



Chia Tai Enterprises International Limited  
正大企業國際有限公司

*(Incorporated in Bermuda with members' limited liability 於百慕達註冊成立之成員有限責任公司)*  
Stock Code 股份代號 : 3839

2023  
ENVIRONMENTAL, SOCIAL  
AND GOVERNANCE REPORT  
環境、社會及管治報告

# CONTENTS

## 目錄

Approach 匯報方式	2
Board Statement on Environmental, Social and Governance Issues 董事會對環境、社會及管治事宜之聲明	2
Scope of the Report 報告範圍	3
Stakeholder Engagement Process 持份者參與過程	4
Environmental, Social and Governance Issues Material to the Group 影響本集團的重大環境、社會及管治事宜	5
A. Environmental 環境	8
Key Environmental Targets 主要環境目標	8
A1. Emissions 排放物	9
A2. Use of Resources 資源使用	13
A3. The Environment and Natural Resources 環境及天然資源	16
A4. Climate Change 氣候變化	16
B. Social 社會	19
B1. Employment 僱傭	19
B2. Health and Safety 健康與安全	21
B3. Development and Training 發展及培訓	22
B4. Labour Standards 勞工準則	23
B5. Supply Chain Management 供應鏈管理	23
B6. Product Responsibility 產品責任	24
B7. Anti-corruption 反貪污	26
B8. Community Investment 社區投資	27
Environmental, Social and Governance Data Table 環境、社會及管治數據表	28
Laws and Regulations 法律及規例	32
HKEX Environmental, Social and Governance Content Index 香港聯合交易所的環境、社會及管治內容索引	34



## Approach 匯報方式

Chia Tai Enterprises International Limited (the “Company”) and its subsidiaries (together the “Group”) are committed to maintaining sustainable development.

The Group publishes this Environmental, Social and Governance Report (the “Report”) with the aim of communicating to its stakeholders material environmental, social and governance (“ESG”) issues faced by the Group, the ESG initiatives taken and the achievements in sustainable development.

### Board Statement on Environmental, Social and Governance Issues

The board of directors of the Company (the “Board”) holds the overall responsibility for the Group’s ESG matters. The Board, via the Corporate Governance Committee and the Audit Committee, oversees the Group’s ESG strategy, performance, risk management and reporting.

The Corporate Governance Committee is responsible for, among others, overseeing the implementation of the Group’s ESG strategy, monitoring the progress of ESG targets and initiatives, and ensuring compliance with applicable ESG reporting requirements. The Corporate Governance Committee meets regularly to discuss the above ESG matters and reports to the Board on a regular basis.

The Audit Committee, on the other hand, is responsible for, among others, reviewing and maintaining the effectiveness of the Group’s risk management and internal control system. The Audit Committee oversees the Group’s ESG risk management and ensures that relevant risks, including ESG related risks, are identified, evaluated and prioritised according to our risk management framework. The Audit Committee meets regularly to discuss the above ESG related risks and reports to the Board on a regular basis.

The Group identifies, evaluates and prioritises ESG issues through regular communications with internal and external stakeholders. Based on the prioritised issues, the Group will consider these issues and implement corresponding measures. For details of the stakeholder engagement process and materiality assessment results, please refer to the *Stakeholder Engagement Process* and *Environmental, Social and Governance Issues Material to the Group* sections.

正大企業國際有限公司(「本公司」)及其附屬公司(統稱「本集團」)致力於可持續發展。

本集團發佈本環境、社會及管治報告(「本報告」)以向其持份者闡述本集團在環境、社會及管治方面所面對的重大影響事宜、採取的舉措及在可持續發展方面的績效。

### 董事會對環境、社會及管治事宜之聲明

本公司董事會(「董事會」)全面負責本集團的環境、社會及管治事宜。董事會通過企業管治委員會和審計委員會負責監督本集團的環境、社會及管治策略、表現、風險管理和匯報。

企業管治委員負責(其中包括)監督本集團的環境、社會及管治策略的實施,監督環境、社會及管治的目標進展和措施,並確保符合相關之環境、社會及管治報告要求。企業管治委員定期開會討論上述環境、社會及管治之事宜,並定期向董事會匯報。

審計委員會則負責(其中包括)審查及監控本集團風險管理及內部監控系統的有效性。審計委員會監督本集團的環境、社會及管治風險管理,並確保根據我們的風險管理框架識別,評估及優先考慮相關風險,包括環境、社會及管治之相關風險。審計委員會定期開會討論上述環境、社會及管治之相關風險,並定期向董事會匯報。

本集團透過定期諮詢內部與外部持份者的意見來識別及評估環境、社會及管治事宜,並釐定有關事宜的優先次序。本集團會按照有關事宜的優先次序考慮,並實施相應的措施。有關持份者參與過程及重要性評估的結果詳情,請參閱「持份者參與過程」及「影響本集團的重大環境、社會及管治事宜」部分。

## Scope of the Report

The Report has been prepared in compliance with the “comply or explain” provisions in the Environmental, Social and Governance Reporting Guide (the “ESG Guide”) set out in Appendix C2 to the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited. Unless otherwise specified, the Report covers our ESG performance for the period between 1 January 2023 and 31 December 2023 (the “Reporting Period”).

The scope of the Report covers operations that are under the Group’s direct operational control and are considered material in reflecting the Group’s environmental and social impacts. These operations comprise of the Group’s biochemical business, which focuses on the manufacture and/or sale of chlortetracycline (“CTC”) and animal health products.

The indicators in the Report are selected and elaborated following the principles as set out in the ESG Guide to disclose the Group’s performances in the material issues.

**Materiality:** The Group identifies, evaluates and prioritises ESG issues through regular communications with internal and external stakeholders. For details of the stakeholder engagement process and materiality assessment results, please refer to the *Stakeholder Engagement Process* and *Environmental, Social and Governance Issues Material to the Group* sections.

**Quantitative:** Measurable key performance indicators are disclosed in the Report with standards, methodologies and assumptions stated in supplementary notes.

**Consistency:** A consistent approach is adopted to disclose and compare data over the years in the Report, and the changes in statistical methods and key performance indicators are stated.

**Balance:** Information are presented without selections and omissions in the Report, to provide stakeholders an unbiased picture of the Group’s performance.

This Report focuses on the Group’s environmental and social performance. For information regarding our corporate governance, please refer to the Company’s annual report.

## 報告範圍

本報告乃遵守香港聯合交易所有限公司證券主版上市規則附錄C2《環境、社會及管治報告指引》(「指引」)中的「不遵守就解釋」條文選寫。除非文義另有所指，本報告涵蓋我們由二零二三年一月一日至二零二三年十二月三十一日期間(「報告期」)之表現。

本報告的範圍涵蓋由本集團直接營運以及在對環境和社會方面有重大影響之業務。這些營運業務包含了本集團專注製造及／或銷售金霉素及動保化藥產品的生化業務。

本報告中的指標是按照指引中的原則選擇和闡述的，以披露本集團在重大議題上的表現。

**重要性：**本集團透過定期諮詢內部與外部持份者的意見來識別及評估環境、社會及管治事宜，並釐定有關事宜的優先次序。有關持份者參與過程及重要性評估的結果詳情，請參閱「持份者參與過程」及「影響本集團的重大環境、社會及管治事宜」部分。

**量化性：**可以計量的關鍵績效指標均於本報告披露，所用的標準、方法及假設等資料亦於在補充中說明。

**一致性：**本報告採用了與以前年度一致的數據披露方法，並就不同年度的數據進行了比對，並列示了統計方法、關鍵績效指標的變動。

**平衡：**本報告不偏不倚地披露內容，並確保為持分者提供對本集團表現公正的描述。

本報告主要針對本集團在環境和社會方面的表現。有關我們企業管治的資訊，請參閱本公司之年報。

## Approach

匯報方式

### Stakeholder Engagement Process

To understand the relevance of ESG issues to our biochemical business, the Group engaged a diverse group of stakeholders through various formal and informal communication channels. To ensure a systematic approach to our stakeholder engagement, we have identified five stakeholder groups that are most significant to the Group's business. These groups include employees, customers, suppliers, shareholders and investors, and the communities and non-governmental organisations ("NGOs"). The table below outlines our communication channels with different stakeholder groups:

### 持份者參與過程

為了解與我們生化業務相關的環境、社會及管治事宜，本集團透過多個正式和非正式的溝通渠道與廣泛的持份者進行交流。我們識別了五個對集團業務最為重要的持份者類別，確保有效地進行溝通工作。這些持份者類別包括僱員、客戶、供應商、股東及投資者，以及社區和非政府組織。下表詳列不同持份者的溝通渠道：

Stakeholder Groups 持份者類別	Communication Channels 溝通渠道
Employees 僱員	<ul style="list-style-type: none"> <li>- Performance appraisals 工作表現評估</li> <li>- Surveys and interviews conducted by a third party 由第三方進行之調查及訪問</li> <li>- Volunteering activities 義工活動</li> <li>- Training sessions, seminars and workshops 培訓課程、講座及工作坊</li> </ul>
Customers 客戶	<ul style="list-style-type: none"> <li>- Customer satisfaction surveys 客戶滿意度調查</li> <li>- Surveys and interviews conducted by a third party 由第三方進行之調查及訪問</li> </ul>
Suppliers 供應商	<ul style="list-style-type: none"> <li>- Site visits 實地考察</li> <li>- Surveys and interviews conducted by a third party 由第三方進行之調查及訪問</li> <li>- Supplier assessments 供應商評估</li> </ul>
Shareholders and investors 股東及投資者	<ul style="list-style-type: none"> <li>- Annual general meeting 股東週年大會</li> <li>- Annual and interim reports 年報及中期報告</li> </ul>
Communities and NGOs 社區及非政府組織	<ul style="list-style-type: none"> <li>- Charity events 慈善活動</li> <li>- Participation in programmes initiated by NGOs 參與由非政府組織舉辦的活動</li> <li>- Volunteering activities 義工活動</li> </ul>

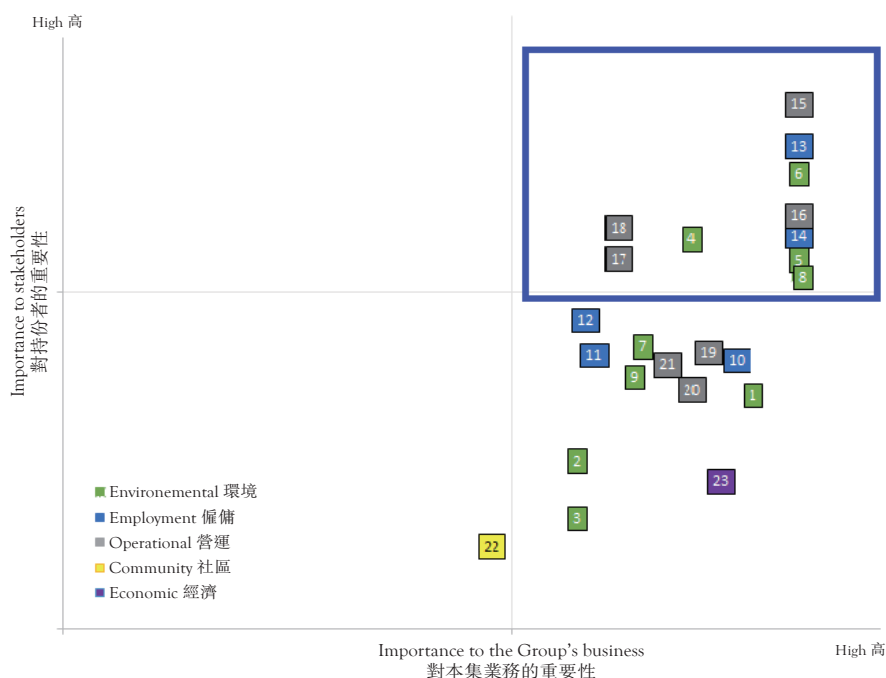
## Environmental, Social and Governance Issues Material to the Group

Where there is no significant fundamental change in our business, we engage stakeholders every five years to update our understanding of their views, priorities and expectations on ESG issues. Meanwhile, we review industry trends and key ESG issues faced by peer companies on an annual basis to ensure our management and disclosures on ESG are relevant and sufficient to stakeholders.

In accordance with our five-year stakeholder engagement plan, we conducted our second stakeholder engagement process in 2020 to review the materiality of ESG issues. The results will be applicable to ESG Reporting Periods from 2021 onwards, including this Report, unless there is significant fundamental change in our business.

We undertook a review of the key ESG issues faced by peer companies in the biochemical industry and referred to the latest ESG Guide, and identified 23 ESG issues that were most relevant to the Group's business. A diverse group of stakeholders were invited to take part in a survey and rank the relative importance to the Group of each ESG issue based on their understanding of the Group's operations. Furthermore, qualitative feedback collected from stakeholders through interviews were used to validate the ranked results. The final materiality analysis results were reviewed and endorsed by the Board.

The results are presented below in the form of a matrix to provide an overview of the relative importance of the ESG issues to the Group.



## 影響本集團的重大環境、社會及管治事宜

如集團業務沒有重大或基本性的變動，我們會與持份者每五年進行一次溝通，以了解及更新他們對環境、社會及管治事宜的看法、關注的事宜及期望。與此同時，我們每年會檢閱行業趨勢及同業面對的重大環境、社會及管治事宜，以確保對持份者而言，我們在環境、社會及管治的管理及披露是相關和充足的。

根據本集團的五年持份者參與計劃，我們於二零二零年進行了第二次持份者參與過程，以審查集團的環境、社會及管治事宜的重要性。除非我們的業務發生重大或基本性的變動，否則結果將適用於二零二一年及以後的環境、社會及管治報告期。

我們審查了生化行業同業的重大環境、社會及管治事宜，參考最新的指引，並識別了二十三項與集團業務最為相關的环境、社會及管治事宜。不同類別的持份者受邀參與問卷調查，並根據他們對集團營運的了解，為各項重大環境、社會及管治事宜對集團的相對重要性進行評分。此外，透過訪問持份者所收集的定性反饋用於驗證排名的結果。最終的重要性分析結果已被董事會審閱及認可。

分析結果呈現於下列矩陣，以概述各重大環境、社會及管治事宜對集團的相對重要性。

## Approach

匯報方式

Environmental, Social and Governance Issues  
Material to the Group (continued)影響本集團的重大環境、社會及管治事宜  
(續)

		ESG Issues Material to the Group 影響本集團的 重大環境、社 會及管治事宜	ESG Guide Reference on Material Issues 重大事宜《環境、社會及管治報告指引》參照
Environmental Issues 環境事宜			
1	Air pollution 空氣污染		
2	Greenhouse gas emissions 溫室氣體排放		
3	Climate risk mitigation and adaptation 減緩和適應氣候變化風險		
4	Energy management 能源管理	✓	A2: Use of Resources 資源使用 A3: The Environment and Natural Resources 環境及天然資源 A4: Climate Change 氣候變化
5	Water management 水資源管理	✓	A2: Use of Resources 資源使用 A3: The Environment and Natural Resources 環境及天然資源
6	Wastewater discharge 污水排放	✓	A1: Emissions 排放物 A3: The Environment and Natural Resources 環境及天然資源
7	Non-hazardous waste management 無害廢棄物管理		
8	Hazardous waste management 有害廢棄物管理	✓	A1: Emissions 排放物 A3: The Environment and Natural Resources 環境及天然資源
9	Use of packaging materials 包裝材料使用		



**Environmental, Social and Governance Issues  
Material to the Group (continued)****影響本集團的重大環境、社會及管治事宜  
(續)**

		ESG Issues Material to the Group 影響本集團的 重大環境、社 會及管治事宜	ESG Guide Reference on Material Issues 重大事宜《環境、社會及管治報告指引》參照
Employment Issues 僱傭事宜			
10	Employee training and development 僱員培訓及發展		
11	Employee remuneration 僱傭酬勞		
12	Equal opportunity and anti- discrimination 平等機會及反歧視		
13	Occupational health and safety 職業健康與安全	✓	B2: Health and Safety 健康與安全
14	Child and forced labour 童工及強制勞工	✓	B4: Labour Standards 勞工準則
Operational Issues 營運事宜			
15	Product safety and quality 產品安全及質量	✓	B6: Product Responsibility 產品責任
16	Customer response 客戶反饋	✓	B6: Product Responsibility 產品責任
17	Responsible marketing and labelling 負責任的行銷和產品標籤	✓	B6: Product Responsibility 產品責任
18	Responsible supply chain 負責任的供應鏈	✓	B5: Supply Chain Management 供應鏈管理
19	Intellectual property rights 知識產權		
20	Anti-corruption practice 反貪污政策		
21	Technology and innovation 科技與創新		
Community Issues 社會事宜			
22	Community investment 社區投資		
Economic Issues 經濟事宜			
23	Economic performance 經濟表現		

Out of the 23 issues assessed, 10 issues located in the upper-right corner of the matrix were identified as highly material, and the respective ESG aspects stated in the ESG Guide were prioritised for disclosure throughout the Report. Through the stakeholder engagement process, stakeholders provided extensive and meaningful feedback that have guided us in managing our ESG issues.

在已識別的二十三項事宜中，位於矩陣右上角的十項事宜被識別為重要事宜，其在指引中的相關範疇將在整個報告中重點披露。透過持份者參與過程，持份者提供了廣泛和具價值的建議，有助我們管理環境、社會及管治事宜。



## A. Environmental 環境

The Group is committed to strengthening environmental protection and has established a Safety, Health and Environmental Committee (the “SHE Committee”) at each of our production sites in Pucheng and Zhumadian, China. The SHE Committees oversee relevant environmental policies and programmes affecting our biochemical operations, and ensure that proper environmental considerations are taken into account during the Group’s decision making processes. Each SHE Committee comprises of representatives appointed by key departments within the respective entity.

Our biochemical operations are certified under International Organization for Standardization (“ISO”) 14001 Environmental Management System. According to ISO’s requirements, the Group’s operating facilities are evaluated regularly by a third party to ensure adherence to proper environmental protection guidelines and procedures for improving environmental and energy performance. During the Reporting Period, our production facility in Zhumadian also obtained the national green factory certification.

### Key Environmental Targets

The Group published its environmental targets in the 2021 ESG report. We are committed to reducing our operations’ impact on the environment. The table below shows the Group’s targets to be achieved by 2030, as compared to the base year 2021. Details of each target will be discussed in the respective sections.

#### 2030 Target

#### 2030年目標

Reduce 10% of greenhouse gas emission (scope 1 and 2) intensity (kilogram CO<sub>2</sub> equivalent per production tonne)  
溫室氣體排放密度(範圍一及二)減少10% (千克二氧化碳當量/公噸產量)

Maintain the intensity of non-hazardous waste directed to landfill/incineration (kilogram per production tonne)  
維持運往垃圾堆填區/焚化爐的無害廢棄物密度(千克/公噸產量)

Reduce 10% of hazardous waste sent to landfill/incineration intensity (kilogram per production tonne of CTC HCL)  
運往垃圾堆填區/焚化爐的有害廢棄物密度減少10% (千克/公噸鹽酸金霉素產量)

Reduce 10% of energy consumption intensity (gigajoule per production tonne)  
能源消耗密度減少10% (千兆焦耳/公噸產量)

Reduce 10% of water consumption intensity (cubic meter per production tonne)  
耗水密度減少10% (立方米/公噸產量)

本集團致力加強環境保護，於中國浦城及駐馬店之生產設施分別成立安全、健康及環境委員會，以監督影響我們生化營運的相關環境政策和項目，並致力確保本集團在決策過程中充分考慮環境因素。各委員會由公司內重點部門的代表組成。

我們的生化業務擁有國際標準化組織(「ISO」) 14001 環境管理系統認證。按照ISO的要求，本集團的營運設施由第三方進行定期評估，以確保妥善遵守環境保護指引及程序，從而改善環境表現以及能源使用。報告期內，我們在駐馬店工廠的生產設施亦取得了國家綠色工廠認證。

### 主要環境目標

本集團在2021年環境、社會及管治報告中發佈了環境目標。我們致力於減少我們的營運對環境之影響。下表顯示了本集團與二零二一年基準年相比下到二零三零年要達到的目標。每個目標的詳細信息將在其各自的部分中討論。

## A. Environmental 環境

In 2023, we implemented a number of initiatives, including upgrading our environmental protection equipment, stopping the use of coal and improving the water recycling rate to improve our environmental performance. We will continue to monitor our performance and make further enhancement.

### A1. Emissions

#### Air Emissions and Greenhouse Gas Emissions

The Group is vigilant in monitoring the emissions generated from our business activities. This action is an important part of our environmental strategy.

The main air pollutants from our production sites in Pucheng and Zhumadian include nitrogen oxides, sulphur oxides and particulates. The Group conducts regular checks on the pollutant control systems of our machineries to ensure compliance with relevant national and local emission laws and regulations.

Carbon dioxide (“CO<sub>2</sub>”) is the main type of greenhouse gas generated from our operations. The Group recognises that greenhouse gas has a negative impact on climate change and therefore systematically monitors emissions by tracking the emission intensity. In order to lower the emission from steam generation, the Group has purchased high quality steam from a third party supplier. In the Reporting Period, we reduced the steam consumption by recycling and reusing heated water and improved the stirring motor in Pucheng factory’s fermentor to lower electricity usage. The estimated yearly saving on coal consumption is expected to be about 870 tonnes. Moreover, in 2023, the Group participated in a tree planting campaign, during which a total of 1,100 trees were planted.

The Group commits to reducing the intensity of greenhouse gas emission (kilogram CO<sub>2</sub> equivalents per production tonne) from its operations by 10% by 2030, relative to the base year 2021 (Baseline: 3,670 kilogram CO<sub>2</sub> equivalent per production tonne). We purchased steam from third parties and stopped generating steam from using coal since May 2022. As a result, the greenhouse gas emission intensity of the Group decreased to 2,667 kilogram CO<sub>2</sub> equivalent per production tonne in 2023. The planned reduction in greenhouse gas emission is also linked to our energy usage – please refer to the *Energy usage* section for more details.

於二零二三年，我們積極通過各項措施，例如升級了我們工廠的環保設備，停止使用煤炭及提高水的循環率，從而改善我們的環境績效。我們將持續監察我們的表現，並改善我們的環境績效。

### A1. 排放物

#### 廢氣及溫室氣體排放

作為環境策略中的重要一環，本集團密切監察因業務活動而產生的廢氣排放。

本集團位於浦城及駐馬店的生產設施主要排放的廢氣包括氮氧化物、硫氧化物和微粒。本集團定期對機器的污染物控制系統進行檢測，確保符合國家及當地相關的排放法律和規例。

二氧化碳(「CO<sub>2</sub>」)是我們營運中產生的主要溫室氣體。本集團知悉這些溫室氣體對氣候變化有負面影響，因此有系統地透過追蹤排放密度去監察排放量。同時，為了減少燃煤排放，本集團統一採用外購蒸汽，以減少大量氣體污染物的產生。在報告期內，我們的浦城工廠通過回收利用熱水，從而降低蒸汽消耗，並對節能攪拌電機進行改造，藉此降低電量消耗，每年節約標準煤約870噸。同時，我們亦參與了植樹造林活動，二零二三年累計植樹1,100棵。

於二零三零年或之前，本集團承諾由其營運產生的溫室氣體排放密度(千克二氧化碳當量／公噸產量)較二零二一年基準年減少10%(基準：3,670千克二氧化碳當量／公噸產量)。自二零二二年五月起，我們向第三方外購蒸氣，並停止使用煤生產蒸氣。因此，本集團二零二三年的溫室氣體排放密度下跌至2,667千克二氧化碳當量／公噸產量。溫室氣體排放的減少計劃與我們的能源使用直接相關，詳情請參閱「能源使用」部分。

## A. Environmental

## 環境

## A1. Emissions (continued)

## Air Emissions and Greenhouse Gas Emissions (Continued)

Air pollutant emissions from production activities are regulated by the Chinese government under “Emission Standard of Air Pollutants for Boilers”. Simultaneous improvement in the three areas discussed below enabled the Group to reduce air emissions in an effective manner. The Group passed the air pollutants sampling tests conducted by the government during the Reporting Period.

## A1. 排放物 (續)

## 廢氣及溫室氣體排放 (續)

從生產過程中產生的氣體污染物排放受中國政府制定的《鍋爐大氣污染物排放標準》所規管。我們同時結合以下三方面的減少排放方法，有效減少廢氣排放。本集團於報告期內通過政府有關氣體污染物排放的樣本測試。

Approaches to reduce emissions 減少排放的方法	Measures 措施
Structural improvement 改善結構	Eliminate outdated production equipment and replace old machines with more energy-efficient models. 淘汰過時的生產設備，以節能型號取代舊有機器。
Process improvement 改善生產過程	Adopt new technologies to reduce emissions, for example, through adding dust-removal and sulphur-removal equipment to production lines. 採用減少排放的新技術，例如在生產線引入除塵及除硫設備。
Production management system improvement 改善生產管理系統	Optimise the Group’s production management system following an annual review to improve production efficiency and reduce air emissions. In accordance with government requirements, the Group evaluates its production process regularly to ensure that the air pollutant emission level complies with the national standards. 年度評估後改善本集團的生產管理系統，以提高生產效率和減少廢氣排放。根據政府要求，本集團定期評估其生產流程，以確保空氣污染物排放量符合國家標準。

During the Reporting Period, there was no material non-compliance with relevant laws and regulations that would have a significant impact on the environment or on the Group relating to air and greenhouse gas emissions.

報告期內，並無發生對環境或本集團有重大影響的廢氣及溫室氣體排放之相關法律及規例的重大違規事件。

## A. Environmental 環境

### A1. Emissions (continued)

#### Waste

As the business grows, the Group will continue to develop a comprehensive waste management solution for its biochemical business to reduce waste generation and handle waste responsibly. Part of this solution involves finding ways to reuse waste where feasible.

In recent years, we replaced the sludge dewatering equipment in our Zhumadian factory from belt filter press to plate-and-frame filter press, which reduces wastewater content in the sludge and lowers the ultimate weight of sludge. Sludge is collected by licensed third parties in accordance with the requirements of the environmental protection unit.

For the period up to 2030, we aim to maintain non-hazardous waste from production sent to landfill/incineration intensity at 3.92 kilogram per production tonne – the intensity level in the base year 2021. The intensity of non-hazardous waste was 1.43 kilogram per production tonne in 2023. We will continue to explore methods in waste reduction, closely monitor our performance and continue to make ongoing improvements.

### A1. 排放物 (續)

#### 廢棄物

隨著業務增長，本集團將繼續為其生化業務制定全面的廢棄物管理方案，以減少產生和妥善處理廢棄物。部分措施包括在可行情況下循環再用廢棄物。

近年，我們更換了駐馬店工廠的污泥脫水設備，並由帶式壓濾機改為板框壓濾機，減少了污泥中的廢水含量，從而降低了污泥的最終重量。污泥按照環保主管單位要求委託第三方合規處置。

在截至二零二零年的期間，我們的目標是將本集團運往垃圾堆填區／焚化爐的產品生產無害廢棄物密度維持在每公噸產量產生大約3.92千克無害廢棄物，即二零二一年的密度。本集團二零二三年的無害廢棄物密度為每公噸產量產生大約1.43千克無害廢棄物。我們未來會繼續探索減少廢棄物的方法和監察我們的表現，並持續改善我們的環境績效。

## A. Environmental

### 環境

## A1. Emissions (continued)

### Waste (continued)

Hazardous waste is generated during the production process which involves the use of certain chemicals. Mindful of the negative effect of hazardous waste on the environment, the Group ensures hazardous waste is processed in compliance with applicable laws and regulations. Our hazardous waste, mainly mycelium residue, is handled by and disposed of through licensed waste collectors in accordance with regulatory requirements. Mycelium residue is a by-product in CTC HCL production.

The Group commits to reducing the intensity of hazardous waste sent to incineration (kilogram per production tonne of CTC HCL) by 10% by 2030, relative to the base year 2021. Baseline level in 2021 was 4,374 kilogram per production tonne of CTC HCL. In recent years, we have enhanced our low temperature sludge dryer which decreases the moisture content of mycelium residue, effectively reducing the weight of mycelium residue before being collected by incensed waste collectors. The increased utilisation of drying equipment has resulted in a reduction in hazardous waste intensity. Moreover, we improved our product formula to reduce mycelium residue per batch of production. Nonetheless, the intensity of hazardous waste sent to incineration increased to 3,816 kilogram per production tonne of CTC HCL in 2023 when compared to 3,654 kilogram in 2022. CTC HCL is a form of biological fermentation and fluctuations in production efficiency do happen, resulting in an overall increase in mycelium residue intensity in 2023. Mycelium residue accounts for over 99% of the Group's hazardous waste; therefore, we set our target based on the production volume of CTC HCL. We plan to further improve our existing equipment to continuously reduce the generation of mycelium residue as a by-product in CTC HCL production.

During the Reporting Period, there was no material non-compliance with relevant laws and regulations that would have a significant impact on the environment or the Group relating to the generation of hazardous and non-hazardous waste.

Going forward, the Group will continue to explore ways to further reduce waste generation.

## A1. 排放物 (續)

### 廢棄物 (續)

我們在生產過程中使用的化學物會產生有害廢棄物。本集團明白這些有害廢棄物對環境造成的不良影響，故致力確保有害廢棄物的處理符合相關的法律和規例。我們的有害廢棄物主要為菌絲體殘餘，按照監管要求由註冊廢物收集商處理和棄置。菌絲體殘餘物是生產鹽酸金霉素過程中產生的副產品。

以二零二一年為基準，本集團承諾於二零三零年將運往焚化爐的產品生產有害廢棄物密度(千克/公噸鹽酸金霉素產量)減少10%。二零二一年基準水平為4,374千克/公噸鹽酸金霉素產量。近年，我們升級了低溫烘乾設備，將菌絲體殘餘物的水分含量降低，有效地減少了持牌廢物收集商處理的菌絲體殘餘物的重量。烘乾設備增加，能有效地減少有害廢棄物密度。另外，今年度我們優化生產配方，減少每批生產輸出的菌渣廢物。雖然如此，二零二三年運往焚化爐的有害廢棄物密度為3,816千克/公噸鹽酸金霉素產量，對比起二零二二年的3,654千克上升了，因為鹽酸金霉素屬於生物發酵，生產存在效能波動，導致二零二三年整體菌絲渣密度上升。菌絲體殘餘物佔本集團有害廢棄物的99%以上，因此我們設立的目標以鹽酸金霉素的產量為基準。我們計劃對原有設備進行改進，以持續減少鹽酸金霉素生產中作為副產品的菌絲體殘餘物的產生。

報告期內，並無發生對環境或本集團有重大影響的有害及無害廢棄物的產生之相關法律及規例的重大違規事件。

展望未來，本集團會繼續發掘減少廢棄物產生的方法。



## A. Environmental 環境

### A2. Use of Resources

#### Energy usage

The Group puts significant emphasis on energy management and conservation as an important part of its business operations. The Group's biochemical business has an established energy management system which comprises guidelines on managing energy which are reviewed annually and updated as necessary. The energy management system, which covers energy procurement and machine operations, helps the Group in managing different types of energy usage in its business.

Under the energy management system, each department has its own obligations and responsibilities to ensure energy management measures are consistently and effectively implemented across different levels of operations.

Starting from May 2022, the Group purchased steam from a third party supplier as opposed to generating steam onsite using coal and natural gas. Purchased steam has a higher temperature than the steam generated by natural gas. With the higher temperature, the steam sterilisation process after fermentation of CTC can be shortened, hence lowering energy consumption.

The use of poor quality coal can cause serious environmental impact as its combustion can produce more carbon dioxide and sulphur oxides that contribute to climate change and air pollution.

The Group regularly reviews its production lines and production process and conducts inspections to monitor equipment performance to minimise energy wastage resulting from equipment mismanagement. If the results of these inspections indicate that a particular machine is malfunctioning, the machine will be shut down and repaired or replaced accordingly. We continue to upgrade equipment to help reduce energy consumption. For example, in 2021, we upgraded the motor in Pucheng factory's fermentor and installed a maglev centrifugal air compressor in Zhumadian factory in 2022 in order to save more energy. In 2023, Pucheng factory upgraded its air compressor for energy reduction. The project is currently in progress and planned to be completed in 2024.

### A2. 資源使用

#### 能源使用

作為業務營運的重要一環，本集團高度重視能源管理和節約。其生化業務設有一套由能源管理指引組成的能源管理系統，並每年進行檢討和於有需要時作出更新。該能源管理系統涵蓋能源採購和機器運作，有助本集團管理各種能源的使用。

在能源管理系統下，不同部門各有責任和職責，確保在不同營運層面能貫徹和有效地執行能源管理措施。

從二零二二年五月開始，本集團停止通過燃燒煤炭和天然氣來生產蒸汽，並統一採用外購蒸汽。購買的蒸汽溫度比舊工廠的天然氣產生的蒸汽溫度高。更高的溫度使金霉素發酵工序後使用蒸汽滅菌所需的時間縮短並降低我們的能耗。

使用質素欠佳的煤可對環境造成嚴重影響，因其燃燒會產生更多二氧化碳和硫氧化物，加劇氣候變化和造成空氣污染。

本集團定期檢討生產線和生產過程，並進行檢驗以監控設備的運作情況，以減少因設備管理不善而導致能源浪費。若檢測結果顯示機器出現故障，我們會停止其運作，並進行維修或更換。與此同時，我們繼續升級現有設備以降低能源消耗。例如，二零二一年，我們浦城工廠的發酵罐攪拌電機升級為更節能的型號；而於二零二二年浦城工廠亦安裝了磁懸浮空壓機與傳統空壓機相比更能有效節能。在二零二三年，浦城工廠對空氣壓縮機進行改造，實現節能降耗的目的，項目預計二零二四年完成並投入運行。

## A. Environmental

### 環境

## A2. Use of Resources (continued)

### Energy usage (continued)

The Group commits to achieving a 10% reduction in energy consumption intensity (gigajoules per production tonne) by 2030, relative to the base year 2021. Baseline level in 2021 was 31.48 gigajoules per production tonne. During the Reporting Period, we upgraded the wastewater treatment equipment in our plant. We installed a dissolved air floatation system to treat oil in wastewater, which helped us to reduce the load on the anaerobic reactor to improve energy efficiency and equipment durability. We also replaced the power supply in the fermentation plant with direct drive motors and implemented measures to recycle the residual heat from the air compressor in the power plant to reduce steam consumption. As a result, the energy consumption intensity of the Group decreased to 20.07 gigajoules per production tonne in 2023.

### Water and Wastewater

The Group carefully manages water consumption notwithstanding that the Group's operations are not located in water-stressed regions and has no difficulty in sourcing water that is fit for the purpose. Our factory in Pucheng draws water from a nearby river for production, the amount of water consumed is estimated based on the amount of water drawn. Our factory in Zhumadian draws water from municipal supplies. In 2023, Pucheng factory and Zhumadian factory consumed 3.39 and 0.42 (2022: 6.99 and 0.24) million cubic meters of water, respectively.

Under the respective SHE Committees' oversight, the Environmental Departments at our production sites in Pucheng and Zhumadian have implemented wastewater treatment systems to monitor the quality of our discharged wastewater in real time, and to filter and neutralise wastewater before discharge. The treated wastewater is maintained at a level of chemical oxygen demand that complies with provincial requirements, as specified in "Standard of Water Pollution for Fermented Pharmaceutical Industry" issued by Henan Provincial Department of Ecological Environment.

Our Pucheng factory's wastewater is discharged to the Fujian Pucheng Industrial Park's (the "Industrial Park") wastewater treatment plant for further treatment. Under the new requirements on wastewater content, the requirement on total-nitrogen is more stringent than before. We have upgraded our wastewater treatment system to ensure compliance with the new requirements. Overall, we have ensured the wastewater discharged from our facilities meets the new standards as required by the Industrial Park.

## A2. 資源使用 (續)

### 能源使用 (續)

於二零三零年或之前，本集團承諾將能源消耗密度（千兆焦耳／公噸產量）較二零二一年基準年減少10%。二零二一年基準水平為31.48千兆焦耳／公噸產量。報告期內，我們升級了廠房內的廢水處理設備。我們安裝了溶氣氣浮機以處理廢水內的油份，有助我們降低厭氧反應器的負荷以改進效能及設備耐久度。我們亦將發酵車間的供電設備更換成直驅電機，並將動力車間內空壓機的餘熱回收利用，以降低蒸汽用量。因此，本集團二零二三年的能源消耗密度下跌20.07千兆焦耳／公噸產量。

### 用水及污水

儘管本集團的業務並非處於水資源缺乏的地區，且在獲得適用水源上並未有任何問題，本集團仍謹慎管理耗水量。位於浦城的工廠從附近的河流抽取水以進行生產，耗水量根據取水量估算。位於駐馬店的工廠則靠市政供水。於二零二三年，浦城工廠和駐馬店工廠的耗水量分別為339萬立方米和42萬立方米（二零二二年：699萬立方米和24萬立方米）。

在各自的安全、健康及環境委員會的管理下，浦城及駐馬店生產設施的環境部門根據污水處理系統實時監察我們排放的污水水質，確保在排放前過濾和中和污水。經過處理的污水的化學需氧量維持在符合由河南省生態環境廳發出的省級要求《發酵類製藥工業水污染物排放標準》的水平。

我們浦城工廠的污水現排放到福建浦城工業園區（「工業園區」）的污水處理廠作進一步處理。新的污水成分要求對總氮的含量要求比以前更加嚴格。我們已經升級了我們的污水處理系統，以確保符合新要求。總體而言，我們確保從我們的設備排放的污水水質達到了工業園區的新標準。



## A. Environmental 環境

### A2. Use of Resources (continued)

#### Water and Wastewater (continued)

Our factories in Zhumadian and Pucheng are equipped with cooling towers to increase the amount of water recycled and reduce wastewater discharge. Water used for cooling after the CTC fermentation process will be circulated through the cooling tower to lower its temperature for re-use, thus reducing overall water consumption. In 2023, we installed a direct drive motor in our new Zhumadian factory and further upgraded our cooling tower in Pucheng factory to increase the amount of water recycled.

Furthermore, our new Zhumadian factory started partially replacing fresh water with recycled water for the filtration process after fermentation, effectively reducing water consumption. Our Pucheng factory also replaced filter plates with membrane filtration, so as to further reduce water use and waste water discharge.

Although the amount of water used by employees in their daily activities is not significant, the Group encourages our employees to conserve water as far as practicable. Tips and reminders are placed inside our facilities, including washrooms and resting areas, to raise our staff's awareness of water conservation.

The Group targets to reduce water consumption intensity (cubic meter per production tonne) by 10% by 2030, relative to the base year 2021. Baseline level in 2021 was 218 cubic meter per production tonne. During the Reporting Period, we improved the recycled water rate and reduced production of high water consuming products. As a result, the water consumption intensity of the Group reduced to 107 cubic meter per production tonne in 2023. We have ongoing plans to upgrade facilities, such as the water-cooling tower, and enhance operations to continuously achieve our goal.

Wastewater intensity, on the other hand, increased from 15.94 cubic meter per production tonne in 2022 to 20.65 cubic meter per production tonne in 2023, as new product lines were introduced which generated more wastewater per production tonne than existing products.

During the Reporting Period, there was no material non-compliance with relevant laws and regulations that would have a significant impact on the environment or the Group relating to discharges into water and land.

### A2. 資源使用 (續)

#### 用水及污水 (續)

我們在駐馬店及浦城工廠安裝了冷卻塔，以增加循環用水量及減少污水排放量。在金霉素發酵過程後用於冷卻的水經過冷卻塔降溫後可以循環再用，從而降低整體用水量。於二零二三年，我們在駐馬店的新工廠中安裝了直驅電機，並對浦城工廠的冷卻塔進行了進一步的改造，以增加循環用水量。

此外，我們的駐馬店新工廠開始於發酵後的過濾過程中用循環水來替代部分自來水，有效減少耗水量。浦城工廠則採用膜式過濾設備替代板框過濾機，以減少用水，同時降低污水排放量。

雖然由僱員日常活動產生的用水量不多，本集團亦鼓勵僱員在可行情況下節約用水，故在不同設施如洗手間和休息地方張貼提示和告示，以提高僱員節約用水的意識。

本集團定立目標在二零三零年或之前將耗水密度（立方米／公噸產量）與二零二一年基準年相比降低10%。二零二一年基準水平為218立方米／公噸產量。報告期內，我們改善了循環水利用率和減少了生產高耗水產品。因此，本集團二零二三年的耗水密度減少至107立方米／公噸產量。我們已計劃採取多種方式以持續實現目標，包括升級冷卻塔等設施及加強營運。

另一方面，污水密度從二零二二年的15.94立方米／公噸產量增加到二零二三年的20.65立方米／公噸產量，因為我們增加了產品系列，而新產品產生的污水密度比現有產品高。

報告期內，並無發生對環境或本集團有重大影響的向水及土地的排污之相關法律及規例的重大違規事件。

## A. Environmental

環境

### A3. The Environment and Natural Resources

The Group is conscious of the need to reduce the potential impact that its biochemical business could have on the environment. For example, we engage authorised subcontractors to dispose of hazardous waste with due care, minimising the potential effect on the micro-ecosystems in soil and groundwater.

With the continuous support from our stakeholders, the Group aims to further reduce its environmental impact and improve its environmental performance by investing in projects to enhance and upgrade its existing production lines.

### A4. Climate Change

In 2021, the Group developed a Climate Impact Policy as a guide for management to develop strategies in mitigating and adapting to climate risk.

There are two major types of climate-related risks – physical risk and transition risk. Physical risks resulting from climate change can be caused by increase in severity and frequency of extreme weather events (that is, acute physical risks), or longer-term gradual shifts of the climate (that is, chronic physical risks). Examples of physical risk include, increase in temperature, water stress and flooding. Transition risks are related to the process of adjustment towards a low-carbon economy. Examples of transition risk include more stringent government policies, change in market demand and supply chain disruption.

### A3. 環境及天然資源

本集團了解其生化業務需要減少對環境產生的潛在影響，例如於棄置有害廢棄物時，我們會聘請獲認可的承包商作適當處理，以減低對泥土及地下水微生物生態系統的影響。

在持份者持續的支持下，本集團透過投資於改良和升級現有生產線的項目，繼續降低對環境造成的影響。

### A4. 氣候變化

於二零二一年，本集團制定了氣候影響政策，作為管理層制定減輕和適應氣候風險策略的指引。

與氣候相關的風險主要有兩種類型，即實體風險和轉型風險。氣候變化帶來的實體風險可由極端天氣事件（即急性實體風險）或長期氣候逐漸變化（即慢性實體風險）的嚴重性和頻率增加而導致的經濟長期損失。實體風險例子包括，溫度上升、水資源短缺和洪水氾濫。轉型風險與向低碳經濟調整的過程有關。轉型風險例子包括更嚴格的政府政策、市場需求變化和供應鏈影響。

A. Environmental  
環境

## A4. Climate Change (continued)

We commissioned a third-party consultant in 2021 to conduct a climate change impact assessment to identify significant climate-related issues that would affect the Group's business. The assessment identified climate-related risks that are relevant to our business.

## A4. 氣候變化(續)

我們在二零二一年聘請了第三方顧問評估氣候變化帶來的影響，辨識影響本集團營運的重大氣候問題。該氣候評估辨識了與我們業務相關的潛在氣候風險。

Climate-related risks 相關的潛在氣候風險	Impact on the Group's business 對本集團營運的影響
Chronic physical risk – Increase in temperature 慢性實體風險 – 氣溫上升	Temperature rise may lead to increase in operating cost to maintain the optimal condition for our operations. 氣溫上升可能增加我們維持最佳營運條件的成本。
Chronic physical risk – Water stress 慢性實體風險 – 水資源短缺	Water stress may cause government to raise water tariff, and in more extreme circumstances, impose restrictions on water consumption. Our overall production capacity may be affected. 水資源短缺可能導致政府提高水費，在更極端情況下或限制用水量，進而影響我們的整體產能。
Acute physical risk – Flooding 急性實體風險 – 洪水氾濫	Climate change induced heavy rainfall and sea-level rise may lead to flooding. These phenomena may lead to operational disruption and damages to facilities that are located in areas prone to high coastal and riverine flood risk, potentially increasing operating expenses for repair and capital expenditure for strengthening flood resilience of our facilities. 氣候變化所引起的高降雨量及海平面上升會導致洪水氾濫。這現象可能會導致位於沿海和河流洪水風險高的營運中斷和設施損壞，從而增加用於維修的營運費用和用於加強設施洪水抵禦力的資本支出。
Transition risk – Government policies and market demand 轉型風險 – 政府政策和市場需求	Compliance with more stringent government policies and regulations, and meeting evolving consumer preferences for low-carbon product. 應對更嚴格的政府政策及法規，以及滿足消費者對低碳產品的偏好正不斷演化。
Transition risk – Supply chain disruption 轉型風險 – 供應鏈影響	Procurement of raw materials may be impacted by climate-related risks, affecting the supply and costs of raw material. 原材料的採購可能會受到氣候相關風險的影響，從而影響原材料的供應和成本。

## A. Environmental

### 環境

#### A4. Climate Change (continued)

Climate-related risks are incorporated into the Group's risk management and internal control systems. So far, climate-related risks are not known to have caused severe adverse impacts to the Group's business. Nonetheless, mitigation and adaptation measures are implemented in our operations as precautionary practices to address these identified climate-related risks. For example:

- In view of rising temperature globally, we are investing in improving our cooling system to overcome the difficulties in controlling the temperature during the CTC fermentation process.
- We have introduced measures to increase water efficiency, such as increasing the use of recycled water during the manufacturing process.
- We have enhanced the resilience of factory buildings to floods by incorporating flood resistant building designs and constructing flood dykes.
- Emergency response plans for tropical cyclone and heavy rainfall are in place to provide guidance of actions before, during and after such hazards occurring.

#### A4. 氣候變化(續)

氣候相關風險已被納入本集團的風險管理和內部監控系統。到目前為止，我們並未發現氣候相關風險對本集團業務造成嚴重的負面影響。儘管如此，我們已實行一系列減緩及適應氣候風險的營運措施，以預防已識別的氣候相關風險，例如：

- 針對全球氣溫上升，我們正在投資改善冷卻系統，以解決金霉素發酵過程中控制溫度的困難。
- 我們已採取提高用水效益的措施，例如在生產過程中加強水資源的回收利用。
- 我們通過引入抗洪的建築設計及建造防洪堤，提高工廠建築的抗洪能力。
- 我們制定針對熱帶氣旋及暴雨的緊急應變計劃，作為災害發生前、中、後的行動指引。

## B. Social 社會

### B1. Employment

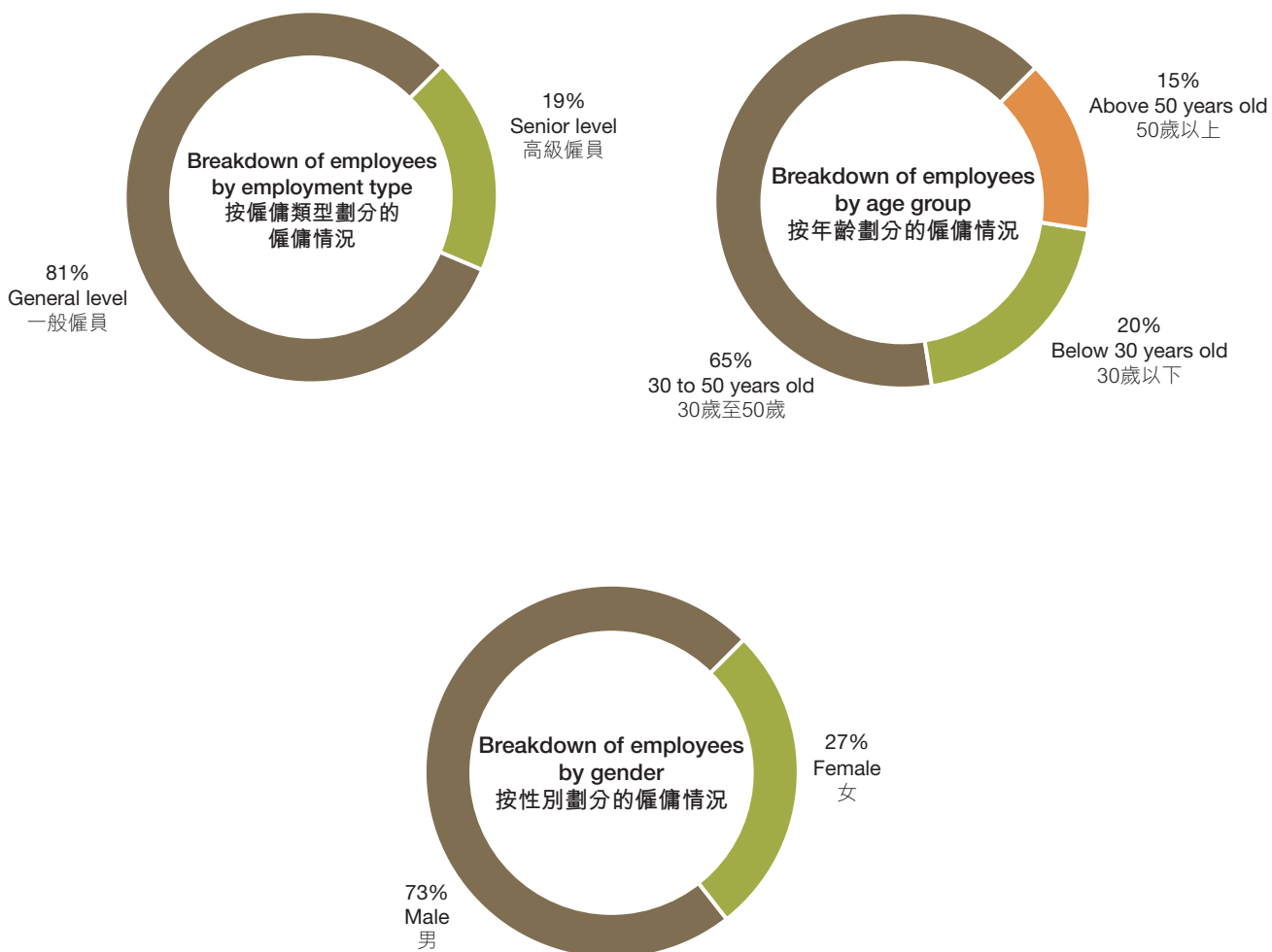
Talent is one of the most valuable resources for any organisation, and our employees play an essential role in helping the Group to excel in product quality and productivity. As a responsible employer, the Group recognises the importance of understanding, respecting, trusting and developing its employees. Our employee handbooks are founded upon these values. As of 31 December 2023, the Group's biochemical business had around 875 employees, all of which are full-time employees and based in mainland China.

Comprehensive employment policies have been developed to cover aspects such as company values, compensation and benefits, business ethics and conducts, and equal employment opportunities.

### B1. 僱傭

人才是機構的最重要資源之一，僱員在提升本集團的產品質素和生產力上擔當重要角色。作為負責任的僱主，本集團意識到理解、尊重、信任和栽培僱員的重要性。我們在制定僱員手冊時，均以這些價值觀為基礎。截至二零二三年十二月三十一日，本集團的生化業務約有875名僱員，全部均為位於中國的全職員工。

我們制定了涵蓋公司價值觀、薪酬和福利、商業道德和操守及平等聘用機會的全面僱員政策。



## B. Social

### 社會

#### B1. Employment (continued)

We recruit and retain high-calibre talent by providing attractive compensation packages and development opportunities. Our employees are the key contributors of innovation in the Group. To promote innovation, the Group has a Research and Development Incentive Programme. Under this programme, employees are awarded incentives depending on different criteria, including progress of the project, results of the project and contribution by each employee.

Furthermore, the Group introduced a Talent Nurturing Programme. The programme – focusing on middle-to-senior management – nurtures future leaders and aims to secure continuity of senior leadership. Over the course of 6 months, selected employees will receive on-the-job training, classroom trainings and opportunities to exchange experiences with leaders of other companies in the Charoen Pokphand Group. During the Reporting Period, the Group has implemented a Mentor Programme, which allows selected employee to receive professional training from department head.

The Group promotes open and honest two-way communications. We facilitate internal communications by organising regular meetings between employees and senior management. During these meetings, employees can voice their opinions and concerns in relation to work conditions, employee benefits and other matters of employee interests. Employees can also access online feedback forms by scanning a QR code posted around the factories. Incentives are awarded to employees who successfully bring attention to potential hazards in their working environment.

In addition to proactively responding to employees' feedback, management organises activities to improve employee work-life balance as the Group believes that employees are most productive and motivated when they have a healthy work-life balance. The Group organises festive activities and sports competitions for employees, ranging from running, swimming, basketball to Mid-Autumn and Women's Day celebrations, to promote and encourage a balanced lifestyle. Nevertheless, total employee turnover increased in 2023, due to merging of positions for operational optimisation.

During the Reporting Period, there was no material non-compliance with relevant laws and regulations that that would have a significant impact on the Group relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination and other benefits and welfare in relation to employees.

#### B1. 僱傭 (續)

本集團透過吸引的薪酬水平和發展機會，招聘和挽留高質素的僱員。我們的員工是本集團創新的主要貢獻者。為促進創新，本集團設有《研發項目激勵方案》。該方案向員工發放獎金，具體取決於不同的准則，包括項目的進度、項目的結果以及個人貢獻。

此外，本集團推出人才培養方案。該方案側重於中高層管理人員，培養未來的領導層，旨在確保高層領導的連續性。在六個月內，選定的員工將接受在職培訓、課堂培訓以及與正大集團其他公司的領導層交流經驗的機會。報告期內，為了培養和保留人才，本集團推出繼任者培養計劃，員工可透過此計劃接受部門負責人的專業培訓。

本集團鼓勵開放和誠懇的雙向溝通，我們通過組織定期員工座談會，促進高級管理層和員工之間的內部交流。在座談會期間，員工可以表達他們對工作條件、員工福利和其他員工利益問題的相關意見和關注。員工還可以通過掃描工廠周圍張貼的二維碼訪問在線反饋表。本集團會向成功提出工作環境潛在隱患的員工頒發獎勵金。

除了主動回應員工反饋，管理層組織活動以改善員工的工作與生活平衡，因為本集團相信僱員若能在工作與生活之間取得平衡會有助提升其生產力和工作動力。本集團為僱員舉辦節日活動和運動競賽，由跑步、游泳、籃球，以至中秋節、三八女性節活動等，以推廣及鼓勵平衡的生活方式。儘管如此，我們於二零二三年進行人員優化，合併部分崗位，因此僱員流失率增加。

報告期內，並無發生對本集團有重大影響和員工有關的薪酬及解僱、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之相關法律及規例的重大違規事件。



## B2. Health and Safety

Workplace safety is the foundation for a sustainable business. Under the respective SHE Committees' oversight, Safety Departments at our production sites in Pucheng and Zhumadian ensure safety measures are properly implemented throughout the workplace to create a safe working environment.

The Group has successfully obtained ISO 45001 Occupational Health and Safety Management Systems for both of our factories in Pucheng and Zhumadian, which demonstrates that our factories conform to international standards on occupational health and safety management.

The Group continuously identifies safety risks and implements controls to minimise safety hazards at its factories. We inspect our factories and examine heavy machineries on a routine basis to ensure their proper functioning. Our safety policies also require our production staff to wear personal protective equipment while operating specific machineries. Furthermore, the Group provides regular health examinations for production staff who are potentially exposed to occupational health risks.

As some of our worksites and operations involve the use of heavy equipment, the Group provides technical safety trainings to minimise workplace injuries. The Group requires its production staff to obtain relevant occupational qualification certificates issued by the local authorities before commencing work. During the Reporting Period, there were two cases of staff injury, resulting in 132 lost work days.

We also provide briefing sessions on safety requirements and measures to contractors and other service providers who regularly perform duties at our production sites.

## B2. 健康與安全

安全的工作環境是業務達至可持續發展的基礎。在各自的安全、健康及環境委員會的管理下，浦城及駐馬店生產設施的安全部門致力確保安全措施在工作場所內有效執行，以創造安全的工作環境。

本集團已成功為浦城和駐馬店的廠房取得ISO 45001職業健康和安全管理系統的認證，反映了我們的廠房在職業健康和安全管理上符合國際標準。

本集團持續進行風險識別和監控以減少廠房的安全隱憂。我們定期巡視廠房和檢查重型機械，以確保機械正常運作。我們的安全政策亦要求生產線員工在特定崗位操作時穿上個人保護裝備。此外，本集團為有潛在職業健康風險的生產線員工定期提供健康檢查。

由於本集團的部分廠房和營運有涉及使用重型設備，本集團提供技術安全培訓以減少工業意外，並要求對此生產線員工在投入工作崗位前獲取由當地政府發出的相關職業技能鑒定證書。報告期內本集團錄得兩宗工傷案件，導致損失工作日數共132日。

我們亦為在我們生產設施內定期履行職責的承包商及其他服務供應商就安全規定及措施提供簡介會。



## B. Social

社會

### B2. Health and Safety (continued)

The number of work-related fatalities was zero in 2021. In 2022, the Group recorded one fatality case. During the Reporting Period, the Group recorded zero fatality case. In the aftermath of the 2022 fatality case, the Group strengthened its contractor management process. The purchasing department acts as a gatekeeper for reviewing and inspecting contracts, business licenses and qualifications, safety management agreements of contractors, and review whether insurance were purchased for construction workers. In addition, construction materials are reviewed and audited by project team, and safety training is offered to the contractors.

### B3. Development and Training

The Group values the development of our employees and promotes career development among our employees. We provide equal opportunities for promotion based on merits and offer career advancement paths across the organisation. We encourage all our employees to realise their career goals and make the best use of their talents.

The Group has developed training programmes for different levels of employees across our biochemical business, from junior to senior levels. New hires are required to attend a series of orientation activities, such as introduction to the Group and safety training. New staff are also assigned a “work buddy” to offer guidance regarding day-to-day aspects of carrying out his or her duties at work.

In 2022, to better enhance the learning system, the Group changed the existing internal online learning platform, the “Chia Tai Business Online Academy”, to an online human resource management system, the “IHR system”, which offer courses on topics specific to job skills and employees’ hobbies and interests. This platform enables employees to engage in training programmes that are relevant to their career progression. While employees can choose courses based on their interests, job related trainings are specified to ensure employees are competent at their job.

During the Reporting Period, our employees attended more than 26,785 hours (2022: 27,600 hours) of training in aggregate, representing around 31 hours (2022: 30 hours) for each employee on average.

### B2. 健康與安全 (續)

本集團在二零二一年度因工身亡的員工人數為零，二零二二年度錄得1宗工傷死亡事故。而報告期內，本集團因工身亡的員工人數為零。為防止二零二二年度的同類意外再次發生，本集團去年對外判施工單位進行更嚴謹管理，包括歸由採購部管理審查及簽訂合同、審查營業執照和資格、施工單位安全管理協議、施工人員保險購買情況等，以及要求材料提供到生產部設備科項目組審核、再為施工單位人員提供入場安全訓練。

### B3. 發展及培訓

本集團重視人才並鼓勵員工的職業發展，提供建基於個人績效的平等晉升機會及於集團內的職業發展路徑。我們鼓勵所有員工向實現事業目標邁進，盡展才能。

本集團的生化業務為不同級別，由初級至高級的僱員提供培訓。新入職員工須參與一系列的迎新活動，例如集團介紹和安全培訓。新員工均獲編排一位「工作夥伴」，為其日常工作提供指導。

於二零二二年，為了優化管理系統，本集團把內部開發的在線學習平台，即「正大商學院」網課更改為網上人力資源管理系統「IHR智慧人事系統」，以提供各種涵蓋工作需要、興趣及愛好等課程，使僱員能參與相關和對他們事業發展有幫助的培訓課程。儘管僱員可以根據自己的興趣自行選擇課程，但本集團亦要求僱員參與特定性的工作相關培訓，以確保僱員能勝任工作。

報告期內，我們員工的總受訓時數超過26,785小時（二零二二年：27,600小時），即平均每名員工接受總共約31小時（二零二二年：30小時）的培訓。

## B4. Labour Standards

The Group complies with relevant national labour laws and regulations, and has zero tolerance for child or forced labour. The employment policies of the Group outline the principles and procedures to prevent child or forced labour in the organisation. These procedures include inspection of birth and medical certificates when appropriate and needed. Our human resources department conducts regular checks for child or forced labour. If any child or forced labour is discovered in the organisation, the matter will be reported to senior management for further investigation and any illegal practice would be stopped and handled in accordance with regulatory requirements.

During the Reporting Period, there was no material non-compliance with relevant laws and regulations that would have a significant impact on the Group relating to preventing child or forced labour.

## B5. Supply Chain Management

We expect our suppliers to share the same values that we have on product quality and environmental performance.

In 2020, we updated our supplier code of conduct to the Sustainable Sourcing Policy and Supplier Guiding Principle (“Sourcing Policy”). The Sourcing Policy outlines our standards on product safety and quality, product traceability, human rights, employment practices, environmental issues and business integrity (including anti-corruption). We also ensure our suppliers thoroughly understand our Sourcing Policy. Major suppliers have acknowledged our new standards. An elimination program is progressively being carried out to drop suppliers who do not sign the consent form to our Sourcing Policy.

A robust supplier selection mechanism is in place to ensure that the suppliers we select are of high quality. Suppliers are assessed based on different criteria including their product and service quality, reputation and financial credibility. We consolidate the results of these assessments into a rating to reflect each supplier’s overall performance.

## B4. 勞工準則

本集團遵守相關的國家勞工法律和法規，絕不容忍童工或強制勞工。本集團的僱傭政策列明相關原則和程序，防止本集團內出現童工或強制勞工，這些程序包括在適當或有需要時要求檢查出生及醫療證明。我們的人力資源部門定期檢查童工或強制勞工情況。如在本集團中發現童工或強制勞工行為，該行為將會匯報給高級管理層，並進行進一步調查。如果確認此類違法行為，我們會立即停止及依據法規要求處理。

報告期內，並無發生對本集團有重大影響的防止童工或強制勞工的相關法律和規例的重大違規事件。

## B5. 供應鏈管理

供應商應與我們擁有相同的價值觀，尤其在產品質量及環境表現方面。

二零二零年，我們更新了供應商行為守則至可持續採購政策和供應商指導原則（「採購政策」）。該採購政策列明我們在產品安全及質素、產品可追溯性、人權、僱傭措施、環境問題以及商業誠信（包括反貪污）的準則，並且確保供應商了解我們的採購政策。主要供應商已經認同我們的新標準。若供應商不簽署採購政策同意書，將會被逐步淘汰。

本集團採取嚴格的供應商挑選機制，確保選擇高質素的供應商。我們對供應商進行不同層面的評估，包括產品及服務質素、聲譽和財務可信性。我們會綜合評估結果釐定評級，以反映供應商的整體表現。

**B. Social**

社會

**B5. Supply Chain Management (continued)**

The Group's biochemical business purchases raw materials from suppliers that meet our quality requirements. Both new and existing suppliers must pass quality tests conducted by our in-house laboratory which examines the levels of impurities in raw materials supplied to ensure that they are up to our stringent standards. In addition, we conduct assessments and onsite audits to monitor the business capability of our suppliers in meeting our requirements. Suppliers who repeatedly fail to meet our standards during the contract period will be removed from our approved list.

During the Reporting Period, we had 853 suppliers and all of them were based in mainland China.

**B6. Product Responsibility**

The Group endeavours to provide the best possible services and products to customers. Our products must meet our quality criteria before they can be despatched. Moreover, products are appropriately labelled and advertised in accordance with relevant regulations. For products that are exported, we ensure that they are labelled in accordance with regulations in the relevant export market. Labels of new products are approved by quality assurance department, general manager and relevant government authorities. In our daily operations, each batch of finished products are checked by our quality assurance staff to ensure proper labelling before dispatch.

Both our factories in Pucheng and Zhumadian are fully compliant with the standards set by the Chinese government. Our factories have obtained Certificate of Good Manufacturing Practices for Animal Drugs issued by the local branches of the Ministry of Agriculture and Rural Affairs of the PRC.

The Group has set up Quality Management Departments at our production sites in Pucheng and Zhumadian to monitor and control product quality so as to ensure that our products are manufactured in accordance with the procedures outlined in our quality management manual. Every batch of our products must undergo necessary sample tests at our laboratories to check for impurities and contamination.

The quality management manual also specifies corrective actions to be taken when a product sample fails our quality tests. With our established quality management system, the Group is confident that our products are of high standards.

**B5. 供應鏈管理 (續)**

本集團的生化業務從供應商採購符合我們品質要求的原材料。新採用及現有的供應商均須通過本集團於自設實驗室進行的品質測試，包括檢驗原材料的雜質水平，確保能符合我們的嚴格標準。此外，我們會透過評估及實地審核，監測供應商於業務的表現，以確保供應商均達到我們的要求。若供應商在合同期內屢次未能達到我們的標準，該供應商將會從合格名單中被移除。

報告期內，本集團聘用853家供應商，所有供應商均以中國為基地。

**B6. 產品責任**

本集團致力為客戶提供最佳的服務和產品。產品在出貨前均須符合我們的品質要求。同時，我們所有產品根據相關法例要求，適當的標籤及宣傳產品。對於我們出口的產品，我們確保按照相關出口市場的規定進行標籤。新產品的標籤由質量保證部門、總經理和相關政府部門審批。在我們的日常運營中，我們的質量保證人員會在發貨前檢查每一批的完成品，以確保產品貼上正確標籤。

本集團在浦城和駐馬店的廠房均符合中國政府所設定的標準。我們的工廠已獲得由中華人民共和國農業農村部的地方機構頒發的《獸藥GMP證書》。

本集團於浦城及駐馬店的生產設施已成立品質管理部門以監控產品質量，確保產品的生產過程均遵照我們品質管理守則所列明的程序。我們會從每一批產品中抽取樣本於本集團的實驗室進行必要的雜質含量及污染物測試。

品質管理守則內也列明產品樣本如不通過品質測試時的糾正措施。在有關品質管理系統下，本集團有信心其產品能達至高標準。

**B6. Product Responsibility (continued)**

Our Quality Management Departments at the production sites in Pucheng and Zhumadian have partnered with leading universities and research institutes to keep abreast of the latest technologies to support our business development. Implementing the right technologies in our operations has strengthened our capability to produce top-quality products.

Nevertheless, the Group has set up a recall procedure in case any serious product quality, product safety and/or health-related incidents occur. We have established a recall committee to make necessary decisions in the unlikely event of a recall, and to inform the general manager and relevant government departments so that the Group can rectify the problem as soon as possible. The Group will ensure that any recall process is carried out in an effective and transparent manner. None of the products sold or shipped were subject to recalls for product safety and health in the Reporting Period.

The Group endeavours to deliver high-quality products to our customers so as to ensure customer satisfaction. The sales teams and quality assurance teams at Pucheng and Zhumadian are tasked to handle customer enquiries and complaints. Upon receiving a complaint, the sales team is responsible for obtaining details of the problem underlying each complaint, following which the quality assurance department conducts a preliminary assessment on the complaint and appoints investigators from relevant departments. After investigators ascertain the cause of the problem and report back to the quality assurance department, relevant departments rectify the problem. Quality assurance department then notifies the sales team to communicate with the customer in a timely manner. The quality assurance team follows up on the remedies implemented. During the Reporting Period, there were no major complaints regarding our product quality or safety.

According to our company policies and employment contracts with employees, inventions or technical knowhow developed by employees during their course of employment with the Group are owned by the Group. Where appropriate, the Group will apply for the registration of intellectual property rights, such as patents and trademarks. With regards to the protection of customer data and privacy, only authorised persons can collect customer data and have access to the collected data. Trainings are also provided to staff to enhance their awareness and knowledge on customer information protection.

**B6. 產品責任 (續)**

我們位於浦城及駐馬店的生產設施的品質管理部門與領先的大學和研究機構合作，確保本集團了解最先進的科技，以支持業務發展。在營運中運用適當的科技使我們能加強生產高品質產品的能力。

惟本集團亦訂立了一套回收程序，為萬一出現有關重大產品質量，產品安全和／或健康有關情況作準備。本集團已成立回收委員會，如一旦出現回收個案，可作出所需決策，並立即知會總經理及相關政府部門，以便盡快解決問題。本集團會確保任何回收過程具效率和透明度。報告期內，並無產品在出售或運送後因為產品安全和健康理由而需要回收。

本集團致力為客戶提供高品質產品，以確保客戶滿意度。浦城及駐馬店的銷售團隊和質量管理部負責處理客戶的查詢和投訴。在接到投訴時，銷售團隊負責就每宗投訴收集詳細資料，隨後質量管理部對投訴進行初步評估，並從相關部門落實調查責任人。調查責任人查明問題起因並向質量管理部門報告後，由相關部門進行整改。質量管理部隨後通知銷售團隊及時與客戶溝通。質量管理部會跟進實施的補救措施。報告期內，本集團沒有涉及就產品質量及安全的重大投訴。

根據我們的公司政策和與員工的僱傭合同，僱員在本集團任職期間所開發的發明及累積的專業知識均歸本集團所有。在適當的情況下，本集團會申請專利和商標等知識產權。此外，為保障客戶的資料及私隱，只有授權人員才可接收和查閱客戶資訊。我們亦會向員工提供培訓課程以提升員工在保護客戶資料方面的意識及知識。



**B. Social**

社會

**B6. Product Responsibility (continued)**

During the Reporting Period, there was no material non-compliance with relevant laws and regulations that would have a significant impact on the Group relating to health and safety, advertising, labelling and privacy matters with regards to products and services provided and methods of redress.

**B7. Anti-corruption**

The Group has adopted our anti-corruption and whistleblowing policies in 2022. We conduct our business in accordance with the highest ethical standards, and are committed to preventing corrupt practices. The Group has policies designed to prevent dishonest behaviour. In addition, anti-corruption risk assessment is performed periodically to identify related risks and assess the effectiveness of controls in mitigating these risks. Any employee who violates the Group's anti-corruption policies will be warned, dismissed and/or reported to relevant regulatory bodies. The Group also provides channels for stakeholders to report any suspicious activities and protect whistleblowers from reprisal.

To raise their awareness and knowledge regarding anti-corruption, the Group arranges integrity and anti-corruption trainings for employees and the Board periodically. These trainings covered topics such as conflict of interest prevention, anti-corruption and business ethics. These trainings provide our employees and the Board with guidance and reminder as to how they should behave and react when faced with situations involving corruption. During the Reporting Period, two sessions of anti-corruption related trainings of a total duration of three hours were offered to our biochemical business employees in China.

During the Reporting Period, there was no material non-compliance with relevant laws and regulations that would have a significant impact on the Group relating to bribery, extortion, fraud and money laundering. In the same period, there were no concluded legal cases regarding corruption practices brought against the Group or its employees.

**B6. 產品責任(續)**

報告期內，並無發生對本集團有重大影響的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之相關法律及規例的重大違規事件。

**B7. 反貪污**

本集團於二零二二年度通過了我們的反貪污和舉報政策。我們以最高的道德標準經營業務，致力預防貪污行為。本集團已制定政策防止不誠實行為。此外，集團定期進行反貪污風險評估，以識別相關風險並評估控制措施的有效性以減輕風險。任何違反本集團反貪污政策的員工將給予警告、辭退懲戒和／或通知相關監管機構。在適當情況下，本集團亦向持份者就任何可疑資訊提供舉報渠道，並保護舉報人免受報復。

為了提高其反貪污的意識和認識，本集團定期為員工和董事安排誠信及反貪污培訓。培訓涵蓋的主題包括預防利益衝突、反腐敗和商業道德。這些培訓為我們的員工和董事提供指導和提醒，讓他們知道在面對貪污情況時應該如何表現和反應。報告期內，我們為中國生化業務員工提供了兩節反貪污相關培訓課程，總時長為三小時。

報告期內，並無發生對本集團有重大影響的有關防止賄賂、勒索、欺詐及洗黑錢之相關法律及規例的重大違規事件。在同一時期，並無任何對本集團或其員工提出並已審結的就貪污訴訟提出的案件。

## B8. Community Investment

The Group takes an active role in giving back to the community and strongly ingrains this value among employees. The Group cares about the communities in which we operate. We proactively communicate with stakeholders to understand their needs and provide support through various charitable activities.

The Group also encourages our employees to take part in such activities. The Group continued to create positive social impact through a variety of community contributions and donations. The Company was awarded 2023/2024 Caring Company Logo under Hong Kong Council of Social Service's Caring Company Scheme, in recognition of our community service achievements.

During the Reporting Period, the Group held several community activities at our factory locations. Our Zhumadian staff hosted a care visit to a local primary school, and participated in the "Golden Autumn School Aid" campaign in August 2023 to raise funds for the children of families in need. Our Zhumadian and Pucheng staff also participated in blood donation events organised by blood donation centres. Also, Pucheng factory has organised environmental conservation events to assist in river cleaning.

## B8. 社區投資

本集團積極回饋社區，並向僱員灌輸這價值觀。本集團關心我們經營所在地的社區。我們主動與持份者溝通，了解他們的需求，並支持各種慈善活動。本集團亦鼓勵員工參與此類慈善活動。

本集團繼續透過多元化的社區服務和捐款為社會帶來正面的影響。本集團獲得由香港社會服務聯會「商界展關懷」計劃所頒發的2023/2024「商界展關懷」標誌，以肯定我們在社區服務的成就。

報告期內，本集團於我們的廠房所在地舉辦項社區活動。本集團的駐馬店工廠職工到訪並慰問了當區的一家小學，並在二零二三年八月參與了「金秋助學」活動，為困難職工家庭的子女籌集助學資金。在駐馬店工廠及浦城工廠，我們亦參與了捐血中心組織的捐血活動。浦城工廠更開展「正大生物送溫暖，共建美麗殿下村」活動，協助清理河道。

# Environmental, Social and Governance Data Table

## 環境、社會及管治數據表

	Units 單位	2023	2022
<b>A. Environment 環境</b>			
<b>Air Emissions 排放物</b>			
Sulphur Oxides (SO <sub>x</sub> ) 硫氧化物	tonnes 公噸	0.00 <sup>1</sup>	14.59
Nitrogen Oxides (NO <sub>x</sub> ) 氮氧化物	tonnes 公噸	0.00 <sup>1</sup>	17.54
Smoke and Dust 煙塵	tonnes 公噸	0.00 <sup>1</sup>	2.38
<b>Greenhouse Gas 溫室氣體</b>			
Direct Greenhouse Gas Emissions (Scope 1) 直接溫室氣體排放量(範圍一)	million tonnes of CO <sub>2</sub> equivalents 百萬公噸二氧化碳當量	0.00 <sup>1,2</sup>	0.02
Indirect Greenhouse Gas Emissions (Scope 2) 間接溫室氣體排放量(範圍二)	million tonnes of CO <sub>2</sub> equivalents 百萬公噸二氧化碳當量	0.10 <sup>2</sup>	0.10
Total Greenhouse Gas Emissions (Scope 1 & Scope 2) 溫室氣體總排放量(範圍一及二)	million tonnes of CO <sub>2</sub> equivalents 百萬公噸二氧化碳當量	0.10 <sup>2</sup>	0.12
Greenhouse Gas Emissions Intensity 溫室氣體排放密度	kilogram of CO <sub>2</sub> equivalents per production tonne 千克二氧化碳當量/公噸產量	2,667 <sup>2</sup>	2,745
<b>Hazardous Wastes 有害廢棄物</b>			
Hazardous Waste 有害廢棄物	tonnes 公噸	2,034	2,658
Hazardous Waste Intensity <sup>3</sup> 有害廢棄物密度	kilogram per production tonne of CTC HCL 千克/公噸鹽酸金霉素產量	3,816	3,654
<b>Non-hazardous Wastes 無害廢棄物</b>			
Non-hazardous Waste 無害廢棄物	tonnes 公噸	51 <sup>4</sup>	77
Non-hazardous Waste Intensity 無害廢棄物密度	kilogram per production tonne 千克/公噸產量	1.43 <sup>4</sup>	1.71
<b>Energy 能源</b>			
Coal 煤	terajoule 萬億焦耳	0 <sup>1</sup>	207
Electricity 電力	terajoule 萬億焦耳	344	442
Natural Gas 天然氣	terajoule 萬億焦耳	1.06	0
Steam 蒸汽	terajoule 萬億焦耳	366	383
Fuel for Vehicles 車輛燃料	terajoule 萬億焦耳	3.65	3.19
Total Energy Consumption 能源總耗量	terajoule 萬億焦耳	714	1,035
Total Energy Intensity 能源消耗密度	gigajoule per production tonne 千兆焦耳/每噸產量	20.07	23.11



## Environmental, Social and Governance Data Table

環境、社會及管治數據表

	Units 單位	2023	2022
<b>Water 水</b>			
Water Consumption 耗水量	million cubic meters 百萬立方米	3.81	7.23
Water Intensity 耗水密度	cubic meter per production tonne 立方米／公噸產量	107	161
Wastewater Discharged 污水排放	million cubic meters 百萬立方米	0.73	0.71
Wastewater Intensity 污水密度	cubic meter per production tonne 立方米／公噸產量	20.65	15.94
<b>Packaging Material 包裝材料</b>			
Total Packaging Materials Used 包裝材料總量	tonnes 公噸	810	683
Packaging Material Intensity 包裝材料密度	kilogram per production tonne 千克／公噸產量	22.8	15.24
<b>B. Social 社會</b>			
<b>Employment 僱傭</b>			
Total Employee Turnover 僱員流失總數	person/turnover rate 人／流失率	157/18%	98/11%
– By Gender 以性別劃分			
Male 男	person/turnover rate 人／流失率	111/17%	60/9%
Female 女	person/turnover rate 人／流失率	46/20%	38/15%
– By Age 以年齡劃分			
< 30	person/turnover rate 人／流失率	60/35%	40/21%
30 – 50	person/turnover rate 人／流失率	76/13%	46/8%
> 50	person/turnover rate 人／流失率	21/16%	12/8%
<b>Health and Safety 健康與安全</b>			
Lost Days Due to Work Injuries 因工傷損失工作日數	days 日	132	0
Number of Fatalities 死亡個案	cases 宗	0	1

## Environmental, Social and Governance Data Table

環境、社會及管治數據表

	Units 單位	2023	2022
<b>Development and Training 發展及培訓</b>			
<b>Percentage of Employees Trained 受訓僱員百分比</b>			
– By Gender 以性別劃分			
Male 男	percentage 百分比	85%	97%
Female 女	percentage 百分比	93%	96%
– By Employee Category 以職級劃分			
Senior 高級僱員	percentage 百分比	83%	90%
General 一般僱員	percentage 百分比	88%	98%
<b>Average Training Hours Completed Per Employee 僱員完成受訓的平均時數</b>			
– By Gender 以性別劃分			
Male 男	hours 小時	33	31
Female 女	hours 小時	24	27
– By Employee Category 以職級劃分			
Senior 高級僱員	hours 小時	19	46
General 一般僱員	hours 小時	33	28
<b>Community 社區</b>			
Donations for Charitable and Other Purposes 慈善與其他捐款	US Dollars 美元	10,000	91,000

## Remarks:

- Since May 2022, the Group has started to purchase high quality steam as opposed to producing coal generated steam on site, attributing to the significant reduction in air emissions and greenhouse gases in FY2022 and FY2023.  
自二零二二年五月起，本集團已全面使用外購蒸汽以代替煤炭產蒸，導致二零二二及二零二三財政年度的空氣污染物及溫室氣體排放大幅減小。
- The figure includes emissions generated from the use of coal, electricity, natural gas and fuel for production and transportation. For the emission factors used to calculate greenhouse gas emissions, we referred to HKEX “App 2: Reporting Guidance on Environmental KPIs”, NDRC “Guidelines on Greenhouse Gas Emission Accounting Methodologies and Reporting for Enterprises in Other Industrial Sectors (Trial)”, and national average carbon dioxide emission factors for power grids.  
該數字包括生產及運輸過程中所產生的排放量，包括煤、電力、天然氣及燃料的使用。我們參照香港聯交所《附錄二：環境關鍵績效指標匯報指引》、中國發展及改革委員會《工業其他行業企業溫室氣體排放核算方法與報告指南（試行）》及全國電網平均碳排放因子計算溫室氣體排放量。
- Mycelium residue is a by-product in the production of CTC HCL and accounts for over 99% of the Group’s hazardous waste. Therefore, it is more appropriate to calculate hazardous waste intensity based on production volume of CTC HCL than total production volume.  
菌絲體殘餘物是生產鹽酸金霉素過程中產生的副產品並佔本集團有害廢棄物的99%以上，因此，根據鹽酸金霉素的產量比總產量來計算有害廢棄物密度更合適。

## Environmental, Social and Governance Data Table

環境、社會及管治數據表

- <sup>4</sup> FY2023 non-hazardous waste related figures in the data table excluded an one-off generated waste. In July to September 2023, our Pucheng factory underwent a renovation, resulting in an increase in non-hazardous waste intensity due to waste metal generated. Including waste generated from the Pucheng renovation, non-hazardous waste generated would be 419 tonnes and non-hazardous waste intensity would be 11.78 kilogram per production tonne.

數據表內2023財政年度的無害廢棄物相關數據不包括一次性產生的廢棄物。報告期間，浦城工廠進行大型裝修工程，於七月至九月淘汰舊設備，產生金屬廢棄物，所以無害廢棄物密度有所增加。裝修廢棄物包含在內的無害廢棄物產生為419公噸，無害廢棄物密度為11.78千克／公噸產量。

## Laws and Regulations

### 法律及規例

Based on the subject areas and aspects in the ESG Guide, the Group has identified relevant laws and regulations that had a significant impact on our business. During the Reporting Period, the Group had no material non-compliance with the below stated laws and regulations.

本集團就指引中不同範疇及層面識別出對我們業務有重大影響的相關法規。報告期內，本集團並無發現對以下列法規的重大違規。

ESG Guidelines 環境、社會及管治指標	China Laws & Regulations 中國政策及法規
<b>A. Environmental 環境</b>	
Aspect A1: Emissions 層面A1:排放物	Environmental Protection Law of the People's Republic of China 《中華人民共和國環境保護法》  Atmospheric Pollution Prevention and Control Law of the People's Republic of China 《中華人民共和國大氣污染防治法》  Water Pollution Prevention and Control Law of the People's Republic of China 《中華人民共和國水污染防治法》  Prevention and Control of Solid Waste Pollution Law of the People's Republic of China 《中華人民共和國固體廢物污染環境防治法》  Prevention and Control of Soil Pollution Law of the People's Republic of China 《中華人民共和國土壤污染防治法》
<b>B. Social 社會</b>	
Aspect B1: Employment and Labour Practices 層面B1:僱傭及勞工常規  Aspect B4: Labour Standards 層面B4:勞工準則	Labour Law of the People's Republic of China 《中華人民共和國勞動法》  Labour Contract Law of the People's Republic of China 《中華人民共和國勞動合同法》  Labor Union Law of the People's Republic of China 《中華人民共和國工會法》  Employment Promotion Law of the People's Republic of China 《中華人民共和國就業促進法》  Social Insurance Law of the People's Republic of China 《中華人民共和國社會保險法》

## Laws and Regulations

法律及規例

ESG Guidelines 環境、社會及管治指標	China Laws & Regulations 中國政策及法規
Aspect B2: Health and Safety 層面B2:健康及安全	<p>Work Safety Law of the People's Republic of China 《中華人民共和國安全生產法》</p> <p>Prevention and Control of Occupational Diseases Law of the People's Republic of China 《中華人民共和國職業病防治法》</p> <p>Fire Prevention Law of the People's Republic of China 《中華人民共和國消防法》</p> <p>Special Equipment Safety Law of the People's Republic of China 《中華人民共和國特種設備安全法》</p>
Aspect B6: Product Responsibility 層面B6:產品責任	<p>Product Quality Law of the People's Republic of China 《中華人民共和國產品質量法》</p> <p>Protection of Consumer Rights and Interests Law of the People's Republic of China 《中華人民共和國消費者權益保護法》</p> <p>Advertising Law of the People's Republic of China 《中華人民共和國廣告法》</p> <p>Regulations on Administration of Veterinary Drugs 《獸藥管理條例》</p> <p>Patent Law of the People's Republic of China 《中華人民共和國專利法》</p>
Aspect B7: Anti-corruption 層面B7:反貪污	<p>Criminal Law of the People's Republic of China 《中華人民共和國刑法》</p> <p>Anti-money Laundering Law of the People's Republic of China 《中華人民共和國反洗錢法》</p> <p>Anti-Unfair Competition Law of the People's Republic of China 《中華人民共和國反不正當競爭法》</p>

# HKEX Environmental, Social and Governance Content Index

## 香港聯合交易所環境、社會及管治內容索引

Indicators 指標		Section/Statement 分部／聲明	Page 頁數
<b>A. Environmental 環境</b>			
<b>Aspect A1: Emissions 層面A1: 排放物</b>			
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer  relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. 有關廢氣及溫室氣體排放、向水及土地的排污、有害及無害廢棄物的產生等的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	A1. Emissions A1. 排放物	9-12
KPI 關鍵績效指標 A1.1	The types of emissions and respective emissions data. 排放物種類及相關排放數據。	ESG Data Table 環境、社會及管治數據表	28
KPI 關鍵績效指標 A1.2	Direct and energy indirect greenhouse gas emissions (in tonnes) and, where appropriate, intensity. 直接及能源間接溫室氣體排放量(以噸計算)及(如適用)密度。		
KPI 關鍵績效指標 A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity. 所產生有害廢棄物總量(以噸計算)及(如適用)密度。		
KPI 關鍵績效指標 A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity. 所產生無害廢棄物總量(以噸計算)及(如適用)密度。		
KPI 關鍵績效指標 A1.5	Description of emissions targets set and steps taken to achieve them. 描述所訂立的排放量目標及為達到這些目標所採取的步驟。	A1. Emissions A1. 排放物	8
KPI 關鍵績效指標 A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction targets set and steps taken to achieve them. 描述處理有害及無害廢棄物的方法，及描述所訂立的減廢目標及為達到這些目標所採取的步驟。		11-12



## HKEX Environmental, Social and Governance Content Index

香港聯合交易所環境、社會及管治內容索引

Indicators 指標		Section/Statement 分部／聲明	Page 頁數
<b>Aspect A2: Use of Resources</b> 層面A2:資源使用			
General Disclosure 一般披露	Policies on the efficient use of resources, including energy, water and other raw materials. 有效使用資源(包括能源、水及其他原材料)的政策。	A2. Use of Resources A2.資源使用	13-15
KPI關鍵績效指標 A2.1	Direct and/or indirect energy consumption by type in total and intensity. 按類型劃分的直接及／或間接能源總耗量及密度。	ESG Data Table 環境、社會及管治數據表	28
KPI關鍵績效指標 A2.2	Water consumption in total and intensity. 總耗水量及密度。		29
KPI關鍵績效指標 A2.3	Description of energy use efficiency targets set and steps taken to achieve them. 描述所訂立的能源使用效益目標及為達到這些目標所採取的步驟。	A2. Use of Resources A2.資源使用	13-14
KPI關鍵績效指標 A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency targets set and steps taken to achieve them. 描述求取適用水源上可有任何問題，以及所訂立的用水效益目標及為達到這些目標所採取的步驟。		14-15
KPI關鍵績效指標 A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced. 製成品所用包裝材料的總量(以噸計算)及(如適用)每生產單位估量。	ESG Data Table 環境、社會及管治數據表	29
<b>Aspect A3: The Environment and Natural Resources</b> 層面A3:環境及天然資源			
General Disclosure 一般披露	Policies on minimising the issuer's significant impacts on the environment and natural resources. 減低發行人對環境及天然資源造成重大影響的政策。	A. Environmental; A.環境;  A3. The Environment and Natural Resources A3.環境及天然資源	8-16
KPI關鍵績效指標 A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them. 描述業務活動對環境及天然資源的重大影響及已採取管理有關影響的行動。	A3. The Environment and Natural Resources A3.環境及天然資源	16

## HKEX Environmental, Social and Governance Content Index

香港聯合交易所環境、社會及管治內容索引

Indicators 指標		Section/Statement 分部／聲明	Page 頁數
<b>Aspect A4: Climate Change</b> 層面A4:氣候變化			
General Disclosure 一般披露	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer. 識別及應對已經及可能會對發行人產生影響的重大氣候相關事宜的政策。	A4. Climate change A4.氣候變化	16-18
KPI關鍵績效指標 A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them. 描述已經及可能會對發行人產生影響的重大氣候相關事宜，及應對行動。		17
<b>B. Social社會</b>			
<b>Aspect B1: Employment and Labour Practices</b> 層面B1:僱傭及勞工常規			
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. 有關薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、多元化、反歧視以及其他待遇及福利的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	B1. Employment B1.僱傭	19-20
KPI關鍵績效指標 B1.1	Total workforce by gender, employment type, age group and geographical region. 按性別、僱傭類型、年齡組別及地區劃分的僱員總數。		19
KPI關鍵績效指標 B1.2	Employee turnover rate by gender, age group and geographical region. 按性別、年齡組別及地區劃分的僱員流失比率。	ESG Data Table 環境、社會及管治數據表	29

## HKEX Environmental, Social and Governance Content Index

香港聯合交易所環境、社會及管治內容索引

Indicators 指標		Section/Statement 分部／聲明	Page 頁數
<b>Aspect B2: Health and Safety</b> <b>層面B2:健康及安全</b>			
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards. 有關提供安全工作環境及保障僱員避免職業性危害的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	B2. Health and Safety B2.健康及安全	21-22
KPI關鍵績效指標 B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year. 過去三年(包括匯報年度)每年因工亡故的人數及比率。	B2. Health and Safety B2.健康及安全	21-22
KPI關鍵績效指標 B2.2	Lost days due to work injury. 因工傷損失工作日數。	ESG Data Table 環境、社會及管治數據表	29
KPI關鍵績效指標 B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored. 描述所採納的職業健康與安全措施，以及相關執行及監察方法。	B2. Health and Safety B2.健康及安全	21-22
<b>Aspect B3: Development and Training</b> <b>層面B3:發展及培訓</b>			
General Disclosure 一般披露	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. 有關提升僱員履行工作職責的知識及技能的政策。描述培訓活動。	B3. Development and Training B3.發展及培訓	22
KPI關鍵績效指標 B3.1	The percentage of employees trained by gender and employee category. 按性別及僱員類別劃分的受訓僱員百分比。	ESG Data Table 環境、社會及管治數據表	30
KPI關鍵績效指標 B3.2	The average training hours completed per employee by gender and employee category. 按性別及僱員類別劃分，每名僱員完成受訓的平均時數。		

## HKEX Environmental, Social and Governance Content Index

香港聯合交易所環境、社會及管治內容索引

Indicators 指標		Section/Statement 分部／聲明	Page 頁數
<b>Aspect B4: Labour Standards</b> 層面B4:勞工準則			
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour. 有關防止童工或強制勞工的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	B4. Labour Standards B4.勞工準則	23
KPI關鍵績效指標 B4.1	Description of measures to review employment practices to avoid child and forced labour. 描述檢討招聘慣例的措施以避免童工及強制勞工。		
KPI關鍵績效指標 B4.2	Description of steps taken to eliminate such practices when discovered. 描述在發現違規情況時消除有關情況所採取的步驟。		
<b>Aspect B5: Supply Chain Management</b> 層面B5:供應鏈管理			
General Disclosure 一般披露	Policies on managing environmental and social risks of the supply chain. 管理供應鏈的環境及社會風險政策。	B5. Supply Chain Management B5.供應鏈管理	23-24
KPI關鍵績效指標 B5.1	Number of suppliers by geographical region. 按地區劃分的供應商數目。		
KPI關鍵績效指標 B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored. 描述有關聘用供應商的慣例，向其執行有關慣例的供應商數目、以及有關慣例的執行及監察方法。		
KPI關鍵績效指標 B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored. 描述有關識別供應鏈每個環節的環境及社會風險的慣例，以及相關執行及監察方法。		
KPI關鍵績效指標 B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored. 描述在揀選供應商時促使多用環保產品及服務的慣例，以及相關執行及監察方法。		

## HKEX Environmental, Social and Governance Content Index

香港聯合交易所環境、社會及管治內容索引

Indicators 指標		Section/Statement 分部／聲明	Page 頁數
<b>Aspect B6: Product Responsibility</b> <b>層面B6:產品責任</b>			
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. 有關所提供產品和服務的健康與安全、廣告、標籤及私隱事宜以及補救方法的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	B6. Product Responsibility B6.產品責任	24-26
KPI關鍵績效指標 B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons. 已售或已運送產品總數中因安全與健康理由而須回收的百分比。		25
KPI關鍵績效指標 B6.2	Number of products and service related complaints received and how they are dealt with. 接獲關於產品及服務的投訴數目以及應對方法。		25
KPI關鍵績效指標 B6.3	Description of practices relating to observing and protecting intellectual property rights. 描述與維護及保障知識產權有關的慣例。		25
KPI關鍵績效指標 B6.4	Description of quality assurance process and recall procedures. 描述質量檢定過程及產品回收程序。		24-25
KPI關鍵績效指標 B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored. 描述消費者資料保障及私隱政策，以及相關執行及監察方法。		25

## HKEX Environmental, Social and Governance Content Index

香港聯合交易所環境、社會及管治內容索引

Indicators 指標		Section/Statement 分部／聲明	Page 頁數
<b>Aspect B7: Anti-corruption</b> <b>層面B7:反貪污</b>			
General Disclosure 一般披露	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering. 有關防止賄賂、勒索、欺詐及洗黑錢的： (a) 政策；及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。	B7. Anti-corruption B7.反貪污	26
KPI關鍵績效指標 B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the Reporting Period and the outcomes of the cases. 於匯報期內對發行人或其僱員提出並已審結的貪污訴訟案件的數目及訴訟結果。		
KPI關鍵績效指標 B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored. 描述防範措施及舉報程序，以及相關執行及監察方法。		
KPI關鍵績效指標 B7.3	Description of anti-corruption training provided to directors and staff. 描述向董事及員工提供的反貪污培訓。		
<b>Aspect B8: Community Investment</b> <b>層面B8:社區投資</b>			
General Disclosure 一般披露	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests. 有關以社區參與來了解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。	B8. Community Investment B8.社區投資	27
KPI關鍵績效指標 B8.1	Focus areas of contribution. 專注貢獻範疇。		
KPI關鍵績效指標 B8.2	Resources contributed to the focus area. 在專注範疇所動用資源。	ESG Data Table 環境、社會及管治數據表	30





Chia Tai Enterprises International Limited  
正大企業國際有限公司