

本報告旨在對本集團的環境及社會責任兩個主要範疇的理念、實踐和績效與股東、投資者、持份者及公眾人士進行坦誠溝通，回應關注問題。

編制基礎

本報告主要參照上市規則附錄二十七《環境、社會及管治報告指引》之原則及條文編制。

報告範圍

本報告包含截至二零一八年十二月三十一日止年度的統計及資料，以及以前年度比較數據為主，以本集團的九十五條水泥粉磨線、四十五條熟料生產線及六十座混凝土攪拌站為主要匯報範圍。除另有說明外，本報告基本不包含本集團的聯營公司及合營公司。

A. 環境

本公司積極履行企業公民的社會責任，大力推動綠色生產，降低污染物排放，嚴格遵循相關法律法規。根據國家、行業、地方法律法規要求，開展大氣、廢水以及噪聲等污染防治工作，所有生產線的污染物排放值達到或優於國家、地方污染物標準限值。

This report aims to enhance open communications with and address the issues concerned by our shareholders, investors, stakeholders and the public on the Group's philosophy, implementation and performance on the two main scopes of environmental and social responsibilities.

BASIS OF PREPARATION

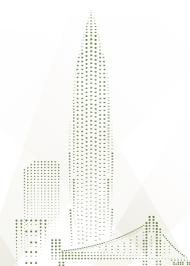
This report is prepared mainly with reference to the principles and provisions of the Environmental, Social and Governance Reporting Guide set out in Appendix 27 of the Listing Rules.

SCOPE OF REPORT

This report mainly includes the statistics and information for the year ended 31 December 2018, as well as comparative data of previous years. The main scope of report covers ninety five cement grinding lines, forty five clinker production lines and sixty concrete batching plants of the Group. Unless otherwise stated, this report does not cover the Group's associates and joint ventures.

A. ENVIRONMENT

The Company proactively fulfils its social responsibilities as a corporate citizen, vigorously implements green production, reduces emission of pollutants and strictly complies with relevant laws and regulations. According to the requirements of national, industrial and local laws and regulations, the Company carries out prevention and control of air, water and noise pollutants. The pollutant emission levels of all production lines met or were better than the national and local standard limits of pollutant emission.



1. 排放物

本集團嚴格遵守有關廢氣及溫室氣體排放、向水及土地的排污、有害及無害廢棄物產生的法律及規例，其中包括：

- 《中華人民共和國環境保護法》
- 《中華人民共和國大氣污染防治法》
- 《中華人民共和國水污染防治法》
- 《中華人民共和國固體廢物污染環境防治法》
- 《中華人民共和國環境噪聲污染防治法》
- 《中華人民共和國環境保護稅法》
- 《中華人民共和國環境影響評價法》
- 《水泥工業大氣污染物排放標準》

1. EMISSIONS

The Group strictly complies with the laws and regulations relating to air and Greenhouse Gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste, including but not limited to:

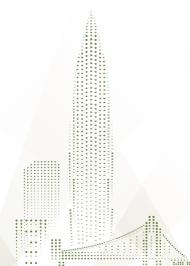
- Environmental Protection Law of the People's Republic of China
- Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution
- Law of the People's Republic of China on Prevention and Control of Water Pollution
- Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste
- Law of the People's Republic of China on Prevention and Control of Environmental Noise Pollution
- Environmental Protection Tax Law of the People's Republic of China
- Environmental Impact Assessment Law of the People's Republic of China
- Emission Standard of Air Pollutants for Cement Industry

本集團嚴格執行《華潤水泥管理手冊》「EHS管理篇」及監控環境管理體系，下發有關協同處置項目污染物排放監測管理的明確要求。本集團的星級管理評價體系基於行業對標或內部對標結果設定目標值，對各水泥生產基地在環境、健康和安全等方面進行全面評價，從而提升管理水平，推動企業的可持續發展。

本集團的主要產品為水泥、熟料及混凝土，生產製造過程中主要產生的排放物為粉塵、氮氧化物及二氧化硫等。本集團的熟料生產線在物料處理、輸送過程中均採用全封閉式運送，物料裝卸過程均在封閉的室內進行，同時採用密閉方式收集顆粒物。此外，本集團將高效袋式除塵器收集的粉塵應用於原料、半成品、成品中，循環利用生產過程中產生的廢棄物。

We strictly implement the “EHS Management Series” of the “Management Manual” of the Company and monitor the environmental management system by issuing definite requirements on the monitor and management of pollutant emissions relating to co-processing projects. The Group’s star-grading management appraisal system sets targets based on the results of industry benchmarking or internal benchmarking. Comprehensive appraisal on the environment, health and safety aspects of every cement production plant is conducted, which enhances the management standard and fosters corporate sustainable development.

During the production and manufacturing process of our major products (namely, cement, clinker and concrete), the Group mainly emits pollutants including dust, Nitrogen Oxides and sulphur dioxide. Fully enclosed delivery is adopted during materials treatment and delivery process at all the clinker production lines of the Group. Materials are loaded and unloaded in a sealed indoor environment. At the same time, hermetic measures were taken to collect particulate matters. Besides, the Group applies the dust that is collected from highly-effective bag filters in our raw materials, semi-finished products and finished products in order to recycle the solid waste produced during the production process.



本集團積極推動綠色生產，目前，所有水泥生產基地均取得污染物排放許可證，所有熟料生產線均配套餘熱發電設備、脫硝系統及袋式除塵器。本集團根據脫硫系統運行情況升級引進複合脫硫技術，截至二零一八年底，已建成3套濕法脫硫系統及11套複合脫硫系統。本集團在部份生產線應用超低排放濾料技術、推廣水泥包裝車移動收塵技術，並對水泥包裝機進行技術改造，進一步減少顆粒物的排放。二零一八年，本集團完成100台水泥包裝車移動收塵技術的應用，令包裝發運粉塵排放符合國家《工作場所所有害因素職業接觸限額》(GBZ2.1-2007)要求；完成106台水泥數控包裝機技術改造，並在華潤水泥(江門)有限公司的中轉站成功應用自動插袋技術，改善水泥包裝工作環境，提高裝備自動化水平及有效減少顆粒物排放。

本集團建成環境污染物排放總部監控平台，實現總部對所有生產線污染物排放情況的即時監控和預報系統，進一步提升污染物排放的風險管理能力。此外，本公司總部根據行業環保形勢和政策動態及時下發環保預警通知，要求各生產基地進行大氣污染防治和生態環境風險排查，採取有效的管理、技術措施，並制定應急措施，杜絕環境違法事件的發生。

本集團的氮氧化物、二氧化硫及顆粒物排放濃度均低於國家污染物排放標準限值，在行業中處於領先地位。

The Group proactively promotes green development. Currently, all our cement production plants have obtained permits for pollutant emission, and all our clinker production lines have been equipped with residual heat recovery generators, denitration systems and bag filters. The Group introduced composite desulphurization technology having regard to the operational situation of the existing desulphurization systems. As of the end of 2018, the Group had completed the construction of 3 sets of wet-process desulphurization systems and 11 sets of composite desulphurization systems. The Group applies filter technology for ultra-low emissions at some production lines, promotes the mobile dust collection technology of cement packaging trucks, and implements technological upgrade of cement packaging machines for further reduction of emission of particulate matters. In 2018, the Group completed the application of mobile dust collection technology for 100 cement packaging trucks, which had enabled the compliance with national requirements of "Quota of Occupational Access to Harmful Factors at Workplace" (GBZ2.1-2007) for the dust emitted during packaging and delivery. Technological upgrade for 106 cement bagging machines had been completed and the automatic bagging technology had also been successfully applied at the cement silo of China Resources Cement (Jiangmen) Limited. These have improved the working environment of cement bagging, enhanced the automation level of the equipment and effectively reduced the emission of particulate matters.

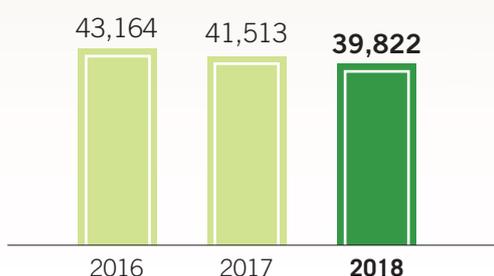
The Group has established a platform at headquarters to monitor the emissions of environmental pollutants, thereby achieving the headquarters' real-time monitor on pollutant emissions of all production lines and alarm system for further raising the risk management capability on pollutant emissions. Besides, the headquarters of the Company issues timely notifications of environmental alarms based on the circumstances of environmental protection in the industry and policy development. Each production plant is required to conduct risk inspections on prevention and control of air pollution and ecological environment. Effective management and technological measures have been adopted and contingency measures have been stipulated to prevent the occurrence of breach of environmental law.

Our emission levels of Nitrogen Oxides, sulphur dioxide and particulate matters are lower than the national standard limits of pollutant emissions, placing the Group at a leading position in the industry.

截至二零一六年、二零一七年、二零一八年十二月三十一日止年度，本集團水泥生產基地主要排放口的污染物排放數據載列如下：

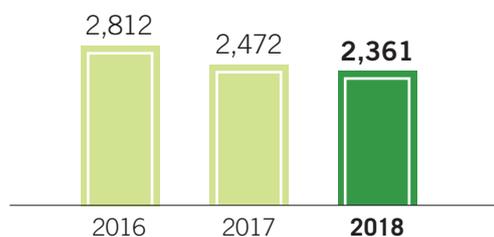
氮氧化物排放量 Emission of Nitrogen Oxides

噸 tons



顆粒物排放量 Emission of particulate matters

噸 tons



其他廢棄物方面，本集團生產製造過程產生的廢機油循環利用於機械潤滑，廢機油桶交由有資質機構進行處理。

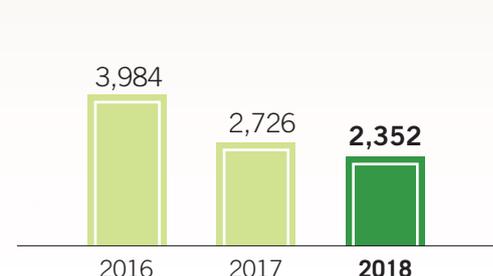
本集團的礦區採用無廢或少廢工藝，基本上無廢水排放，廢渣、夾石等無害廢棄物全部綜合利用，實現廢渣零排放，堆存的含泥石料後續可用於生產。

在碳排放方面，本集團積極參加行業組織的碳排放相關會議，為未來全國碳市場統一作準備。本集團於廣東省的9家工廠、福建省的5家工廠均完成二零一七年度碳排放權配額的清繳。此外，本集團已按《中國水泥生產企業溫室氣體排放核算方法與報告指南》完成二零一八年度碳排放量的統計。

Data of pollutants emitted from the major discharge outlets of the Group's cement production plants for the years ended 31 December 2016, 2017 and 2018 is set out as follows:

二氧化硫排放量 Emission of sulphur dioxide

噸 tons



Regarding other wastes, the waste oil generated in the production process is recycled for lubrication of mechanical equipment, and the oil barrels are handled by qualified institutions.

Waste-free or less-waste technology has been adopted at the Group's mines with virtually no discharge of wastewater. In order to achieve zero discharge of waste residue, harmless wastes such as waste slag and stones are all compositely utilized. Accumulated argillaceous aggregates could be used in production later on.

Regarding carbon emission, the Group actively participated in meetings relating to carbon emission organized by industry associations in preparation for the future unification of national carbon market. 9 plants in Guangdong province and 5 plants in Fujian province had settled the carbon credit quota for 2017. In addition, the Group had completed the calculation of quantity of carbon emissions for 2018 in accordance with the "Guidelines for Accounting and Reporting Greenhouse Gas Emissions for Cement Enterprises".



2. 資源使用

本集團設有能源管理系統及《節能減排監督管理》制度，對生產過程中資源消耗量進行統計，用於評估生產基地的運營表現，提高能源及資源利用率和經濟效益。此外，本集團亦持續推動節約能源的工作，主要包括能源的運用、節約和循環利用，節能環保技術投資，減排技術改造及研發與創新等。

本集團所有水泥生產基地配置餘熱發電系統。純低溫餘熱發電系統將水泥生產過程中產生的餘熱回收轉化為電能，提高能源利用效率，減少煤炭消耗，減輕大氣污染和溫室效應，並具有良好的經濟、社會和環境效益。相關數據詳載於管理層討論及分析內銷售成本一節。

本集團一直以來高度重視水資源的保護工作，積極宣導節約用水、循環用水。所有生產線均配套生物化學深度水處理系統，處理生活廢水後再進行廠內綠化或達標排放。餘熱發電系統及生產冷卻水系統全部循環利用，無污水外排。二零一八年，本集團的水資源消耗量為29,977,622噸，水資源消耗密度為349.7公斤／噸水泥產量。

2. USE OF RESOURCES

The Group has an energy management system and the policy "Supervision and Management of Energy Saving and Emission Reduction". All resources consumed during production process are measured for the assessment of operational performance of the production plant in order to enhance utilization rate of energy and resources as well as economic benefits. In addition, the Group persistently encourages energy saving mainly through the use, saving and recycling of energy, investment of environmental protection technologies for energy saving, technological upgrade on emission reduction, R&D and innovation.

All the cement production plants of the Group are equipped with residual heat power generation system. The pure low-temperature residual heat power generation system would recycle and convert the residual heat generated during the process of cement production into electricity. It raises the efficiency of energy use, reduces coal consumption, alleviates air pollution and greenhouse effect, and brings about good economic, social and environmental benefits. Relevant data is set out in the costs of sales section of the Management Discussion and Analysis.

The Group has always placed strong emphasis on protection of water resources and actively promotes conservation and recycling of water. All production lines have been equipped with intensive biochemical water treatment system. Treated domestic wastewater is used for gardening in the factories or discharged in compliance with standards. No sewage is discharged as the water from residual heat power generation systems and cooling water production systems is fully recycled. In 2018, water consumption of the Group was 29,977,622 tons and intensity of water consumption was 349.7 kg per ton of cement produced.

3. 環境及天然資源

協同處置

本集團依靠自主創新，推動城鄉生活垃圾、市政污泥及工業危險廢物三個領域的協同處置項目，在履行社會責任的同時，助力環保轉型，實現企業的可持續發展。

本集團利用水泥窯協同處置固體廢棄物，較傳統填埋方式大幅節約土地資源，而且有效利用窯內高溫去除二噁英等有毒污染物，實現「無害化、減量化、資源化」，為當地居民創造更健康的環境。

二零一八年，本集團新增位於海南昌江縣的工業危險廢物協同處置項目，位於廣西田陽縣和雲南彌渡縣的城鄉生活垃圾協同處置項目，以及聯營公司位於雲南鳳慶縣的城鄉生活垃圾協同處置項目。截至二零一八年底，本集團共擁有7個協同處置項目。

具體項目如下：

項目地點 Project Location	類型 Type	處理能力 Processing Capacity	狀態 Status
廣西賓陽 Binyang, Guangxi	城鄉生活垃圾 Municipal solid waste	每日300噸 300 tons per day	運營中 In operation
廣西田陽 Tianyang, Guangxi	城鄉生活垃圾 Municipal solid waste	每日500噸 500 tons per day	運營中 In operation
廣西南寧 Nanning, Guangxi	市政污泥 Urban sludge	每日300噸 300 tons per day	運營中 In operation
廣東廣州* Guangzhou, Guangdong*	市政污泥 Urban sludge	每日300噸 300 tons per day	運營中 In operation
海南昌江 Changjiang, Hainan	工業危險廢物 Hazardous industrial waste	每年30,000噸 30,000 tons per year	試運營 In trial operation
雲南彌渡 Midu, Yunnan	城鄉生活垃圾 Municipal solid waste	每日300噸 300 tons per day	試運營 In trial operation
雲南鳳慶* Fengqing, Yunnan*	城鄉生活垃圾 Municipal solid waste	每日300噸 300 tons per day	試運營 In trial operation

*註：位於聯營及合營公司的水泥生產基地。

3. ENVIRONMENT AND NATURAL RESOURCES

Co-Processing

In reliance on independent innovation, the Group promotes co-processing projects in the three scopes of municipal solid waste, urban sludge and hazardous industrial waste in order to fulfil its corporate social responsibility whilst supporting environmental transformation and achieving sustainable corporate development.

Compared to traditional landfilling, co-processing of solid waste through the use of cement kilns enables the Group to substantially save land resources and eliminate poisonous pollutants such as dioxin by effective use of heat inside cement kilns, thereby achieving waste treatment in a “hazard-free, mass-reducing and recyclable” manner and creating a healthier living environment for local residents.

During 2018, the Group launched new projects including the hazardous industrial waste Co-Processing project in Changjiang County, Hainan, the municipal solid waste Co-Processing projects in Tianyang County, Guangxi and Midu County, Yunnan, as well as the municipal solid waste Co-Processing project of an associate in Fengqing County, Yunnan. As of the end of 2018, the Group had 7 co-processing projects in total.

Details of the projects are set out as follows:

*note: Located in the cement production plants of our associates and joint ventures.

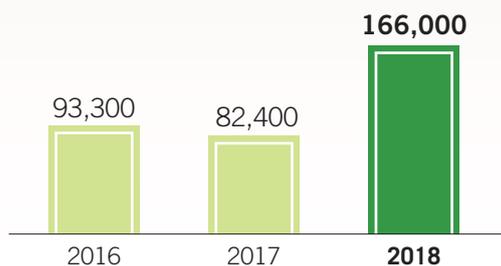


截至二零一六年、二零一七年及二零一八年十二月三十一日止年度，本集團水泥生產基地的協同處置量數據載列如下：

Data of waste co-processed by the Group's cement production plants for the year ended 31 December 2016, 2017 and 2018 is set out as follows:

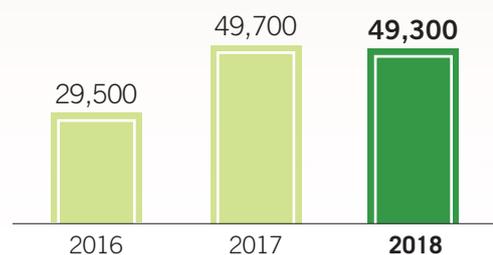
城鄉生活垃圾協同處置量 Municipal solid waste co-processed

噸 tons



市政污泥協同處置量* Urban sludge co-processed*

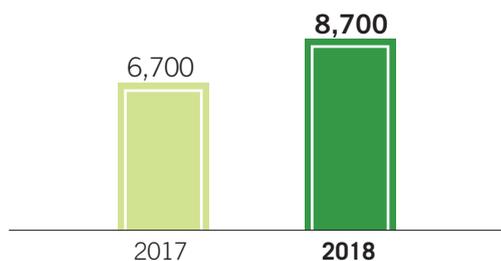
噸 tons



*註：折算為80%含水率濕污泥
*note: 80% moisture content for wet sludge

工業危險廢物協同處置量* Hazardous industrial waste co-processed*

噸 tons



*註：二零一六年無工業危險廢物協同處置項目
*note: no hazardous industrial waste co-processing project in 2016



本集團位於廣西田陽縣的城鄉生活垃圾協同處置項目建成投入運營

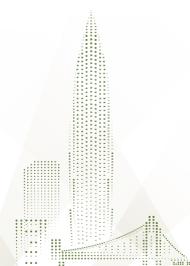
The Group's municipal solid waste co-processing project in Tianyang County, Guangxi had completed construction and commenced operation

資源綜合利用

本集團通過優化生產配方，有效利用工業廢渣、石灰石廢石等資源，降低能耗，實現資源的綜合利用，有利於社會總體廢棄物的減量化、無害化、資源化處置，對社區環境保護作出積極貢獻。本集團致力研究和探索工業廢渣在水泥生產中的應用。其中，本集團開展石灰石廢石資源綜合利用項目，通過優化生料配方，利用100%廢石生產特種水泥，成效顯著。

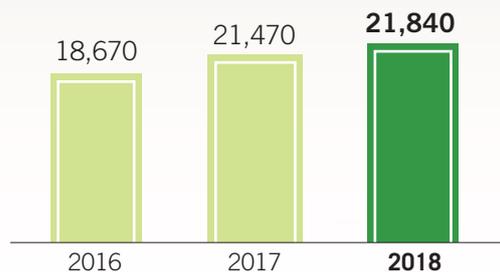
Composite Utilization of Resources

The Group achieved reduction of energy consumption and composite utilization of resources through optimization of the production prescription and effective use of resources such as industrial waste and stone residue. Composite utilization of resources is conducive to the mass reducing, hazard-free and recycling disposal of social aggregate solid wastes, which is a proactive contribution of environmental protection to the community. The Group is dedicated to research and exploration of the application of industrial wastes in cement production. Among which, the Group launched projects for composite utilization of stone residue resources which successfully utilized 100% stone residue for the production of special types of cement through optimizing the prescriptions of raw materials.



截至二零一六年、二零一七年及二零一八年十二月三十一日止年度，本集團水泥生產基地的工業廢渣綜合利用量數據載列如下：

工業廢渣綜合利用量 千噸



Data of industrial waste utilized by the Group's cement production plants for the years ended 31 December 2016, 2017 and 2018 is set out as follows:

Quantity of industrial waste utilized '000 tons

礦山復綠

本集團高度重視礦山復綠工作，確立科學規劃、合理開採、節約資源、促進人與自然和諧發展，以及綠色生態型、環境友好型礦山企業的工作思路，將礦山恢復納入生產運營及長期發展規劃。

針對新項目，必須開展項目環評，並在開發建設過程中盡量避免對生態造成破壞。對於開採區域，本集團通過礦內水資源循環利用，污水零排放，廢油及時回收利用，減震、弱震爆破技術的應用等措施，減少生產運營活動對生物生存環境的影響，進而有效保證區域內物種的棲存和延續。在礦山開採結束後進行覆土，種上藤類植物，逐步恢復植被，使地表的植被覆蓋率達到或基本接近礦山開發前的植被覆蓋率，逐步恢復生態平衡。對於未開採區域，劃定保護及禁入區域，保護原生植被與原生動物種類，減少人為因素造成的物種遷徙。

Ecological Restoration of Mines

The Group places strong emphasis on ecological restoration to the mines. We confirm a work approach of scientific planning, reasonable mining, resources conservation, promotion of harmonious development between human beings and the nature as well as green, ecologically and environmentally friendly mining enterprise. Restoration of mines is included in the production, operation and long-term development plans of the Company.

Environmental assessments must be conducted for new projects and damages on the ecology in the course of development and construction are avoided to the greatest possible extent. For the mining areas, through reutilization of water resources in the mines, there is zero discharge of wastewater. Measures for timely recycling of waste oil and application of shock reduction and weak shock blasting technologies are taken, in order to reduce the impact of production and operation activities on ecological environment and ensure existence and continuity of species in the region. After completion of mining, the soil would be recovered by planting rattan plants for the gradual restoration of vegetation such that the surface vegetation coverage rate would reach or is basically close to that prior to mining for the gradual restoration of ecological balance. For unexplored areas, the Company delimits protected and prohibited areas in order to protect indigenous vegetation and animal species as well as reduce species migrations as a result of human factors.

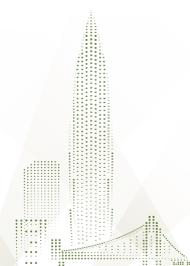
截至二零一八年十二月三十一日止年度，本集團完成礦山復綠面積累計共約1,861,100平方米。

As of the year ended 31 December 2018, the Group had completed ecological restoration of its mines with a cumulative area of approximately 1,861,100 m².



華潤水泥（鶴慶）有限公司礦山復綠後面貌

The appearance of the mines of China Resources Cement (Heqing) Limited after ecological restoration



B. 社會

I. 僱傭及勞工常規

本集團視員工為企業生存和發展最寶貴的資源，為員工提供、創造廣闊的發展平台和施展個人才華的機會。

1. 僱傭

一般資料

為使僱員分類更能反映各僱員的工作職能，自二零一八年度起，本集團將原來安全、環保及研發相關僱員的職能由過去披露為「財務及行政」納入「技術人員」、「品質控制」僱員按職能納入「生產人員」或「技術人員」，以及物流相關僱員由「生產及技術」職能納入「營銷人員」，二零一七年度的數據也按照上述分類變化重新披露。

於二零一八年十二月三十一日，本集團共聘用20,301名全職僱員（於二零一七年十二月三十一日：20,592名），其中159名在香港工作（於二零一七年十二月三十一日：159名），及其餘20,142名在中國內地工作（於二零一七年十二月三十一日：20,433名）。員工主動流失率為6.4%（於二零一七年十二月三十一日：7.8%）。按職能劃分的僱員明細載列如下：

		於二零一八年 十二月三十一日 As at 31/12/2018	於二零一七年 十二月三十一日 As at 31/12/2017
管理層	Management	393	390
財務、行政及其他	Finance, administration and others	2,648	2,672
生產人員	Production staff	11,753	11,996
技術人員	Technical staff	4,618	4,633
營銷人員	Sales and marketing staff	889	901
總計	Total	20,301	20,592

B. SOCIAL

I. EMPLOYMENT AND LABOUR PRACTICES

The Group regards our employees as the most valuable resources for our corporate survival and development. We provide and create a broad career development platform and opportunities for the employees to display their individual talents.

1. EMPLOYMENT

General Information

In order to better reflect the work functions of each staff by classification, since 2018, the Group had re-classified the roles relevant to the functions of safety, environmental protection and R&D from “finance and administration” to “technical staff”. “Quality control” staff had been re-classified as “production staff” or “technical staff”. Logistical staff had been re-classified from “production and technical” function to “sales and marketing”. The restated data for 2017 according to the above new classifications is disclosed below.

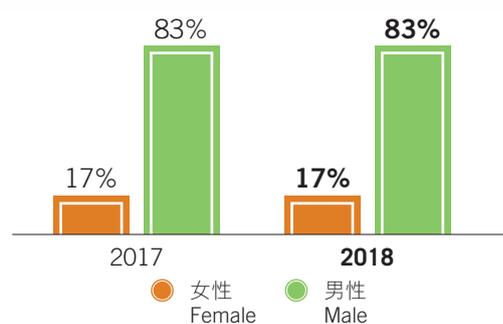
As at 31 December 2018, the Group employed a total of 20,301 full-time employees (20,592 as at 31 December 2017) of whom 159 were based in Hong Kong (159 as at 31 December 2017) and the remaining 20,142 were based in the Chinese Mainland (20,433 as at 31 December 2017). Employee attrition rate was 6.4% (7.8% as at 31 December 2017). A breakdown of our employees by function is set out as follows:

按年齡劃分的僱員明細載列如下：

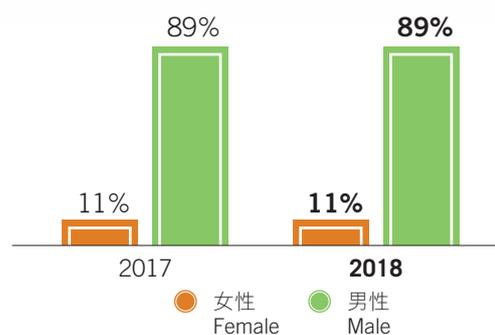
A breakdown of our employees by age is set out as follows:

		於二零一八年 十二月三十一日 As at 31/12/2018	於二零一七年 十二月三十一日 As at 31/12/2017
29歲及以下	29 or below	3,648	4,501
30至39歲	30 to 39	8,635	8,612
40至49歲	40 to 49	6,524	6,294
50歲及以上	50 or above	1,494	1,185
總計	Total	20,301	20,592

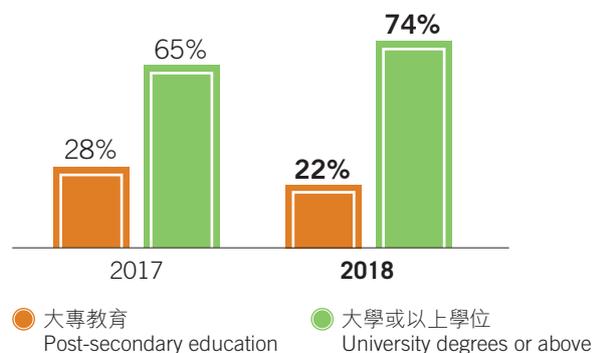
按性別劃分的僱員 Employees by gender



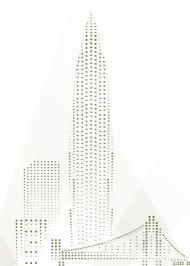
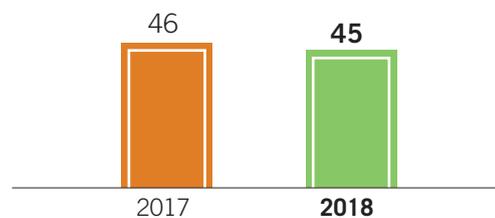
按性別劃分的管理層 Management by gender



按教育程度劃分的管理層 Management by education level



管理層平均年齡 Average age of management



我們主要根據僱員個人表現與經驗，並考慮業內慣常做法給予薪酬待遇，其中包括基本工資、津貼、績效獎金及其他員工福利。

法律和政策

本集團貫徹執行有關薪酬、解僱、招聘、晉升、工作時數、假期、平等機會、多元化、反歧視、其他待遇及福利的法律及規例，其中包括：

- 《中華人民共和國勞動法》
- 《中華人民共和國勞動合同法》
- 《中華人民共和國未成年人保護法》
- 《職工帶薪年休假條例》
- 《女職工勞動保護特別規定》

本集團按照相關法律及法規設有完善的內部人力資源制度和管理體系，保障員工在招聘、薪酬、福利、晉升、休假、離職等各方面的合法權益，反對任何形式的歧視及潛在違規事宜。

We offer our employees remuneration packages mainly on the basis of individual performance and experience and also having regard to common practice in the industry, including basic wages, allowance, performance related bonuses and other staff benefits.

Laws and Policies

The Group strictly complies with the laws and regulations relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare, including but not limited to:

- Labour Law of the People's Republic of China
- Labour Contract Law of the People's Republic of China
- Law of the People's Republic of China on the Protection of Minors
- Regulations on Paid Annual Leave of the Employees
- Special Rules on the Labour Protection of Female Employees

In accordance with the relevant laws and regulations, the Group has formulated well-established internal human resources policies and management systems to protect the legal rights and interests of our employees in every aspect such as recruitment, compensation, welfare, promotion, rest periods and departure. We explicitly prohibit any form of discrimination and potential non-compliance matters.

勞工準則

本集團反對使用童工或強制勞工，依據《中華人民共和國勞動法》及《禁止使用童工規定》，不聘用未滿16歲的未成年人，並嚴格遵守《未成年工特殊保護規定》，對年滿16歲但未滿18歲的未成年員工採取特殊勞動保護措施，以保護其合法權益及健康。員工入職時必須如實申報個人信息，如持假證件、謊報個人信息，一經發現，本集團將按嚴重違反規章制度處理，將其即時解僱。

員工關愛

本集團致力提升員工工作環境和組織氛圍，開展員工生日會、節日慶祝活動、體育活動、攝影比賽和健身活動等有益員工身心健康的集體活動。年內，舉辦集合健身、品牌宣傳、親子活動及才藝展示等為一體的員工健康日活動，寓教於樂、宣揚企業文化，增加員工的歸屬感。

本集團一向重視員工關懷，定期走訪慰問困難員工及家屬，在節日送上問候與祝福，了解他們實際困難與需求，關心及跟進其生活改善的情況，體現公司人文關懷的精神。二零一八年，用於關愛及幫助困難員工的「華潤水泥感恩之心基金」，共籌得本集團及員工的捐款約人民幣2,326,200元，資助困難員工共約人民幣325,800元。此外，本集團將深圳市政府發放的二零一六年度及二零一七年度重點納稅企業管理團隊獎勵金共人民幣4,000,000元捐贈予「感恩之心基金」。

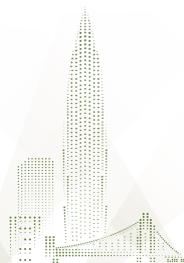
Labour Standards

The Group prohibits employment of child and forced labour. We never employ minors aged below 16 pursuant to the Labour Law of the People's Republic of China and the Provisions on Prohibition of Using Child Labour. In strict compliance with the Provisions for Special Protection of Under-Aged Labour, the Group adopts special labour protective measures to minor workers aged above 16 but below 18 to protect their legal rights, interests and health. Employees must truthfully provide their personal data at commencement of employment. Cases of holding forged identification documents or providing false personal data, once found, will be handled as serious violation of the Group's policies and the relevant employee will be dismissed immediately.

Care for Employees

The Group is dedicated to enhancing the working environment and team ambience for its employees. Various group activities were organized for better physical and mental health of our employees, such as staff birthday parties, festival celebrations, sports activities, photography competitions and fitness activities. During the year, we organized activities for the staff health day which was blended with group fitness, brand promotion, family activities and talent shows in order to enhance our employees' sense of belonging to the Company through learning with entertainment and to promote corporate culture.

The Group has always paid keen attention to caring for employees. To understand their practical difficulties and needs as well as to care for and follow up with the improvement on their living conditions, we regularly visit employees in need and their families with solicitude. Regards and blessings are sent to them during festivals, which reflected our corporate spirit of humanity and care. In 2018, the Group and its employees donated a total amount of approximately RMB2,326,200 to the "China Resources Cement Gratitude Fund", which aims at caring for and helping the employees in need. Employees in need were subsidized with a total amount of approximately RMB325,800. In addition, the cash awards to management teams of key tax-paying enterprises for 2016 and 2017 granted by the Shenzhen Municipal Government to the Group in the total amount of RMB4,000,000 was donated to the "Gratitude Fund".



2. 安全生產及職業健康

本集團嚴格遵守《中華人民共和國安全生產法》，並制定《華潤水泥管理手冊》「EHS管理篇」，嚴格執行、監控及持續完善員工職業健康及安全管理體系、加大相關方安全管理及積極開展監督檢查工作。二零一八年，本集團頒佈執行《華潤水泥EHS事故事件責任追究條例》、《華潤水泥崗位EHS責任制度》及《華潤水泥水泥／混凝土基地安全生產操作規程》等，持續完善EHS責任考核制度，各大區、部門及基地均簽署《EHS責任書》。在清庫管理、混裝炸藥地面站建設和使用推廣、通勤車監控系統及粉塵治理等方面，不斷探索及應用新技術，以提高生產安全性。

二零一八年，本集團對36個水泥基地進行年度安全大檢查；對8個基地礦山開展安全檢查；對13個水泥基地檢維修作業現場和相關方管理進行督查，對17個混凝土站進行檢查幫扶。

本集團致力於安全生產標準化建設，不斷加強基礎管理和創新管理模式，提升總體安全管理水平。截至二零一八年底，本集團有28個水泥基地通過了國家安全生產標準化一級企業現場評審，並在田陽水泥試點開展安全生產標準化一級礦山的創建。本集團現有專職安全管理人員212人，其中註冊安全工程師55人（二零一七年底分別為205人及44人）。

2. PRODUCTION SAFETY AND OCCUPATIONAL HEALTH

The Group is in strict compliance with the Production Safety Law of the People's Republic of China and promulgated the "EHS Management Series" in the "Management Manual" of the Company accordingly for the stringent implementation, monitor and continuous improvement on the occupational health and safety management system, reinforcement of safety management on stakeholders and proactive launch of supervisions and inspections. In 2018, the Group promulgated and implemented the "Regulations on Accountability of EHS Incidents", the "EHS Accountability System of Positions" and the "Operating Procedures for Production Safety of Cement/Concrete Production Plants". The EHS accountability assessment system is also continuously improved as all regional headquarters, departments and production plants had entered into the "EHS Responsibility Pledge". In order to enhance production safety, the Group persistently explores and applies new technologies with respect to management of silo clearing, construction and use and promotion of ground station for prefabricating mixed explosives, commuter vehicle monitor system and dust control.

In 2018, the Group conducted annual large-scale safety inspections on 36 cement production plants. Safety inspections on the mines of 8 production plants were rolled out. On-site supervision on the repairs and maintenance as well as management of counterparties was done at 13 cement production plants. 17 concrete plants were inspected and assisted.

The Group is committed to production safety standardization and raising the overall standards of safety management through continuous improvement on fundamental management and innovative management models. As of the end of 2018, 28 cement production plants of the Group have passed the on-site assessments as the First-Class Enterprise in National Production Safety Standardization. Pilot construction of a First-Class Mine of Production Safety Standardization commenced at the cement production plant in Tianyang. Currently, the Group has 212 specialized safety management personnel, including 55 registered safety engineers (205 and 44 respectively as of the end of 2017).

安全培訓方面，本集團積極落實安全培訓工作，結合線上及線下培訓方式，將安全應急演練視頻置入本集團在線學習平台 i-Learning 中，鼓勵員工自主學習。二零一八年，本集團員工安全培訓累計約 348,800 學時，相關方培訓累計約 62,500 學時。

此外，本集團開展豐富多樣的安全活動，以推動全員參與安全管理，提升企業安全文化，將安全管理理念深入員工、家庭及社會。年內，本集團組織開展 EHS 知識競賽活動，共 323 個隊伍參加；開展應急演練 991 次，共 15,914 人次參加；舉辦安全開放日 85 場次，共 2,685 人次參加。

本集團嚴格遵守《中華人民共和國職業病防治法》，針對性制定了《職業健康管理規定》。目前，OHSAS18000 職業健康安全管理体系覆蓋率 100%，員工健康體檢率 100%。

3. 發展及培訓

本集團深信人才是企業發展的關鍵，重視人才隊伍建設，持續完善人才發展機制。另外，本集團一直重視對員工的培訓，結合業務戰略、崗位要求和個人發展需要，逐步完善各類人才培養體系，結合線上及線下培訓平台，逐步健全課程體系、講師體系、管理體系，為本集團業務發展提供人才保障。二零一八年，華潤水泥學院共開展培訓班 46 個，參訓學員 2,600 人次。年內，為配合新業務發展，本集團共開展 3 期協同處置人才培養項目，開發 13 門装配式建築、智能製造等創新業務人才培養課程。

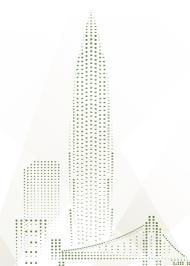
In terms of safety training, the Group actively implemented safety training and combined online and offline training methods. Videos of safety emergency drills were uploaded on i-Learning, the Group's online learning platform, to encourage our staff to self-study. In 2018, the aggregate duration of safety training for the Group's staff amounted to approximately 348,800 hours, whereas that for counterparties amounted to approximately 62,500 hours.

In addition, the Group organized a wide variety of safety activities to promote all-staff participation in safety management, arouse corporate safety culture and implant the concept of safety management in staff, families and society. During the year, the Group organized the EHS Knowledge Competition with a total of 323 teams in participation. 991 emergency drills were conducted with a total of 15,914 participants in attendance. 85 safety open days were held with a total of 2,685 participants in attendance.

The Group is in strict compliance with the Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases and formulated the "Regulations of Occupational Health Management" accordingly. Currently, the coverage rates of OHSAS18000 occupational health safety management system and staff body check are both 100%.

3. DEVELOPMENT AND TRAINING

The Group strongly believes that talent is the key to corporate development, puts strong emphasis on building teams of talents and continuously improves the mechanism for talent development. The Group also attaches great importance to staff training. Integrating the needs for business strategies, job requirements and personal development, the Group has gradually improved various talent development systems, combined online and offline training platforms, and steadily perfected the curriculum system, lecturer system and management system to provide a secure supply of talents for the Group's business development. In 2018, China Resources Cement College organized a total of 46 training courses with 2,600 participants. During the year, in order to complement our new business development, the Group launched three phases of co-processing talent development projects and developed 13 talent development courses for innovative new businesses such as prefabricated construction and intelligent manufacturing.



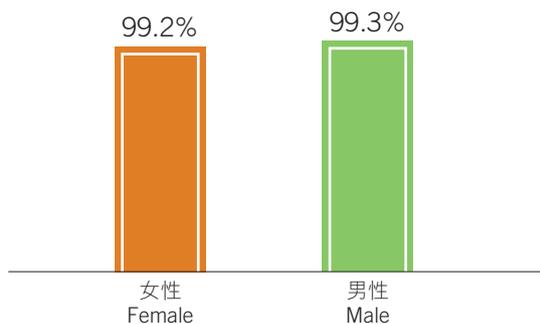
同時，本集團持續優化在線學習平台，實現手機、電腦及平板電腦三端功能及內容源的統一，充分利用互聯網+平台構建起有效的自主學習機制。二零一八年，在線培訓時間約69,600小時，在線培訓員工約20,200人次。

At the same time, the Group continuously optimizes its online learning platform to achieve the unification of functions and contents across the three terminals of mobile phones, computers and tablets. We fully utilize the Internet Plus platform to build an effective mechanism for self-learning. In 2018, approximately 20,200 participants attended online training for a total duration of approximately 69,600 hours.

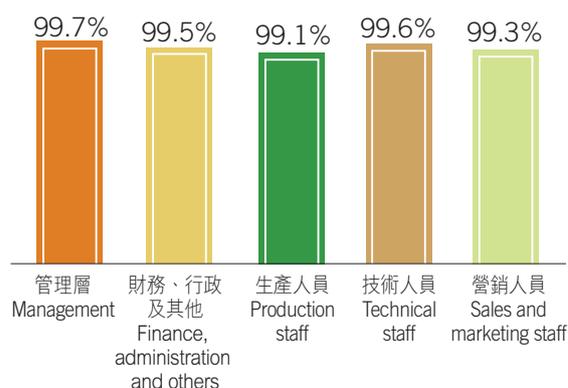
根據本集團內部人力資源系統統計，截至二零一八年十二月三十一日止年度，總體受訓人員百分比為99.3%，按性別及職能劃分的受訓百分比明細載列如下：

According to the statistics of the Group's internal human resources system, 99.3% of our employees were trained for the year ended 31 December 2018. Percentage breakdown of employees trained by gender and function are set out as follows:

二零一八年按性別劃分的受訓百分比
Percentage of employees trained by gender in 2018



二零一八年按職能劃分的受訓百分比
Percentage of employees trained by function in 2018



II · 營運慣例

1. 供應鏈管理

本集團持續完善供應商管理措施，不斷優化自主開發的供應商關係管理系統，從供應商准入、合作、評價、績效反饋等方面對8,007名供應商（二零一七年：6,631名）進行管理與輔導，共同建立透明的、可追溯的、穩定長期和可持續發展的供應鏈。根據公司戰略、採購物資特點等制定供應商開發與選擇標準，多渠道引進優秀供應商，優秀供應商在符合目標成本的前提下優先採購；對待整改供應商及時回饋待整改問題，給予相應協助，限期核查整改結果；將不合格供應商調離合格供應商庫。

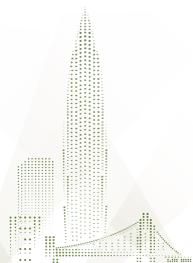
本集團對供應商或合作夥伴提出的責任要求包括遵守法規、保護環境、誠信經營和質量保證等，採購合同均增加附則《供應商誠信條款》，要求所有供應商簽署並遵守相關規定。此外，本集團高度重視供應商安全環保管理，將相關要求納入供應商資格審核及合作過程監管中，所有合作方均須簽署《安全環保協議》；同時，本集團將「陽光採購」作為採購踐行的首要原則，所有採購人員及供應商均須簽署《陽光宣言》及執行《華潤水泥採購人員與供應商接觸的注意事項》，且每年參加至少兩次的廉政教育培訓並簽署《廉潔從業準則》，打造公開、公平、公正和誠信陽光的交易平台。

II · OPERATING PRACTICES

1. SUPPLY CHAIN MANAGEMENT

The Group persistently improves its supplier management measures and continuously optimizes its self-developed supplier relationship management system, in order to manage and provide guidance to 8,007 suppliers (6,631 in 2017) regarding their admission, cooperation, evaluation and performance feedback for the joint establishment of a transparent, traceable, stable, long-term and sustainable supply chain. Corporate strategies and characteristics of procurement materials are taken into account when we set the criteria for development and selection of suppliers. Outstanding suppliers are introduced through multiple channels. We would procure from the outstanding suppliers on a priority basis provided that their prices are consistent with our target costs. Suppliers which require rectifications would be provided with our timely feedback on their weaknesses, offered relevant assistance and examined on their rectification results upon the deadline. The substandard suppliers would be removed from our eligible supplier database.

The Group requires our suppliers or business partners to fulfil certain responsibilities, including compliance with laws and regulations, environmental protection, integrity operations and quality assurance. "Integrity Terms of Suppliers" are incorporated in all our procurement contracts, which all suppliers are required to enter into and comply with. In addition, the Group pays keen attention to management of suppliers on safety and environmental protection by incorporating relevant requirements into our review on suppliers' qualification and supervision during the cooperation process. All business partners are required to sign the "Safety and Environmental Protection Agreement". At the same time, "Sunshine Procurement" has been regarded as the Group's primary principle of procurement practice. All procurement staff and suppliers are required to sign the "Sunshine Declaration" and implement "Things to Note when Procurement Staff are in Contact with Suppliers", attend educational training on integrity at least twice a year and sign the "Integrity Practice Guideline" for creating an open, fair and just trading platform of good faith.



在合作期間，採購人員在各採購環節進行實時管理，持續追蹤供應商的公司動態、經營情況，以確保雙方履行自身責任。若發現不誠信行為等情形將永不合作，並將列入本集團的供應商黑名單庫，同時防止其重新註冊新公司繼續合作。

During the cooperation, our procurement staff carries out real-time management on every procurement step by continuous monitor of the latest corporate development and operations of the suppliers to ensure both parties' fulfillment of their own obligations. The Group will never work with suppliers with any dishonest behaviors, will add them to our blacklisted supplier database and prevent any further cooperation with them through their re-registration of new companies.

2. 產品責任

本集團以客戶至上為原則，秉承誠實守信的核心價值觀，嚴守商業道德，竭誠為客戶提供優質服務。通過加強客戶溝通，悉心維護客戶和消費者權益，滿足並超越客戶期望，提升客戶滿意度。

2. PRODUCT RESPONSIBILITY

We wholeheartedly provide quality service to our customers on the customer-oriented principle, whilst upholding the core values of honesty and trustworthiness and strictly abiding by business ethics. By improving communications with customers and taking the utmost care of the rights and interests of our customers and consumers, we have met or even exceeded our customers' expectations for enhancing our customer satisfaction.

《華潤水泥管理手冊》「質量管理篇」對生產流程各細節管理均有清晰及嚴格要求，包括原料管理、煤炭管理、生料、熟料管理等質量標準，確保管理到位，每步驟達至合格要求，二零一八年相繼發佈《華潤水泥助磨劑管理辦法(2017版)》、《華潤水泥煤炭採樣製樣管理標準》，規範進廠原燃材料的驗收和使用，通過穩定進廠原材料質量，進一步穩定產品質量。化驗室設備、維修保養、檢定要求、操作指引、環境配置、檔案紀錄亦一概標準化列入管理手冊，為產品質量鑒定賦於保證，助力產品質量達到標準。質量檢定過程如下：

Pursuant to the “Quality Management Series” in the “Management Manual” of the Company, there are clear and stringent requirements on managing every detail of production process, including for the management quality standards of materials, coal, raw materials and clinker to ensure appropriate management and compliance with the quality requirements in each step. The “Management Measures for Grinding Agents (2017 version)” and the “Management Standards of Coal Sampling and Preparation” of the Company were issued successively in 2018, standardizing the acceptance inspection and use of incoming raw fuel materials through stabilization of quality of incoming raw materials for further stabilization of product quality. Laboratory equipment, repairs and maintenance, inspection requirements, operating guidance, environmental configuration and filing records are all standardized and covered in the management manuals, which offer guarantee on the product quality assurance and ensure up-to-standard product quality. The process of quality check is as follows:

質量計劃

- 根據市場需求生產水泥產品，合理安排混合材資源。
- 每批進廠原材料檢測。
- 對生產基地原材料資源質量情況進行普查，建立完善的資源檔案。

質量控制

- 質管部24小時對熟料、水泥的生產過程進行監督檢測。
- 生產過程層層把關，實行質量考核。

質量保證

- 與國家水泥質量監督檢驗中心合作，對比驗證。
- 每年組織兩次從原料到產品全覆蓋的質量專項抽查，重點排查和治理氯離子、六價鉻、放射性等毒害物質。

質量改進

- 市場調研，為生產提供前端服務。
- 根據客戶使用反饋，不斷改善產品。
- 技術研發中心開展創新研究。

截至二零一六年、二零一七年及二零一八年十二月三十一日止年度，本集團並無已售或已運送產品因安全與健康理由而須回收。

Quality Planning

- To produce cement products according to market demand, and reasonably arrange resources of mineral admixture.
- To test each batch of incoming raw materials.
- To carry out general surveys on the quality of raw material resources at the production plants, and build a comprehensive record of resources.

Quality Control

- To supervise and test the production process of clinker and cement on a 24-hour basis by quality management department.
- To monitor each step throughout the production process, and implement quality assessments.

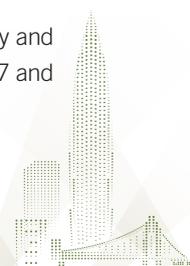
Quality Assurance

- To conduct comparative tests in cooperation with the National Quality Supervision and Testing Center for Cement.
- To conduct special sample checks on quality with full coverage from raw materials to products twice every year, and focus on investigation, control and management of toxic substances including chloride ions, hexavalent chromium and radioactive substances.

Quality Improvement

- To conduct market research for providing front-end services for production.
- To continuously improve the products based on customers' feedback after use.
- To roll out innovative research at the Technology Research and Development Centre.

No products sold or shipped were subject to recalls for safety and health reasons for the years ended 31 December 2016, 2017 and 2018.



此外，本集團設有質量事故管理標準，對事故作出判定，提供不合格產品處理方案、賠償標準、召回機制及處理流程等。當發現並經確認不合格產品出廠或產品在使用過程中出現嚴重質量問題，須立即通知相關客戶停用或隔離該批次產品，組織對該批次未使用產品進行召回，同時對客戶損失進行確認和賠償；並組織對質量事故進行調查分析，制定整改措施及責任認定，並對整改效果進行確認。

本集團依托完整有效的質量管制體系對產品質量進行管理和評價，將生產過程及產品的關鍵質量指標納入大區、基地業績考核範疇，以績效管理不斷推動各單位的質量建設，為消費者提供優質產品。本集團還通過開展多項精益改善專案，持續提升質量、工藝等方面的管理水平。

二零一八年，本集團持續推進客戶服務前置化理念及一系列解決方案，致力提供更多「事前、事中」支援服務，在產品性能指標波動超出約定範圍時及時反饋至銷售人員及客戶，並重點規範民用混凝土攪拌及施工，同時，各水泥生產基地客服人員定期走訪客戶，廣泛收集客戶意見和建議，推動生產、銷售及服務工作改善，提高客戶滿意度。

二零一八年，本集團收到客戶投訴後均在24小時內響應，並由大區客服、水泥生產基地質管部等專人負責處理，投訴處理率達100%。

Besides, the Group had set up standards for managing quality incidents which identify and diagnose the incidents, provide solutions to handle substandard products and offer compensation standards, recall mechanism and process flow. Once discovered and confirmed that substandard products have left our factories or there are serious quality issues in the process of using the products, we would immediately inform the relevant customers to stop using or isolate that batch of products, organize recall on that batch of products if unused, confirm and compensate damages to customers. We will also conduct investigation and analysis on the quality incidents, formulate rectification measures and account for responsibilities, and verify the rectification results.

The Group relies on a comprehensive and effective quality management system to manage and evaluate the quality of our products. Key quality indicators of production process and products had been incorporated into the scope of performance appraisal of the operating regions and production plants as a continuous drive for better quality of all departments through performance management, so as to provide consumers with products of excellent quality. The Group also continuously enhances its management standards in terms of quality and workmanship technology through the implementation of various lean improvement projects.

In 2018, the Group persistently advocated the philosophy of anticipative customer service and a series of solutions dedicated to offering more “advanced and concurrent” support service, thereby giving timely feedback to salespersons and customers when product performance indicators fluctuated beyond the agreed range. We also focus on standardizing domestic concrete mix and use at construction. Meanwhile, customer service officers of each cement production plant regularly visit customers and widely collect comments and suggestions from customers to stimulate improvement on production, sales and service for better customer satisfaction.

In 2018, the Group designated staff from customer service department at our operating regions and quality management department of our cement production plants to handle our customers' complaints within 24 hours, and achieved a handling rate of 100%.

本集團每月收集和匯總客戶走訪、客戶投訴處理及樣品抽樣等資訊，對客戶投訴進行分類，重點跟蹤產品指標波動、包裝袋質量問題、客戶對產品生產與發運的訴求與建議，並根據反饋意見改進產品質量。自二零一八年中起針對影響較大的質量、包裝及發運等問題，制定整改計劃，持續跟進整改進度。

二零一八年內，本集團針對廣東、廣西袋裝民用客戶群製作了多個「規範使用水泥」視頻，引導民用客戶正確施工、自拌混凝土配製、澆築、抹面及養護。視頻於各大區關鍵使用者交流會播放，並安排在本集團運營區域的水泥門店張貼視頻二維碼，引導用戶掃碼觀看，加強其對使用水泥產品的知識。

本集團高度重視知識產權保護，積極開展知識產權保護工作，執行《華潤水泥專利管理辦法》及《華潤水泥控股有限公司品牌建設操作指引》，持續依法推進商標註冊、確權與著作權登記，大力打假維權。

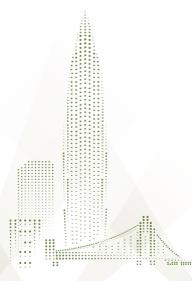
本集團將客戶信息納入公司核心商業秘密範圍，並依據《華潤水泥控股有限公司保密工作管理規定》及《華潤水泥控股有限公司商業秘密管理辦法》等相關管理要求對客戶信息進行嚴密保護及獨立建檔，由專人負責信息的收集、歸檔、更新，並設定相應的信息查詢權限管理。同時，信息系統中客戶交易數據的查詢與導出均有嚴密的系統權限分配管理，確保客戶信息安全。

The Group collects and compiles information from customer visits, customers' complaint handling and product sampling on a monthly basis. Customer complaints are categorized and we closely follow up on the fluctuations of product indicators, quality issues of packaging bags, as well as customers' demands and suggestions on production and delivery of products. We also improve product quality based on the feedback suggestions. Since mid-2018, we had formulated rectification plans to address significant issues of quality, packaging and delivery and we would continuously follow up on the progress of rectification.

During 2018, the Group produced various videos of "standard use of cement" for retail clientele of bag cement in Guangdong and Guangxi, leading domestic customers with correct instructions of use during construction, preparation of self-mix concrete, pouring, plastering and conservation. The videos were broadcast at exchange meetings for key users in each region. QR codes of the videos have been posted on the cement stores at our operating regions. Users are encouraged to watch the videos by scanning the QR codes for enhancing their knowledge on the use of cement products.

The Group pays keen attention to the protection of intellectual property rights by proactively initiating protection on intellectual property. The "Methods of Managing Patents" and "Brand Building Operating Guidelines" of the Company are implemented for the continuous promotion of trade mark registration, right confirmation and copyright registration in accordance with law and for the vigorous defense of our rights and crackdown on counterfeit goods.

The Group treats customer data as core trade secrets. Customer data is under strict protection pursuant to the relevant management requirements including "Regulations on Managing Confidentiality Work of China Resources Cement Holdings Limited" and "Management Measures on Trade Secrets of China Resources Cement Holdings Limited". Independent files are created for all customer data with designated staff in charge of data collection, filing and update. We also set up management of access rights to make enquiry on the relevant data. Meanwhile, in order to ensure security of customer data, we strictly manage the grant of access rights to our systems to make inquiries and export information of our customers' transactions in our information systems.



3. 反貪污

根據《中華人民共和國刑法》、本集團的員工管理辦法及規章制度，任何人不得利用職權索賄、受賄，以不正當手段謀取私利，不得進行勒索、欺詐及洗黑錢活動。一經發現，將其除名永不錄用，案情重大者，將送公安局或司法機關處理。

本集團一貫重視並持續強化員工誠信建設和廉潔教育工作。二零一八年，共有352名高中級管理人員遞交述廉報告；集體廉政談話共有357名高中級管理人員參與；410名高中級管理人員簽署《廉潔自律承諾書》；廣泛開展「廉潔教育送上門」和警示教育活動，受眾共計7,097人次。

本集團致力於維護良好的企業管治，強調問責精神及高度透明度，制定了《舉報政策》並通過本公司網站對外發佈，鼓勵員工及與本集團有往來者（如客戶、承辦商、供應商、債權人、債務人等）對本集團內的不當行為作出舉報。同時，持續暢通來電、來訪、網路等舉報渠道，對違紀違規問題嚴肅查處。

截至二零一六年、二零一七年及二零一八年十二月三十一日止年度，本集團或其僱員並無涉及任何貪污訴訟案件。

3. ANTI-CORRUPTION

According to the Criminal Law of the People's Republic of China, the Group's staff management measures and policies, no person is allowed to take advantage of his position to demand and receive bribery or obtain benefits by improper means. It is also not allowed to blackmail, conduct fraud or money laundering. Once identified, the staff will be dismissed and blacklisted. Significant cases will be reported to the police or judicial authority.

The Group always places strong emphasis on and continuously strengthens the work for integrity cultivation and probity education. In 2018, a total of 352 senior and middle-level management staff submitted their integrity reports; a total of 357 senior and middle-level management staff participated in the group discussions on integrity; 410 senior and middle-level management staff signed the "Commitment Letter on Integrity and Self-Discipline"; and a total of 7,097 participants were benefited from the "integrity education delivered to door" and the alert education activities.

The Group is committed to maintaining good corporate governance with an emphasis on the spirit of accountability and a high level of transparency. We formulated the "Whistle-Blowing Policy", which has been published on the Company's website to encourage our employees and parties who deal with us (for example, customers, contractors, suppliers, creditors and debtors) to report any misconducts within the Group. At the same time, we maintain smooth whistle-blowing channels including telephone, visits and the internet. All investigations on non-compliance issues are handled seriously.

None of the Group or its employees were involved in any corruption litigation cases for the years ended 31 December 2016, 2017 and 2018.

III · 社區投資

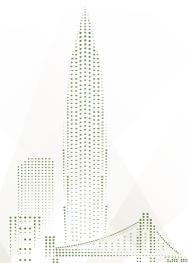
本集團積極參與社區公益服務工作，通過捐贈水泥產品，幫助周邊村鎮修橋築路，完善當地基礎設施，並為貧困地區、困難戶捐贈現金或實物解決其實際困難。本集團定期組織各大區及生產基地慰問走訪周邊村鎮的敬老院、孤寡老人及有困難群眾，並非常關注貧困山區兒童的教育工作，通過捐贈衣物、文具、書本、助學金及安排助學活動，協助創造良好學習環境及氛圍，營造健康、穩定、和諧的社區環境，以實際行動回報社會。對外捐贈數據詳載於董事局報告內慈善捐助一節。

III · COMMUNITY INVESTMENT

The Group proactively participates in community service work. Through donations of cement products, we help surrounding towns and villages in the construction of roads, repairs of bridges and improvement on local infrastructure. We also make donations in cash or in kind to underprivileged regions and families in need to solve their practical difficulties. The Group regularly organizes for each regional headquarters and production plants to visit and express solicitude to elderly care institutions, the elderly without family and the general public in need in the neighbouring villages. We are very concerned about education for children in the underprivileged mountainous regions and help to create a better learning environment and ambience through donations of clothes, stationery, books, study grants and arranging subsidized schooling, thereby creating a healthy, stable and harmonious community environment and making contribution to the society with practical actions. Data of external donations is set out in the charitable donations section of the Report of the Directors.



華潤水泥(平南)有限公司關愛「蒲公英」志願者協會捐助貧困兒童儀式
Ceremony for donation support to underprivileged children hosted by caring "Dandelion" volunteer association of China Resources Cement (Pingnan) Limited



附錄一：專有名詞釋義索引

專有名詞	釋義
溫室氣體	包括二氧化碳、甲烷、氧化亞氮、氫氟碳化合物、全氟化碳及六氟化硫等氣體。
純低溫餘熱發電	直接利用冷卻機密尾排放的中低溫廢氣進行餘熱回收發電，無需消耗燃料，發電的過程不產生任何污染。
脫硝系統	防止水泥窯內煤燃燒後產生過多的氮氧化物污染環境，減少氮氧化物的產生和去除煙氣中氮氧化物的系統。
袋式除塵器	以袋式纖維濾料過濾、重力沉降為主要原理，適用於捕集細小、乾燥、非纖維性粉塵的乾式濾塵裝置。
水泥窯協同處置	利用水泥窯高溫、鹼性、大容量特點，將滿足或經過預處理後滿足入窯要求的固體廢物投入水泥窯焚燒，在進行水泥熟料生產的同時實現對固體廢物的無害化、資源化、減量化處置過程。
氮氧化物	氮氧化物是一種氣態大氣污染物，大部份來自化石燃料的燃燒過程，是形成酸雨、霧霾天氣的重要因素，對人體呼吸道有傷害作用。主要種類是一氧化氮和二氧化氮。

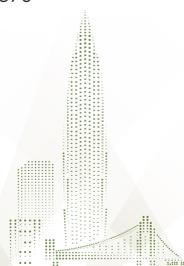
APPENDIX 1: GLOSSARY

Terms	Definitions
Greenhouse Gas(es)	Include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.
Pure low-temperature residual heat power generation	Power generation using the residual heat of medium-and-low temperature waste gas discharged from the emission ends of the kilns of the cooling machine, with no fuel consumed or pollutants produced.
Denitration system	System which prevents excessive emission of Nitrogen Oxides from the combustion process within the cement kilns for the purpose of environmental protection by reducing the amount of Nitrogen Oxides generated and eliminating Nitrogen Oxides in the flue gas.
Bag filter	Dry-type dust filter devise for collecting fine, dry, non-fiber dust through the application of the main principles of bag-type fiber filter and gravitational settling.
Co-processing by use of cement kilns	Processing of solid wastes which meet the requirements for entering kilns, whether with or without pre-treatment, in a “hazard-free, recyclable and mass-reducing” manner by inputting the solid wastes into cement kilns for combustion, taking advantage of the features of cement kilns including high temperature, alkalinity and large capacity during production of cement and clinker.
Nitrogen Oxides	A type of air pollutant, a majority of which comes from the combustion process of fossil fuel. It is a key factor of formation of acid rain and smoggy weather, and is harmful to human respiratory system. It is mainly comprised of nitric oxide and nitrogen dioxide.

附錄二：關鍵績效指標

APPENDIX 2: KEY PERFORMANCE INDICATORS (“KPI”)

		二零一八年 2018	二零一七年 2017	二零一六年 2016
氮氧化物排放量(噸)(註1)	Emission of Nitrogen Oxides (tons) (note 1)	39,822	41,513	43,164
二氧化硫排放量(噸)(註1)	Emission of sulphur dioxide (tons) (note 1)	2,352	2,726	3,984
顆粒物排放量(噸)(註1)	Emission of particulate matters (tons) (note 1)	2,361	2,472	2,812
氮氧化物排放密度 (公斤/噸熟料產量)(註1)	Emission intensity of Nitrogen Oxides (kg per ton of clinker produced) (note 1)	0.5715	0.6230	0.6155
二氧化硫排放密度 (公斤/噸熟料產量)(註1)	Emission intensity of sulphur dioxide (kg per ton of clinker produced) (note 1)	0.0338	0.0409	0.0568
顆粒物排放密度 (公斤/噸熟料產量)(註1)	Emission intensity of particulate matters (kg per ton of clinker produced) (note 1)	0.0339	0.0371	0.0401
溫室氣體排放量 (千噸二氧化碳當量)(註1)	Emission of Greenhouse Gases (‘000 tons of carbon dioxide equivalent) (note 1)	59,710	57,130	56,980
溫室氣體排放密度 (噸二氧化碳當量/ 噸熟料產量)(註1)	Emission intensity of Greenhouse Gases (tons of carbon dioxide equivalent per ton of clinker produced) (note 1)	0.8569	0.8574	0.8615
耗電量(百萬千瓦時)(註2)	Electricity consumption (million kwh) (note 2)	6,500	6,220	6,684
噸水泥電耗(千瓦時)	Electricity consumption per ton of cement (kwh)	73.0	73.1	73.9
耗煤量(千噸)	Coal consumption (‘000 tons)	10,254	9,834	9,677
噸熟料單位煤耗(公斤)	Unit coal consumption per ton of clinker (kg)	147.2	147.3	146.2
噸熟料標準煤耗(公斤)	Standard coal consumption per ton of clinker (kg)	106.5	106.9	107.6
綜合能源消費量(千噸標準煤)	Consolidated energy consumption (‘000 tons of standard coal)	8,035	7,732	7,958
萬元產值可比價綜合能耗 (噸標準煤/萬元人民幣)	Consolidated energy consumption per RMB10,000 output (ton standard coal per RMB10,000)	2.73	3.03	3.24
萬元增加值可比價綜合能耗 (噸標準煤/萬元人民幣)	Consolidated energy consumption per RMB10,000 value addition (ton standard coal per RMB10,000)	6.14	8.61	10.68
包裝材料消耗量(噸)(註3)	Consumption of packaging materials (tons) (note 3)	70,330	74,533	85,051
包裝材料消耗密度 (公斤/噸袋裝水泥產量) (註3)	Consumption intensity of packaging materials (kg per ton of cement packed in bag) (note 3)	2.19	2.18	2.13
工業廢渣綜合利用量 (千噸)(註4)	Industrial waste utilized (‘000 tons) (note 4)	21,840	21,470	18,670



		二零一八年 2018	二零一七年 2017	二零一六年 2016
城鄉生活垃圾協同處置量 (噸)	Municipal solid waste co-processed (tons)	166,000	82,400	93,300
市政污泥協同處置量 (噸) (註5)	Urban sludge co-processed (tons) (note 5)	49,300	49,700	29,500
工業危險廢物協同處置量 (噸) (註6)	Hazardous industrial waste co-processed (tons) (note 6)	8,700	6,700	–
供應商總數 (個)	Total number of suppliers	8,007	6,631	5,019
員工工傷事故發生數 (人)	Number of staff injured at work	9	10	10
一般及以上事故發生數 (宗)	Number of incidents of general or above level	3	1	1
事故死亡數 (人)	Fatalities	1	1	1
事故員工千人死亡率 (‰)	Fatality rate (‰)	0.049	0.047	0.044
安全培訓人次	Number of participants in safety training	218,716	182,207	199,785
安全培訓覆蓋率 (%)	Safety training coverage rate (%)	100	100	100
安全應急演練次數	Number of safety emergency drills	991	625	474
專職安全管理人員數量 (人)	Number of specialized safety management personnel	212	205	233
安全管理人員持證人數 (人)	Number of licensed safety management personnel	1,064	1,068	863
安全生產投入 (百萬元人民幣)	Investment in production safety (RMB million)	146	130	104
節能減排技術改造投入 (百萬元人民幣)	Investment in technological upgrade for energy saving and emission reduction (RMB million)	94	432	223
環保總投入 (百萬元人民幣)	Total investment in environmental protection (RMB million)	393	675	401

註:

1. 統計範圍為本集團的水泥生產基地的主要排放口。
2. 統計範圍為本集團用於生產的外購電力。
3. 包裝材料指用於袋裝水泥的包裝。二零一八年統計範圍從二零一七年的包裝材料採購量改為消耗量。
4. 工業廢渣統計範圍包括煤矸石、廢石、脫硫石膏、粉煤灰、高爐礦渣等。
5. 折算為80%含水率濕污泥。
6. 二零一六年無工業危險廢物協同處置項目。

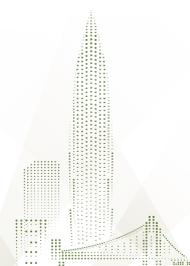
notes:

1. Scope of statistics includes the major discharge outlets of the Group's cement production plants.
2. Scope of statistics includes the power purchased externally for production.
3. Packaging materials refer to the packaging for cement sold in bags. In 2018, the scope of report was adjusted from procurement quantity to consumption of packaging materials.
4. Scope of statistics of industrial waste includes coal gangue, stone residue, de-sulphur gypsum, fly ash and blast furnace slag.
5. 80% moisture content for wet sludge.
6. No hazardous industrial waste co-processing project in 2016.

附錄三：環境、社會及管治指標
索引

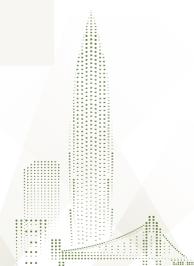
APPENDIX 3: REFERENCE TABLE OF
ENVIRONMENTAL, SOCIAL AND GOVERNANCE
INDICATORS

層面 Aspect	內容 Details	章節 Chapter	頁碼 Page
A 環境 A Environmental			
A1. 排放物 A1. Emissions	<p>一般披露 General Disclosure</p> <p>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：</p> <p>(a) 政策；及</p> <p>(b) 遵守對發行人有重大影響的相關法律及規例的資料。</p> <p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.</p>	A1	50-53
	<p>關鍵績效指標A1.1 KPI A1.1</p> <p>排放物種類及相關排放數據。 The types of emissions and respective emissions data.</p>	附錄二 Appendix 2	75
	<p>關鍵績效指標A1.2 KPI A1.2</p> <p>溫室氣體總排放量及密度。 Greenhouse gas emissions in total and intensity.</p>	附錄二 Appendix 2	75
	<p>關鍵績效指標A1.3 KPI A1.3</p> <p>所產生有害廢棄物總量及密度。 Total hazardous waste produced and intensity.</p>	A1	53
	<p>關鍵績效指標A1.4 KPI A1.4</p> <p>所產生無害廢棄物總量及密度。 Total non-hazardous waste produced and intensity.</p>	A1	53
	<p>關鍵績效指標A1.5 KPI A1.5</p> <p>描述減低排放量的措施及所得成果。 Description of measures to mitigate emissions and results achieved.</p>	A1	51-53
	<p>關鍵績效指標A1.6 KPI A1.6</p> <p>描述處理有害及無害廢棄物的方法、減低產生量的措施及所得成果。 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.</p>	A1	53



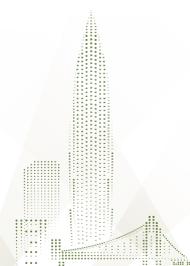
層面 Aspect	內容 Details	章節 Chapter	頁碼 Page
A 環境 A Environmental			
A2. 資源使用 A2. Use of Resources	一般披露 General Disclosure 有效使用資源 (包括能源、水及其他原材料) 的政策。 Policies on the efficient use of resources, including energy, water and other raw materials.	A2	54
關鍵績效指標A2.1 KPI A2.1	按類型劃分的直接及/或間接能源總耗量及密度。 Direct and/or indirect energy consumption by type in total and intensity.	附錄二 Appendix 2	75
關鍵績效指標A2.2 KPI A2.2	總耗水量及密度。 Water consumption in total and intensity.	A2	54
關鍵績效指標A2.3 KPI A2.3	描述能源使用效益計劃及所得成果。 Description of energy use efficiency initiatives and results achieved.	A2	54
關鍵績效指標A2.4 KPI A2.4	描述求取適用水源上可有任何問題, 以及提升用水效益計劃及所得成果。 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	A2	54
關鍵績效指標A2.5 KPI A2.5	製成品所用包裝材料的總量及每生產單位佔量。 Total packaging material used for finished products and with reference to per unit produced.	附錄二 Appendix 2	75
A3. 環境及天然資源 A3. The Environment and Natural Resources	一般披露 General Disclosure 減低發行人對環境及天然資源造成重大影響的政策。 Policies on minimising the issuer's significant impact on the environment and natural resources.	A3	55-59
關鍵績效指標A3.1 KPI A3.1	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。 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	A3	55-59

層面 Aspect	內容 Details	章節 Chapter	頁碼 Page
B 社會 B Social			
<i>I. 僱傭及勞工常規</i> <i>I. Employment and Labour Practices</i>			
B1. 僱傭 B1. Employment	<p>一般披露 General Disclosure</p> <p>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：</p> <p>(a) 政策；及</p> <p>(b) 遵守對發行人有重大影響的相關法律及規例的資料。</p> <p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.</p>	B(I)1	60-63
	<p>關鍵績效指標B1.1 按性別、僱傭類型、年齡組別及地區劃分的僱員總數。</p> <p>KPI B1.1 Total workforce by gender, employment type, age group and geographical region.</p>	B(I)1	60-61
	<p>關鍵績效指標B1.2 按性別、年齡組別及地區劃分的僱員流失比率。</p> <p>KPI B1.2 Employee turnover rate by gender, age group and geographical region.</p>	—	—
B2. 健康及安全 B2. Health and Safety	<p>一般披露 General Disclosure</p> <p>有關提供安全工作環境及保障僱員避免職業性危害的：</p> <p>(a) 政策；及</p> <p>(b) 遵守對發行人有重大影響的相關法律及規例的資料。</p> <p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to providing a safe working environment and protecting employees from occupational hazards.</p>	B(I)2	64-65
	<p>關鍵績效指標B2.1 因工作關係而死亡的人數及比率。</p> <p>KPI B2.1 Number of work-related fatalities and rate.</p>	附錄二 Appendix 2	76
	<p>關鍵績效指標B2.2 因工傷損失工作日數。</p> <p>KPI B2.2 Lost days due to work injury.</p>	—	—
	<p>關鍵績效指標B2.3 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。</p> <p>KPI B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.</p>	B(I)2	64-65



層面 Aspect	內容 Details	章節 Chapter	頁碼 Page
B 社會 B Social			
<i>I. 僱傭及勞工常規</i> <i>I. Employment and Labour Practices</i>			
B3. 發展及培訓 B3. Development and Training	一般披露 General Disclosure 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。 Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	B(I)3	65-66
	關鍵績效指標B3.1 KPI B3.1	按性別及僱員類別劃分的受訓僱員百分比。 The percentage of employees trained by gender and employee category.	B(I)3 66
	關鍵績效指標B3.2 KPI B3.2	按性別及僱員類別劃分，每名僱員完成受訓的平均時數。 The average training hours completed per employee by gender and employee category.	— —
B4. 勞工準則 B4. Labour Standards	一般披露 General Disclosure 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。 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.	B(I)1	63
	關鍵績效指標B4.1 KPI B4.1	描述檢討招聘慣例的措施以避免童工及強制勞工。 Description of measures to review employment practices to avoid child and forced labour.	B(I)1 63
	關鍵績效指標B4.2 KPI B4.2	描述在發現違規情況時消除有關情況所採取的步驟。 Description of steps taken to eliminate such practices when discovered.	B(I)1 63

層面 Aspect	內容 Details	章節 Chapter	頁碼 Page
B 社會 B Social			
<i>II. 營運慣例</i> <i>II. Operating Practices</i>			
B5. 供應鏈管理 B5. Supply Chain Management	一般披露 General Disclosure 管理供應鏈的環境及社會風險政策。 Policies on managing environmental and social risks of the supply chain.	B(II)1	67-68
	關鍵績效指標B5.1 KPI B5.1 按地區劃分的供應商數目。 Number of suppliers by geographical region.	—	—
	關鍵績效指標B5.2 KPI B5.2 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，以及有關慣例的執行及監察方法。 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	B(II)1	67-68
B6. 產品責任 B6. Product Responsibility	一般披露 General Disclosure 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。 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.	B(II)2	68-71
	關鍵績效指標B6.1 KPI B6.1 已售或已運送產品總數中因安全與健康理由而須回收的百分比。 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	B(II)2	69
	關鍵績效指標B6.2 KPI B6.2 接獲關於產品及服務的投訴數目以及應對方法。 Number of products and service related complaints received and how they are dealt with.	B(II)2	70-71
	關鍵績效指標B6.3 KPI B6.3 描述與維護及保障知識產權有關的慣例。 Description of practices relating to observing and protecting intellectual property rights.	B(II)2	71
	關鍵績效指標B6.4 KPI B6.4 描述質量檢定過程及產品回收程序。 Description of quality assurance process and recall procedures.	B(II)2	69-70
	關鍵績效指標B6.5 KPI B6.5 描述消費者數據保障及私隱政策，以及相關執行及監察方法。 Description of consumer data protection and privacy policies, how they are implemented and monitored.	B(II)2	71



層面 Aspect	內容 Details	章節 Chapter	頁碼 Page
B 社會 B Social			
<i>II · 營運慣例</i> <i>II. Operating Practices</i>			
B7. 反貪污 B7. Anti-corruption	<p>一般披露 General Disclosure</p> <p>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。 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.</p>	B(II)3	72
	<p>關鍵績效指標B7.1 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。 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.</p>	B(II)3	72
	<p>關鍵績效指標B7.2 描述防範措施及舉報程序，以及相關執行及監察方法。 KPI B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.</p>	B(II)3	72
<i>III · 社區投資</i> <i>III. Community</i>			
B8. 社區投資 B8. Community Investment	<p>一般披露 General Disclosure</p> <p>有關以社區參與來了解營運所在社區需要和確保其業務活動會考慮社區利益的政策。 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.</p>	B(III)	73
	<p>關鍵績效指標B8.1 專注貢獻範疇。 KPI B8.1 Focus areas of contribution.</p>	B(III)	73
	<p>關鍵績效指標B8.2 在專注範疇所動用資源。 KPI B8.2 Resources contributed to the focus area.</p>	B(III)	73