stringent control over the quality of waste from the suppliers.

危險廢物的收集和運輸由本集團的 專業收運團隊通過專業運輸車輛完 成,收運團隊實行持證上崗並對全 過程進行無縫GPS監控。本集團對所 收集廢物的成分進行全面檢測,嚴 格控制供應商所提供廢物的質量。



The Group has a well-established supplier management system in place and takes into consideration the qualifications and awards, capacity, product quality and functionality and after-sale service when selecting suppliers. To avoid pollution of the work sites and health hazards to crew members with access to or operating the equipment, the Group requires all materials and equipment procurement procedures to follow relevant national laws and regulations, and management practices to maintain strict compliance with the ISO14001 Environmental Management System and the OHSMS18001 Occupational Safety and Health Management System. 本集團已建立完善的供應商管理 制度,在選擇供應商時注重考察其 資質榮譽、產能情況、產品質量和 性能、售後服務等方面的表現。為 避免污染施工環境,以及對接觸或 使用設備的人員健康造成危害,本 集團要求所採購的材料和設備符 合國家有關法律法規,管理上嚴格 遵照IS014001環境管理體系要求以及 OHSMS18001職業安全健康管理體系 要求。

Fulfilment of Environmental Responsibility 踐行環保責任



Quality Management

The Group upholds the principle of "achieving excellent quality in production and services". To this end, it enhances product and service quality through establishing the three-inspection management, employment management and equipment management system.

質量管理

本集團奉行「質量通過生產和服務 過程來實現」的原則,通過建立三 檢管理、上崗管理和設備管理制度, 加強本集團的產品和服務質量。

Quality Inspection and Continuous Enhancement

In order to ensure the products are in compliance with the quality and technological requirements, the quality and technology department of the Group inspects the structure, configuration, functionality, labelling and packaging of the final products on an item-by-item basis in accordance with relevant national standards. The products will only be transferred to the warehouses if they pass the inspection.

The Group has a comprehensive quality information system in place which records all quality issues in the quality information database. In parallel, it has assigned personnel to regularly collect statistics and perform analysis on such information and convene routine meetings to identify the causes, formulate rectification and prevention measures and carry out follow-up actions so as to continuously enhance product and service quality. Apart from that, the Group also implemented the all-rounded monitoring and measurement system. Aiming at improving and strengthening product and service quality, it closely monitors the performance of the quality management system to fulfil rising customer expectations.

In the Reporting Period, the Group maintained strict compliance with relevant national laws, regulations and standards. It was not involved in any material disputes due to product and service quality or subject to substantial penalties for violating laws and regulations on product and service quality and technology supervision.

質量檢驗與持續改進

本集團質量技術部門根據國家相關 標準,逐條逐項檢驗最終產品的結 構、配置、性能指標、標識和包裝 等,確認成品完全符合產品質量技 術要求。產品經檢驗合格後,方可 辦理入庫手續。

報告期內,本集團嚴格執行國家相 關法律、法規和標準的要求,未發 生因產品和服務質量問題而導致的 重大糾紛或因違反有關產品和服務 質量技術監督方面的法律法規而受 到重大處罰。

The Group conforms to the scientific development trend of circular economy and clean production. Leveraging its strengths in terms of technology, scale and management capability, it launches energy saving, consumption reduction, pollution treatment and emission control initiatives in the course of production and operation, with the aim of achieving sustainable operation and promoting sustainable environmental and social development.

Pollution Prevention, Treatment and Control

Pollutants from industrial waste treatment mainly comprise wastewater, exhaust gas, solid waste and noise, while those from municipal waste treatment primarily comprise leachate, exhaust gas, dust and noise. The Group has obtained the ISO14001:2004 Environmental Management System Certification and put into practice comprehensive pollution prevention, treatment and control measures in production and operation. Upon reduction and harmlessness treatment, unrecyclable pollutants that meet the required standards will be disposed of or handed over to other qualified entities for disposal or recycling. For municipal waste produced from daily operation, the Group engages local environmental and sanitary authorities for collection and harmlessness treatment. 本集團順應循環經濟和清潔生產的 科學發展趨勢,依據自身的技術優 勢、規模優勢和管理優勢,於生產 運營中不斷開展節能降耗和治污減 排工作,致力實現可持續運營,推 動環境與社會的可持續發展。

污染防治與控制

工業廢物處理過程中產生的污染 物主要為廢水、廢氣、固體廢物和 噪聲,市政廢物處理過程中產生的 污染物主要為滲濾液、廢氣、粉塵 及噪聲。本集團已獲得IS014001:2004 環境管理體系認證,並於生產運營 過程建立了完善的污染防治與控制 措施;對於無法循環利用的污染物 實位進行處理處置或再利用;對於 日常運營中產生的生活垃圾,委託 當地環衛部門清理後做無害化處理。



The waste residue from recycling of industrial waste is mainly waste liquid with heavy metal contents, whereas the residue from incineration of industrial waste is primarily slag and ash. With regard to waste with low treatment and disposal cost, the Group will carry out safe landfilling after treatment, and discharge or recycle wastewater after it is treated up to standard. For waste that incurs higher treatment and disposal cost or in case the Group lacks the necessary qualifications for disposal, after the Group obtains the approval of or completes the filing with the local environmental protection bureau where the waste is to be moved out and in, it will handover such waste to other qualified entities for recycling or harmlessness treatment.

工業廢物資源化利用後的剩餘廢 物主要為含重金屬廢液,工業廢物 焚燒後的殘餘廢物主要為爐渣和飛 灰。其中,對於處理處置成本較低 的廢物,本集團自行處理後進行安 全處理處置成本較高或本集區 開一,廢水達標排放或回用; 對 備相應處理資質的廢物,經廢物 開 出地和接受地環保局的批准或備 緊,本集團將其移交至其他具有相 關資質的單位進行最終資源化利用 或無害化處理處置。

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The Group strictly follows the national and local environmental protection laws and regulations, including the Environmental Protection Law of the PRC, the Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste, the Integrated Wastewater Discharge Standards (GB8978-1996), the Regulations on the Administration of Construction Projects Environmental Protection and the Regulation of Guangdong Province on Environmental Protection, and so on. As part of its commitment to environmental impact assessment of construction projects and the "Three Simultaneous" system, the Group performs internal monitoring of environmental data and engages qualified third parties to carry out monitoring on a regular basis, while publishing the environmental impact assessment report and the monitoring results on its official website, thereby providing real-time information on pollutant emission to the public. Furthermore, the Group also set up an automatic monitoring system of source



- Spray water at landfill sites, soil extraction site, access route and roads within the operating area on a regular basis
- 在垃圾填埋作業區、土源採 掘區、進場公路和場區道路 等區域定期灑水

Carry out restoration and greening works in areas where the vegetation suffered damages 對植被遭破壞的區域進行復 - 墾和綠化

- Separate discharge system for clean water and leachate at the site 場區清水和滲濾液各自形成 獨立排放系統
- After quality and quantity treatment at the retention basin, leachate collected will be treated up to standard at the leachate treatment plant and discharged through pipes 滲濾液收集進入調節池進行 水質水量調節後,再經滲濾 液處理站處理達標後由管道 外排
- Adopt horizontal impermeable liner made of HDPE at the bottom of the landfill to prevent leakage 採用水平防滲法,在填埋場 場底鋪設HDPE防滲膜作為防 滲層

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of pollution, which is interconnected with the local environmental protection bureau, to facilitate real-time supervision and management of the authority. Subsidiaries of the Group engaging in hazardous waste treatment business have implemented the comprehensive environmental protection supervision and management system and appointed qualified entities to monitor the emission of pollutants after hazardous waste treatment (which include dioxin from incineration facilities) every year. All hazardous waste treatment companies working with the Group have obtained the relevant qualifications for hazardous waste operations.

In the Reporting Period, the emission of major pollutants of the Group met the national and local standards and was kept in line with the requirements of the discharge permits and the discharge limits imposed by the local governments. The Group was not subject to substantial penalties for violating national, provincial and municipal environmental laws and regulations, and there was no secondary pollution to the environment. 團從事危險廢物處理業務的附屬公 司均已實施完善的環境保護監督管 理制度,每年委託有資質的單位對 危險廢物處理後污染物(包括焚燒 設施排放的二噁英)的排放進行監 測。本集團合作的危險廢物接受單 位均具備相應的危險廢物經營許可 資質。

報告期內,本集團主要污染物的排 放均達到國家和地方規定的相關標 準,滿足排污許可證和地方政府規 定的排污總量控制要求,未發生因 違反國家和省、市等地方政府的環 境保護法律法規而受到重大處罰的 情況,亦未對環境造成二次污染。

Energy Saving and Consumption Reduction

In the Reporting Period, Shenzhen Baoan Dongjiang Environmental Technology Co., Ltd., which is one of the major production bases of the Group, formulated and executed dozens of clean production plans in relation to alternative raw materials and auxiliary materials, improvement of technique and equipment, process optimization and control, waste recycling, management and staff development and so on. Such plans brought satisfactory economic, social and environmental benefits and achieved the goals of "energy saving, consumption cutback, pollution reduction and efficiency enhancement".

節能降耗

報告期內,本集團的主要生產基地 之一深圳市寶安東江環保技術有限 公司在原輔材料替代、工藝和設備 改進、過程優化控制、廢棄物循環 再用、管理和員工素質提升等不同 方面制訂並實施了數十個清潔生產 方案,取得了良好的經濟效益、社 會效益和環境效益,實現了「節能、 降耗、減污、增效」的目的。





Alternative raw materials and auxiliary materials and source of energy 原輔材料和能源替代

- Replace oil-fired boiler combustors with oil (gas)-fired combustors that burn natural gas, a clean energy, as fuel
 - 鍋爐燃油燃燒機改為燃油(氣)兩用燃燒機,使用清潔能源天燃氣做燃料
- Reasonable use of raw materials and reduce consumption of auxiliary materials
 合理利用原料,減少輔料投加
- Replace high power lights with energy-saving LED lights
 大功率照明燈改成節能型LED照明

Improvement of technology and technique 技術工藝改造

- Recycle used water from washing process
 物料洗滌水循環使用
- Increase capacity of reactors and flow capacity of pumps to boost efficiency of wastewater treatment 加大反應罐的容量和泵的流量,提高廢水處理效率
- Modify treatment system for mother liquor containing alkaline copper, so as to minimise the effect of pollutants on adsorption capability of resins
 - 城銅母液處理系統改造,減少污染物對樹脂吸附能力的影響
- Replace tilted-plate sedimentation tank with MBR membrane to enhance processing capacity of wastewater
 - 用MBR膜替代斜板沉澱池,提高廢水產能
- Carry out physical and chemical treatment and recycling of mother liquor from evaporation 蒸發母液物化處理及回用

Promoting Sustainable Operation 推動可持續運營



Equipment maintenance and upgrade 設備維護與更新

- Modify wash pumps
 - 洗水泵整改
- Replace filter press with squeezing machines on copper oxide production line to enhance product quality and reduce washing
 - 氧化銅生產線用壓濾機改為壓榨機,提升產品質量,減少水洗次數
- Extend electric hoist at physical and chemical pre-treatment plant to facilitate transportation of drugs 物化預處理車間電動葫蘆延長,方便藥劑傳送
- Enhance measurement of water consumption at plants
 加強車間用水計量
- Add centrifuge at ammonium chloride evaporation plant to promote product quality 氯化銨蒸發車間增加離心機,提高產品質量
- Replace low torque and high noise cycloidal drives that incur high maintenance cost with high torque and low noise gear speed reducers
 - 將低轉矩、高噪音、維修費用高的擺線減速機改高轉矩、低噪音齒輪減速機
- Replace wastewater lifting pumps with vacuum pumps to reduce water consumption 廢水提升泵改用真空引水,節約用水量

Process optimization and control

過程優化控制

- Recycle residual heat in the chimney 煙道餘熱回收利用
- Recycle condensed water from evaporation
 蒸汽冷凝水回用
- Adopt better washing and drying methods of centrifuge to lower water consumption 改進離心機洗料、脱水方式、降低水耗
- Adopt variable-frequency controllers for power device to cut power consumption 動力設備實現變頻器控制,減少動力消耗



Management enhancement 加強管理

- Construct the mother liquor filer press platform 建造母液壓濾機平台
- Practise locked control for sewage discharge and run tests on samples before discharge 廢水排放執行上鎖管控,排放前取樣檢測
- Optimise leakage prevention measures
 完善防洩漏措施
- Strengthen inspection and equipment maintenance for timely identification and rectification of leakage 加強巡檢及設備的維護保養,及時發現和整改跑冒滴漏問題點
- Enhance emergency response of the emergency response team and improve emergency facilities
 提高應急人員的應急處置能力,完善應急設施
- Collect daily statistics and perform analysis of water and power consumption of each position at the plant to enhance management of the use of water and power
 每天統計分析車間各崗位水、電耗用,加強生產用水、用電管理
- Purchase anti-leakage trays for products packed in jumbo bags to prevent leakage 購買防洩漏托盤盛裝噸袋裝產品、杜絕跑、冒、滴、漏
- Carry out rectification measures to the surroundings of the unloading bay to minimise leakage 卸貨台週邊整改,減少洩露
- Enhance water saving management 加強用水降耗管理

Promoting Sustainable Operation 推動可持續運營



Waste treatment and disposal 廢物處理與處置

- Improve ammonium chloride evaporation and concentration technique 氯化銨蒸發濃縮工藝改善工程
- Optimise exhaust fume treatment facilities at the factory area
 完善廠區廢氣治理設施
- Upgrade and modify physical and chemical wastewater treatment procedure 物化廢水處理升級改造工程
- Adopt new special membrane (SRO) treatment system
 新 增 特 種 膜 (SRO) 處 理 系 統
- Recycle of distilled water generated from wastewater with high ammonium nitrogen content 高氨氮廢水蒸餾水回用
- Preliminary treatment of rainwater 初期雨水處理
- Separation of waste to reduce safety accident 廠區生產垃圾分類處理,減少安全事故

Enhancement of staff quality and employee motivation 提高員工素質和積極性

• Provide regular trainings to staff on skills and environmental protection to improve their operational skills and green awareness

定期對員工進行技能及環保培訓,提高員工操作技能和環保意識

- Encourage staff to put forward reasonable proposals and formulate incentive scheme 激勵員工提出合理化建議,制定獎勵措施
- Equip on-duty staff with knowledge of the whole production process and sharpen their skills
 使值班人員全面掌握生產各環節,提高員工能力
- Enhance education of staff on energy saving and consumption reduction, and hold interdepartmental competition where winners will be awarded
 加強職工節能降耗思想意識教育,部門之間競賽,獎勵優勝者





Improvement of ammonium chloride evaporation and concertation technique-ammonium chloride evaporation plant after renovation 氯化銨蒸發濃縮工藝改善-改造後的氯化銨蒸發車間







Optimize exhaust gas treatment facilities-new exhaust gas treatment facilities 完善廠區廢氣處理設施-新增的廢氣處理設施





Newly added special membrane (SRO) treatment system 新增特種膜(SRO)處理系統

Promoting Sustainable Operation 推動可持續運營

Green Office

The Group not only attaches great importance to environmental and resources management in the production process, but also promotes green office by incorporating the concept of sustainability in daily office operation. To this end, it has launched a number of initiatives to raise staff's green awareness and encourage their participation in boosting efficiency of resources utilization and cutting wastage and carbon emission.

綠色辦公

本集團不僅重視生產過程中的環境 和資源管理,亦積極倡導綠色辦公, 將可持續發展的理念融入日常辦公 的各個細節。本集團已推行多項措 施提高員工的環保意識和參與度, 提高資源使用效率,減少浪費和碳 排放。

Use of printers 打印機使用

- Turn off and unplug printers and servers when not in use for long time or after work 長時間不用或非工作時間關閉 打印機及服務器電源,並拔出 插頭
- Connect all computers at the same office to one network and share the printer to reduce idling 同一辦公室共用一部打印機, 將打印機聯網以減少設備閒置
- Promote draft mode printing and printing with smaller font size 推廣草稿模式打印,儘量使用 較小字號

Use of paper and articles 紙張及物品使用

- Set up paper recycle area at the office where reusable paper is sorted according to size 辦公室內設立紙張回收區,將 可以再利用的紙張按大小不同 分類放置
- Promote double-sided printing and copying and encourage staff to print on blank side of used paper or use them as notepads or draft paper 推廣雙面打印和複印,單面使 用後的複印紙,再利用空白面 影印或裁剪為便條紙或草稿紙
- Reduce the use of disposable products, for example, replace disposable pens with fountain pens and encourage staff to bring their own cups 減少一次性用品的使用,推廣 將一次性書寫筆替換為鋼筆, 動員與會人員自帶水杯

Jse of air conditioners and lightings 空調及照明使用

- Set the temperature of air conditioners between 25℃ and 26℃ in summer 夏季空調温度調至25℃~26℃
- Replace traditional light bulbs with highly efficient and energy saving light bulbs 推廣使用高效節能燈泡代替傳 統電燈泡
- Encourage staff to turn off lights when leaving and use natural light instead of indoor lighting if the office is well-lit 號召員工養成隨手關燈的習慣, 在光線好的條件下利用自然光 代替室內照明

Respect for Staff 尊重員工

Talent is the most valuable asset of the Group. The Group has not only strictly complied with laws and regulations relating to labour rights and interests, such as the Labour Law of the PRC and Labour Contract Law of the PRC, but has also been committed to providing a favourable environment for the growth of employees and paving a bright path for their development, which enables them to improve and showcase their strengths, and to find their happiness of growth in Dongjiang Environmental.

Staff Overview

The Group has attached great importance to talent management and has dedicated to creating a peaceful and harmonious atmosphere. To this end, the Group is steadfast in the practice of "merit-based appointments" while embracing creativity and diversity. In addition, talents are recruited through fair and open procedures in accordance with equal opportunities policy regardless of gender, race and religious faith. To recruit the most suitable employees, the Group values morality over ability and ability over education background, while striving for professionalism. The Group does not hire child labour and opposes forced labour. In addition to strict screening of candidates' age, it provides detailed job descriptions and explains employment terms including working hours, salary, remuneration and responsibilities of relevant positions. It also engages employees under labour contracts to safeguard their rights and interests. The Group pays remaining salary to resigned staff in a timely manner according to the laws.

人才是本集團最寶貴的財富。本集 團不僅嚴格遵守與勞工權益相關的 法例法規,如《中華人民共和國勞動 法》和《中華人民共和國勞動合同法》 等,亦致力為員工提供良好的成長 環境,創造員工發展的階梯,讓每 位員工都能培養並發揮自己的才 能,及都能在東江環保找到成長的 快樂。

員工概況

本集團高度重視人才經營,致力營 造和平共融的良好氛圍。本集團始 終堅持「用人唯才」, 鼓勵創造力、 崇尚多元化,並按照平等機會政策, 以公平、公開的程序招募人才,在 性别、種族、宗教信仰等方面不做 差別對待。本集團秉持「品德重於 能力、能力重於學歷、體現專業」的 原則,招募最適合的優秀員工。本 集團拒絕聘用童工和反對強迫勞 動,不僅對應徵者年齡進行嚴格審 查,亦向其提供詳細的工作説明, 闡述該崗位的工作時間、薪酬、待 遇及責任,並按勞動合約委聘員工, 保障員工權益。本集團依法為離職 員工,依時發放剩餘薪資。
For the Reporting Period, the Group has a total workforce of 3,945 who are under employment contracts. The Group hired 118 fresh graduates as well.

報告期內,本集團共有3,945名員工, 勞動合同簽訂率為100%,並有118名 應屆畢業生獲聘。



With great emphasis placed on the rights of female employees, the Group strictly complies with relevant laws and regulations, consistently improves work environment and conditions for them and implements maternity leave and breastfeeding leave policy. For the Reporting Period, the Group provided festival allowance and gifts to female employees and celebrated Women's Day. 本集團關注女員工的權益,除嚴格 遵守相關法津法規外,亦不斷改進 女員工工作環境和工作條件,以及 落實女員工孕產期、哺育期休假等 規定。報告期內,本集團在「三八」 婦女節為女員工發放過節費及禮 品,籌辦相關活動。



Bouquets for female employees on Women's Day 「三八」婦女節為女員工發放鮮花

Development and Training

Human resources are fundamental to the development of the Group. As a part of its commitment to promoting employees' professional capabilities and comprehensive quality, the Group advocates "onthe-job talent nurture" and provides further trainings at workplace. It also assigns employees to suitable positions and helps them become professionals through continuous practice and learning from experience. The Group has formulated clear and specific career paths and transparent promotion system for employees of different departments.

The Group hopes to grow with its staff. Thus, it provides a wide range of learning and training opportunities under the talent nurture system which combines position reassignment, salary adjustment and promotion and the result of regular assessment to drive them to develop a more comprehensive and mature career plan. For example, a talent development scheme designed to facilitate the adaptation of new employees has been formulated, where new employees will be under the guidance of a supervisor. The Group allocates additional resources to nurture employees with outstanding performance based on the result of regular assessment which focuses on working performance, training records and working attitude of employees. Enhancement plans that aim at overcoming their weaknesses are also devised, thereby boosting their capabilities. In full recognition of the importance of mutual communication to workplace cohesion, the Group establishes a two-way communication channel which enables the management to meet with staff to discuss job performance and future development, with the view of improving staff satisfaction.

The comprehensive talent nurture system of the Group is also complemented by a wide variety of trainings for employees at different levels and fields. Apart from internal trainings, employees are encouraged to take part in external courses, pursue self-learning and join field trips for competency enhancement and skills deepening.

發展及培訓

員工是本集團發展的根本。本集團 崇尚用工作育人,強化工作中的學 習,致力於員工業務能力和綜合質 素的培養,把合適的人放在適合的 崗位,並讓其通過實踐不斷摸索和 總結,成長為專業人才。本集團已 為不同部門的員工訂立清晰而明確 的晉升路徑,以及透明度的晉升制 度。

本集團期望與員工共同成長,將員 工崗位調配、薪酬調整及晉升與定 期考核結果相結合,並配合完善的 人才培養體系以及多種形式的培訓 課程,驅動員工擁有更完善及成熟 的生涯規劃。例如,本集團為新員 工制定培養計劃,安排輔導導師進 行指導,以確保其適應工作環境; 定期考核在職員工個人工作表現、 培訓記錄和工作態度等,並根據考 核結果,重點培養表現優秀的員工, 亦為表現不夠優秀的員工制定培養 計劃,改進其不足之處並提升其能 力。本集團深明溝通對員工凝聚力 的重要性,因此與員工建立雙向溝 通渠道,安排管理層與員工討論其 工作績效及溝通其未來發展,提高 員工的工作滿足感。

本集團訂立完善的人才培養體系, 配合多種類型的培訓課程,培養在 不同級別及專業的員工。本集團不 僅為員工提供內部培訓,亦鼓勵員 工參加外部課程,參與個人進修, 並安排外出考察,期冀員工持續提 升工作能力及深化專業技能。

Respect for Staff 尊重員工







Description 具體內容

Internal course

Type of training course

培訓課程類型

In view of the operational needs of different positions, the Group invites employees to attend a wide range of internal training programs, which mainly cover position-specific skills, management skills (e.g., the "Dragon in Dongjiang" Leadership Skill Training Programs which include "Qianlong Program", "Tenglong Program" and "Feilong Program"), job relevant training (e.g., the "Panxiang Training Camp" on financial system, "Tianlang Training Camp" on marketing system, "Woodpecker Training Camp" on EHS system, "Chiyan Training Camp" on administration and human resources system, "Feiying Training Camp" on inspection system and "Luban Training Camp" on project management) and the University Student Program. Employees will also be assigned to other business units to sharpen their skills.

內部課程
為適應崗位職責要求,本集團員工應參加本集團內部舉辦的各種培訓課程。課程類別主要有:崗位技能、管理研修(「龍騰東江」領導力培養系列項目:「潛龍計劃」、「騰龍計劃」、「飛龍計劃」)、專業崗位序列訓練(如財務系統「磐象訓練營」、市場系統「天狼訓練營」、EHS系統「啄木鳥訓練營」、行政人力系統「赤雁訓練營」、檢測系統「飛鷹訓練營」、項目管理「魯班訓練營」等)、大學生項目等。或指定員工到相關單位學習鍛鍊。

Respect for Staff 尊重員工



Type of training course	Description
培訓課程類型	具體內容
External course	The Group will send outstanding employees to attend short-term courses or industry seminars organized by external professional training intuitions so as to expose them to new ideas and enhance their management skills and abilities. External trainers are also invited to give lectures in
外部課程	the Group. 對表現突出的骨幹人員,為開拓思維,進一步提高管理水平和業務能力,可選送到外部專業培訓機構參加短期課程、行業沙龍等,或聘請外部專業培訓師到本集團上課。
Personal training 個人進修	Apart from various training courses that aim to enhance staff quality, the Group encourages employees to enroll in tertiary education or professional training institutions (e.g., to obtain EMBA degree, take part in on-the-job training, obtain professional titles and other qualifications and certificates, take examination and trainings). Employees who pursue studies in fields relating to their duties with prior approval from supervisor and notification to the human resources department will receive reimbursement for tuition fee and examination fee after they obtain the certificate and enter into service contract with the Group. 除舉辦各種培訓班提高員工的素質外,本集團也鼓勵員工到大專院 校或專業培訓機構進修學習(包括攻讀EMBA學位、上崗培訓、職稱及 其他資格證書考試、培訓等),所學專業與工作對口、培訓進修前獲分 管領導批准並在人力資源部備案、取得證書並願與本集團簽訂服務 協議的,可以報銷學費和考證費用。
Site visit 外出考察	To broaden horizon and enrich knowledge, the Group will organize visits to various business units, which introduce management staff and professionals to leading domestic and international corporates and institutions (such as the subsidiaries of the Group). 為拓展視野、豐富知識,本集團將組織管理人員、專業人員到內外單 位實地考察。考察單位包括境內外的優秀企業(包括本集團旗下的附

During the Reporting Period, a total of 5,538 employees of the Group attended trainings and the total training hours reached 50,400 hours. The direct investment in training expenses was RMB2.43 million, while the training expenses totalled approximately RMB5 million.

報告期內,本集團共有員工5,538人 次參與培訓,累計培訓時數達5.04 萬小時,直接投入的培訓經費為243 萬元人民幣,整體培訓經費近500萬 元人民幣。



"Dragon in Dongjiang" Leadership Skill Training Programme

Much effort has been made to build a talent workforce through identifying high-potential employees and enhancing their management capability, so that employees and the Group can both achieve long-term growth. Learning methods and plans for employee development have also been devised.

The "**Feilong Program**" targets management personnel with exceptional potential. It primarily takes the form of "learning through action" and discusses actual management issues of the Group. With the aim of improving the management mindset and skills of general managers, the program intends to solve management and performance problems of the Group.

「龍騰東江」領導力培養系列項目

本集團致力於不同級別挖掘有潛力 的員工,提升其管理能力,打造堅固 人材梯隊和高素質團隊,讓員工與 本集團持續成長。本集團透過不同 的學習方式及計劃,協助員工發展。

「**飛龍計劃**」面向高潛力的經營管理 人員,主要以「行動學習」的形式, 研討本集團的實際管理課題,提升 總經理的經營意識和管理能力,解 決本集團實際管理和執行力等問題。



Respect for Staff 尊重員工

The **"Tenglong Program**" targets middle management personnel with potential. It comprises mainly trainings on management mindset and enhancement of management skills and generic skills, and intends to nurture talents for middle and high management positions while boosting corporate competitiveness.

「**騰龍計劃**」面向有潛力的中層管理 幹部,培訓內容主要圍繞管理思維 訓練、管理技能提升及通用技能提 升,以培養及輸送中高級管理人才, 提升企業競爭力。



The "**Qianlong Program**" targets low level staff with potential. Through trainings on management mindset and enhancement of management skills and generic skills, it intends to nurture future departmental heads and managers.

「**潛龍計劃**」面向有潛力的基層骨幹 員工,培訓內容圍繞管理思維訓練、 管理技能提升及通用技能提升,以 培養未來部門主管及經理。



University Student Program — Second "Dongjiang Star" Training Programme

Fresh graduates are important source of talent for key middle and low level positions. The "Dongjiang Star" training program facilitates the transition of fresh graduates from students to working people, improves their overall quality and capacity, and deepens their understanding of the corporate culture and operational principles of the Group for better employee integration. The program adopts the "1234" training approach, which comprises a one-month course at the headquarter, a two-month rotation training period at the base, a three-month internship training and a four-year attachment at the subsidiaries of the Group. The one-month course at the headquarter includes outward bound group activities, trainings on corporate culture, job skills, the Group's requirements and policy, the Group's history, industry knowledge, basic trainings on professional knowledge and site visits to production bases; during the two-month rotation training period, the participants will be assigned to the production, marketing, technology and safety and environmental departments; the three-month internship training allows trainees to gain in-depth knowledge by working at fixed positions and, based on individual performance, they will become official employees and start the four-year attachment at the subsidiaries of the Group. The Group sets development goals with reference to the various stages of career development and formulates career plans for trainees.

大學生項目— 第二屆「東江之星」

應屆畢業生構建了本集團引進未來 中基層關鍵崗位人才的重要渠道。 本集團通過「東江之星」培訓計劃, 催化應屆畢業生完成由學生到在 職人士的轉變,提升其綜合素質及 能力,並加深其對本集團的企業文 化和經營理念的了解,助其融入本 集團的營運。[1234] 是「東江之星」 的培養模式,即一個月於總部的學 習、兩個月的基地輪訓、三個月的 頂崗實習及四年於本集團旗下附屬 公司的鍛鍊。一個月的總部培訓內 容包括團隊拓展訓練、企業文化、 職業化技能、規章制度、本集團的 歷史、行業知識、專業基礎知識培 訓、基地參觀等;兩個月的基地輪 訓讓受訓人員轉換不同崗位,包括 生產、市場、工藝技術及安全環境 的崗位;三個月的頂崗實習讓受訓 人員在固定崗位進行深入學習,並 根 據 其 情 況 轉 為 正 式 員 工, 開 展 四 年於本集團旗下附屬公司的鍛鍊。 我們根據於職業發展的不同階段提 出成長要求,並為受訓人員制定職 業生涯規劃。

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Position-specific Training — "Chiyan Training Camp" on administration and human resources system

The objective of the "Chiyan Training Camp" was to enhance trainees' professional capabilities in administration and human resources management as well as their overall management skills, thereby promoting more standardized, compliant and professional management while strengthening communication between subsidiaries of the Group. Through the training program, the Group was able to give accurate guidance to its subsidiaries on the 專 業 崗 位 序 列 訓 練 ― 行 政 人 力 資 源 系 統「赤 雁 訓 練 營」

「赤雁訓練營」旨在培養受訓人員的 行政和人力資源管理專業能力和綜 合管理能力,提升本集團行政和人 力資源管理規範性、合規性及專業 性,並加強本集團旗下附屬公司之 間的交流。借助培訓班的形式,本 集團快速及有系統性地準確指導本 framework and requirements of culture, administration and human resources management in a prompt and systematic manner, leading to a higher standards of overall administration and human resources management. The "Chiyan Training Camp" enabled trainees to learn more about the business operation of the Group, which helped upgrade the management and service standards. Apart from that, the Group can also cultivate all-rounded managers for the succession of administration and human resources management talents. 集團旗下附屬公司於文化管理、行 政管理及人力資源管理上的制度及 要求,提升本集團整體行政人力資 源管理水平。「赤雁訓練營」亦使受 訓人員進一步瞭解本集團的業務, 以提升本集團管理和服務水平,並 培養綜合管理人才,建立本集團的 行政人力資源管理專業人才梯隊。



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Position-specific Training – Incineration Operation and Management Short-term Training Course 2016

The comprehensive and rapid development of hazardous waste incineration and detoxification treatment business has highlighted the shortage of relevant management personnel and technicians for the incineration business. In order to cultivate management talents for the production and operation of incineration business, the Group conducted short-term training course on incineration operation management during the Reporting Period. The short-term camp aimed at nurturing management talents for the detoxification business, such as managers, equipment managers and quality technology managers with profound knowledge on industry laws and regulations and the ability to take a systematic and holistic approach in decision-making. The training was also designed to strengthen the management capabilities of trainees and encourage sharing between its subsidiaries that are engaged in incineration business. During the short-term training course, the Group invited external industrial experts to give theoretical lectures on laws and regulations with respect to hazardous waste, disposal system designing and system operation maintenance. It also invited internal experts to give presentation and share experience on key nodes control of incineration project construction, incineration equipment and exhaust fume control,

專業崗位序列訓練— 2016年焚燒運營管理短訓營

危廢焚燒無害化處置業務的全面 快速發展,凸顯出焚燒業務中相關 管理人員及技術人才不足的矛盾。 為了培養焚燒業務生產運營管理人 才,本集團在報告期內舉辦了焚燒 運營管理短訓班。是次短訓營旨在 培養一批熟悉行業法律規範,具有 系統性、全局觀的經理、設備經理 及質量技術經理等無害化業務運營 管理人才,提升受訓人員的運營管 理能力,促進本團旗下主理焚燒業 務的附屬公司之間的交流,構建交 流平台。在是次短訓營,本集團邀 請了外部行業專家講解有關危險廢 物法律法規、處置系統設計、系統 運營維護等理論課程,也邀請了內 部專家主講焚燒項目建設關鍵節點 控制、焚燒設備及尾氣控制、焚燒 運營規範化管理、安全預防、焚燒



standardized management of incineration operation, safety precaution, study of typical incineration system cases, and arranged the trainees to visit Huizhou Dongjiang Veolia Environmental Services Limited (惠州東江威 立雅環境服務有限公司) so that they could experience and learn about the operation and management of incineration projects from multiple perspectives.

Position-specific Training — "Panxiang Training Camp" on financial system

The nine-month "Panxiang Training Camp" adopted a combination of teaching models, which included lecture, case study, sharing of professionals, thematic talks, book sharing, team activities and debate competition, with the view of enriching the management mindset, job skills and professionalism of the trainees, fully implementing the Group's finance and accounting procedures, developing the trainees' comprehensive job capabilities and expanding the Group's talents reserve for finance management. At the conclusion of the "Panxiang Training Camp", trainees not only summarized their feelings but also had the opportunities to recognize their own shortcomings at work, share their self-improvement plans and practise what they learnt. This would motivate them to keep on learning and upholding the Group's corporate culture of "Diligence, Sincerity & Dedication". 系統典型案例剖析等經驗分享,還 安排了惠州東江威立雅環境服務有 限公司實地參觀考察,使學員多方 位、多視角體驗和認識焚燒項目運 營管理。

專 業 崗 位 序 列 訓 練 ― 財 務 系 統 「磐 象 訓 練 營 」

為期九個月的「磐象訓練營」整合了 課堂學習、案例研討、專業人士分 享、主題演講、讀書分享、團隊活 動及辯論比賽等多種學習形式,積 極及說養等多種學習形式,積 能及職業素等」貫徹實行本集團的 財會制度流程,培養崗位綜合能力, 豐富本集團的財務管理人才儲備。 每位受訓人員不但在「磐象訓練營」 完結時總結自己的感想,亦為其 提供了認識自身工作不足、分享改 進計劃、活學活用案例的機會,促 使其繼續努力學習,發揚東江環保 「勤、誠、專」的企業文化精神。





Remuneration and Benefits

In order to promote the development and growth of the Group and its staff, the Group determines the basic salary and annual bonus of employees based on its performance and their individual contribution, thereby motivating staff and building an effective talent retention mechanism. In recognition of employees' value and contribution to the team, the Group offers benefits more favourable than those required by the laws. For example, besides statutory holidays, staff is also entitled to marital leave, maternity leave and bereavement leave. Allowance and gifts are offered during festivals to spread joy and happiness with employees. In addition, relevant allowance including high temperature subsidies and commercial insurance are provided based on the needs of working conditions.

The Group not only provides its staff with appropriate remuneration and benefit, but also listens to their needs through various channels, so as to promote their living quality and mental wellbeing. The "One Small Activity per Month, Two Major Activities per Year" model communicates the corporate culture of the Group to the staff, which helps to build cohesion among staff and relieve their stress. The Group sets themes for every monthly activity and bears expenses of staff activities to encourage each subsidiary to create sound corporate culture and workplace atmosphere. During the Reporting Period, the Group held "New Year's Eve Party", "Dongjiang Environment 7th Staff Sports Gala cum 17th Anniversary Ceremony", spring and autumn company trips, birthday parties for employees and Christmas Party.

薪酬福利



2016 Spring Festival Gala 2016年迎春晚會



Dongjiang Environmental 7th Staff Sports Gala cum 17th Anniversary Ceremony 東江環保第七屆員工運動會暨集團17週年慶



Poster of Staff Activities 員工活動宣傳海報

Respect for Staff 尊重員工

In addition to organizing activities, the Group also identifies employees' needs, cares for them and promotes their satisfaction through various communication means such as Wechat, posters and emails. The Group publishes an internal newsletter named "Charming Dongjiang" (東江風采) to record and share employees' stories of work and life, communicate information about the operation of the Group, and provide an exchange platform for the management and employees. This not only enhances employees' cohesion and team spirit, but also encourages them to be more enthusiastic.

除組織活動外,本集團亦透過微信、 海報、郵件等宣傳形式了解員工的 需要,關愛員工,提高員工滿意度。 本集團編製內部期刊《東江風采》, 記錄和分享員工在工作中和生活中 的點滴、傳遞本集團與經營活動相 關的信息、提供管理層和員工交流 的平台,不僅提高了員工的向心力 和團隊凝聚力,也充分調動了員工 的積極性。

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让世!

Operation Integrity

The Group regards "integrity" as its core corporate culture. The Group firmly believes that trust can only be earned through honest practices. Thus, it has strictly complied with laws and regulations related to protection of intellectual property right, advertising, privacy and anti-corruption, such as the Patent Law of the PRC and the Company Law of the PRC. The Group not only requires its employees to fight against corruption and uphold integrity, but also strives to protect the intellectual property right and privacy of customers and conduct business with honesty.

以[誠]為本

以「誠」為本是本集團的企業核心文 化。本集團堅信以誠懇做人、以誠 信做事才能贏得信任。本集團嚴格 遵守與維護知識產權、廣告、私隱 及防止貪污相關的法例法規,如《中 華人民共和國專利法》和《中華人民 共和國公司法》等,不僅要求員工打 擊貪污,堅持以誠懇做人,亦致力 維護知識產權及客戶的私隱,以誠 信做事。



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The Group cherishes its employees and attaches great importance to their health. Hence, it has proactively established an occupational health and safety management system to provide comprehensive health and safety protection. In order to prevent safety accidents and create a working environment free from accidents, the Group, as an integrated environmental protection enterprise that is engaged in the collection, transportation, treatment and recycling of hazardous industrial waste and municipal solid waste, will constantly regulate itself in the aspects of Environmental, Health and Safety ("**EHS**"), improve its waste treatment facilities, and commit itself to:

- complying with national and local laws, regulations, decrees and international conventions in relation to occupational health and safety
- establishing and maintaining the occupational health and safety management system
- continuously improving employees' cultural quality, professional skills, and occupational health and safety awareness to ensure the effective operation and continuous improvement of the occupational health and safety management system
- maintaining communications with the government and the public at all times, accepting government guidance and social supervision, and constantly improving the Group's safety performance

本集團珍視員工的生命,重視員工 的健康,積極建設職業健康安全管 理體系,全面保障員工的安全健康。 作為工業危險廢物和城市固體廢物 的收集、運輸、處理、利用的綜合 性環保企業,為了杜絕安全事故的 發生,締造一個零意外的工作環境, 本集團將不斷規範自身在環境、職 業健康及安全(Environmental, Health and Safety,縮寫EHS)方面的行為,完 善廢物處理設施,並承諾:

- 遵守國家和地方有關職業健
 康及安全的法律、法規、政令
 及國際公約
- 建 立 並 保 持 職 業 健 康 及 安 全 管 理 體 系
 - 不斷提高員工的文化素質、 專業技能和職業健康及安全 意識,確保職業健康及安全管 理體系有效運行並持續改進
 - 隨時保持與政府及公眾的信 息溝通,接受政府的指導和 社會的監督,不斷改進本集 團的安全績效

Safety Management System

The Group has not only established a sound occupational health and safety management system, but also developed and implemented a safety management system, aiming to provide its employees with a safe and healthy workplace. The Group has progressively implemented the Production Safety Responsibility System under the safety management principle of "safety first, prevention oriented and comprehensive governance". It has signed letters of responsibility for safety and environmental protection with all departments, and made clear the objectives and responsibilities of the responsible persons of each department in respect of occupational health and safety. In addition to identifying and preventing occupational hazards in the early stages, there is also a wide range of safety precautions and regular monitoring for continuous improvement and refinement of its safety management system. The Group's safety management system has met the "Occupational Health and Safety Management System" (GB/T 28001-2011) standard.

During the Reporting Period, all employees of the Group received physical examination. Besides, the Group has not recorded any cases of occupational disease, serious injury or death.

安全管理制度

報告期內,本集團的員工體檢率為 100%,發生零宗職業病危害事件, 以及零宗重大人員傷亡事件。



Maintain Safety and Health 維護安全與健康



Promotion and Education

Promotion campaigns and safety training programs are organised for its employees to enhance their self-protection awareness and ability. Since 2010, the Group has published EHS periodicals which feature EHS national laws and regulations, promotion of the Group's internal EHS campaigns and accident case study, enriching employees' knowledge in respect of occupational health and safety.

In addition to the preparation and issuance of the periodicals, the Group launched the 100-day Production Safety Campaign from June to September 2016, aiming at "enhancing risk awareness and control of major risks". During the campaign, the Group organised a variety of activities including safety training programs and safety knowledge contests to educate employees on work safety and raise their safety awareness, thereby effectively promoting the development of the safety culture. A total of 1,466 employees participated in this campaign.

宣傳及教育

本集團積極對員工進行宣傳活動及 安全培訓,以提高員工的自我保護 意識和能力。自2010年以來,本集團 創辦EHS期刊,紀錄國家關於EHS的 法律法規、本集團內部EHS活動宣傳 與事故案例學習等,加深每位員工 對有關職業健康及安全知識的理解。

除編製及刊發期刊外,本集團於 2016年6月至9月開展了以「強化風險 意識管控重大風險」為主題的百日 安全生產活動。在活動期間,本集 團組織了多種多樣的安全培訓、安 全知識競賽等活動,教育並提高員 工的安全意識水平,切實促進安全 文化建設,此次活動的累計參加員 工達1,466位。



Kick-off meeting of the "100-day Production Safety Campaign" 「百日安全生產活動」啟動大會



Safety-themed lantern riddle game 安全燈謎活動

Besides the promotion of occupational safety, the Group also introduced pre-job and on-the-job safety training programs for its employees so as to enhance their understanding of occupational safety. The training programs cover laws and regulations on occupational safety, the occupational health and safety management system, proper use of tools, emergency rescue measures in case of an accident, all tailored to the operational needs of employees. In addition to classroom trainings, the Group also provided on-line training programs on a monthly basis for its new recruits serving at the safety and environmental management department, which covered relevant professional knowledge such as requirements of national laws and regulations as well as the EHS rules and requirements of the Group.

除了職業安全宣傳,本集團亦對員 工進行職前安全培訓和在職安全培 訓,以增進員工的職業安全知識。 培訓內容包括與職業安全相關的法 律法規、職業健康及安全管理制度、 正確使用工具的方法、發生事故時 的應急救援措施等,以配合員工的 職務需要。除透過實體培訓外,本 集團亦每月以網絡培訓方式為新入 職的安全環境管理部人員提供國家 法律法規、本集團EHS規章制度要求 等相關專業知識培訓。



During the Reporting Period, the Group organised pre-job safety training for a total of 830 attendees and on-the-job safety training for approximately 18,000 attendees respectively, with the total number of safety training hours reaching approximately 36,000 hours.

報告期內,本集團共有830人次參與 職前安全培訓,約1.8萬人次參與在 職安全培訓,總安全培訓時數約3.6 萬小時。



EHS System Training Program at the Headquarters — "Woodpecker Training Camp"

To enhance employees' EHS knowledge and improve their EHSrelated professional capabilities as well as communication and coordination skills, the Group conducted the EHS System Training Program-"Woodpecker Training Camp" at its headquarters. Lectured by the management, external professional institutions and internal key personnel, the training program was designed to improve the professional skills and quality of EHS personnel through a combination of learning methods including comprehensive outward bound training, classroom lecture and pre-class drills. In addition to explaining the EHS management system, relevant laws and regulations, operating procedures of EHS management tools and EHS control measures implemented in business operation, the training program also provided an opportunity for the participants to develop a better understanding of the Group's market management system, production management system and control process, and equipped them with the ability to give lectures and solve problems.

總部EHS系統培訓項目— 「啄木鳥訓練營」

為擴充EHS員工的相關知識,提升學 員EHS專業能力與溝通協調能力,本 集團總部特意開展了EHS系統培訓 項目-「啄木鳥訓練營」。項目由管理 層、外部專業機構、內部業務骨幹 等擔任講師,採取綜合拓展訓練 等的部業就前演練等多種學習式提升EHS系統人員的專業技能及 戰業是升EHS系統人員的專業技能及 戰業を遭緊、相關的法律法規、 EHS管理工具的運作、業務中實施 EHS管控的措施,亦提供機會讓參與 的員工更了解本集團的市場管理、 生產管理體系及管控流程,並培訓 其授課及解難能力。





While pursuing business growth, the Group also commits itself to social responsibility by actively participating in social welfare undertakings. The Group takes the initiative to understand the needs of the community in which it operates so as to ensure that its business development takes into account the interests of the communities. The Group spares no effort to contribute to the community with substantial commitment to promote local development. It also proactively fulfils social responsibility through caring for the community and supporting local environmental advocacy and education, thereby becoming a partner for growth of the community. As of the end of the Reporting Period, the Group has invested more than RMB20 million into the community in aggregate. Furthermore, it also inspired the public to take an active part in advancing social wellbeing.

Environmental Protection and Education

Apart from setting up an environmental emergency response team to support local environmental protection departments of various regions, the Group has organized various promotion and education campaigns to respond to international environmental festivals, such as Earth Day, World Water Day and World Environment Day. Through such activities, the Group educated its employees on environmental protection and started with itself to promote a green culture. It has not only stepped up environmental promotion efforts through supporting environmental protection organisations, but also actively launched large-scale environmental protection campaigns. Moreover, it has established a number of environmental education bases to provide citizens with the environmental education platforms, which enhanced public awareness of environmental protection. In this regard, Karamay Wosen Environmental Technology Co., Limited (克拉瑪依沃森環保科 技有限公司), a subsidiary of the Group, was honoured as the "Karamay Municipal Environmental Education Base" (克拉瑪依市級環境教育 基地).

本集團在發展自身事業的同時亦不 忘社會責任,積極參與社會公益事 業。本集團主動瞭解營運所在社區 的需要,確保本集團的業務發展考 慮到社區利益。本集團不遺餘力回 饋社會,積極推動周邊地區的發展, 並通過關懷社會及支持當地環保宣 傳及教育積極承擔社會責任,與社 區共同成長。於報告期完結時,本 集團已累計投入2,000多萬元於社區 投資,亦帶動社會人士積極投身於 公益事業。

環境保護及教育



Karamay Municipal Environmental Education Base 克拉瑪依市級環境教育基地



Students visiting the Karamay Municipal Environmental Education Base 學生到克拉瑪依市級環境教育基地參觀

Large-scale Public Welfare Campaign — "Pearl River Delta Coastal Cleanup"

The Group joined hands with a number of organizations including Shenzhen Mangrove Wetlands Conservation Foundation, World Wildlife Fund for Nature Hong Kong and Macao Polytechnic Institute in launching the large-scale public welfare campaign -"Pearl River Delta Coastal Cleanup". Through the participants' concerted effort in the marine waste clean-up at the Shenzhen Bay Park, the Group aimed to express the concern of Shenzhen, Hong Kong and Macao citizens over marine waste and their collective determination to address the issue. This campaign has triggered chain reaction within the Group, resulting in 11 of its subsidiaries responding to the event held on the World Environment Day, with a turnout of over 1,000 employees.

「三地同心護海洋」 大型公益活動

本集團聯同深圳市紅樹林濕地保 護基金會、香港世界自然基金會、 澳門理工學院等單位共同舉辦「三 地同心護海洋」大型公益活動。本 集團合力於深圳灣公園清理海洋垃 圾,以表達三地市民對海洋垃圾的 關注及共同應對問題的決心。此次 活動在本集團內亦引發聯動效應, 本集團11家附屬公司響應了世界環 境日活動,參與總人數超千人。





Environmental Education Activities

The Group invited representatives of teachers and students from Songpingshan Second Primary School of Nanshan District and Mingde Primary School of Futian District in Shenzhen to visit the Dongjiang Environmental Protection Exhibition Hall and witness the wonder of how the Group carried out environmental remediation works and turned waste into treasure. The event not only broadened students' horizons, inspired them to protect the environment, allowed them to experience the importance of the natural environment to their lives, but more importantly, also sowed the seed of environmental protection in their heart.

環保教育活動

本集團邀請深圳市南山區松坪山第 二小學及福田區明德小學師生代表 參觀東江環保展廳,讓他們見證本 集團環境整治及變廢為寶的奇妙過 程。此次活動不僅開拓了同學們的 眼界,激發了保護環境的熱情,親 身感受環境對生活的重要影響,更 重要的是在同學們心中播下了環保 的種子。





Caring for the Community

The Group endeavours to spread love and create a bright future. For the well-being of those in need, the Group is devoted to various public welfare activities such as targeted poverty alleviation, thereby providing the most effective support and assistance. During the Reporting Period, the Group offered food and clothing as well as financial aids to the needy people. Meanwhile, Hubei Tianyin Circulation Economic Development Co., Ltd. (湖北天銀循環經濟發展有限公司), a subsidiary of the Group, actively participated in the donation activities organised by Jiangling County Charity Federation such as the first "Charitable Donation Day" (慈善一日捐), and donated second-hand clothes in the "Charitable Wardrobe" (濟眾衣櫥) event. It also sent food to Yikang Garden Elderly Home at Jiangling County.

Apart from organising charitable activities, the Group made strenuous efforts in undertaking of social responsibility and social relief initiatives in the Reporting Period, which earned itself a good public image. For example, it actively participated in the rescue operation of a particularly severe landslide accident at Hong'ao Slag Landfill (紅坳餘泥渣土受納場) in Guangming New District, Shenzhen on 20 December 2015, and received a letter of appreciation from the Urban Construction Bureau of Guangming New District, Shenzhen as an acknowledgement of its contribution to the rescue operation.

Due to prolonged heavy rain in the local area, the foundation of the bridge connecting Longti Work Area at Tielong Woodlands, Wengyuan County and the natural villages of Shalingli and Shishan subsided and deformed in November 2016, putting lives of local villagers under threat. Therefore, Shaoguan Green Recycling Resource Development Co., Ltd. organized the relevant departments to conduct on-site inspection and provided funds for the reconstruction of the bridge, in an effort to help local villagers to overcome travel difficulty while fulfilling its corporate social responsibility.

關懷社會

除舉辦公益活動外,報告期內,本 集團積極承社會責任,參與社會救 援工作,樹立公眾形象。例如:本 集團積極參與深圳光明新區紅坳餘 泥渣土受納場[12.20]特別重大滑坡 事故的救援工作,並收到深圳市光 明新區城市建設局的感謝信,以表 達對本集團在滑坡事故中參與救援 工作的感謝。

2016年11月,受當地持續大雨天氣影響,翁源縣鐵龍林場龍體工區通往 沙嶺李、石山自然村的橋基發生下 沉岩變,成為危橋,為當地村民的 生活帶來嚴重影響。韶關綠然再生 資源發展有限公司組織相關部門進 行現場情況核查,並出資支持該橋 的重建工作,幫助解決當地村民的 出行難題,體現企業社會責任感。

Appendix: Content Index of ESG Reporting Guide 附錄:《環境、社會及管治報告指引》內容索引



ESG Indicators ESG 指 標	Summary 概述	Relevant Sections 章 節	Page 頁碼
A1: Emissions	General Disclosure	Pollution Prevention, Treatment and Control	24-27, 28-33
	 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 	Energy Saving and Consumption Reduction	
A1 排放物	一般披露 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	污染防治與控制 節能降耗	24-27, 28-33
A2: Use of Resources	General Disclosure Policies on the efficient use of resources, including energy, water and other raw materials	Energy Saving and Consumption Reduction Green Office	28-33, 34-35
A2資源使用	一般披露 有效使用資源(包括能源、水及其他原材 料)的政策	節能降耗 綠色辦公	28-33, 34-35

ESG Indicators ESG 指 標	Summary 概述	Relevant Sections 章 節	Page 頁碼
A3:The Environment and Natural Resources	General Disclosure Policies on minimising the issuer's significant impact on the environment and natural resources	Environmental Protection Business Technology Research and Development and Technological Innovation	8-14, 15-18
A3環境及天然資源	一般披露 減低發行人對環境及天然資源造成重大 影響的政策	環保業務 技術研發和科技創新	8-14, 15-18
B1: Employment	General Disclosure 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	Staff Overview Remuneration and Benefits	35-36, 48-50
B1僱傭	 一般披露 有關薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇及福利的: (a) 政策;及 (b) 遵守對發行人有重大影響的相關法律及規例的資料 	員 工 概 況 薪 酬 福 利	35-36, 48-50

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ESG Indicators ESG 指 標	Summary 概述	Relevant Sections 章 節	Page 頁碼
B2: Health and Safety	General Disclosure 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	Safety Management System Promotion and Education	53-54, 55-58
B2健康與安全	一般披露 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	安全管理制度 宣傳及教育	53-54, 55-58
B3: Development and Training	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Development and Training	37-47
B3發展及培訓	一般披露 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	發展及培訓	37-47

	G Indicators G 指 標	Summary 概述	Relevant Sections 章 節	Page 頁碼
Β4	: Labour Standards	General Disclosure 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	Staff Overview	35-36
Β4	↓勞工準則	一般披露 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	員 工 概 況	35-36
	: Supply Chain anagement	General Disclosure Policies on managing environmental and social risks of the supply chain	Quality Control	20-24
B5	5供應鏈管理	一般披露 管理供應鏈的環境及社會風險政策	質量控制	20-24

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	SG Indicators SG 指標	Summary 概述	Relevant Sections 章 節	Page 頁碼
	:6: Product tesponsibility	General Disclosure 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	Quality Control Operation Integrity	20-24, 51
B	6產品責任	一般披露 有關所提供產品和服務的健康與安全、 廣告、標簽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	質量控制 以「誠」為本	20-24, 51
В	7: Anti-corruption	General Disclosure 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	Operation Integrity	51
B	77反貪污	一般披露 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	以「誠」為本	51

B

Relevant Sections ESG Indicators Summary Page 章節 頁碼 ESG指標 概述 **B8: Community** General Disclosure **Environmental Protection** 58-60, Investment and Education 61 Policies on community engagement to Caring for the Community understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests B8社區投資 一般披露 環境保護及教育 58-60, 61 有關以社區參與來瞭解發行人營運所在 關懷社會 社區的需要和確保其業務活動會考慮社 區利益的政策





DONGJIANG ENVIRONMENTAL COMPANY LIMITED* 東江環保股份有限公司