

中油燃氣集團有限公司

CHINA OIL AND GAS GROUP LIMITED

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

Stock Code: 603 股份代號: 603



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

2022



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CHAIRMAN'S STATEMENT

主席致辭



Dear Stakeholders,

Welcome to the Environmental, Social and Governance Report ("ESG Report") of China Oil and Gas Group Limited (the "Company") (Stock Code: 603) and its subsidiaries (collectively referred to the "Group" or "We") for the year from 1 January 2022 to 31 December 2022 (the "year" or "2022")

As a clean energy company, the Group shoulders the mission of "Develop Clean Energy, Create Better Life" and has been promoting the use of natural gas since our establishment.

As at 31 December 2022, the Group has obtained 71 concession rights and completed approximately 20,620 km natural gas pipelines in 13 provinces, municipalities and autonomous regions in the People's Republic of China (the "PRC"). The Group supplies economical and clean natural gas to 1,913,541 residential users and 16,696 industrial and commercial users.

各位尊敬的利益相關方:

歡迎閱讀中油燃氣集團有限公司(「公司」)(股份代號:603)及其附屬公司(統稱為「集團」或「我們」)於二零二二年一月一日至二零二二年十二月三十一日(「本年度」或「二零二二年」)的環境、社會及管治報告(「ESG報告」)。

集團作為清潔能源公司,肩負著「發展清潔能源,共創美好生活」的使命,自成立以來不斷 地推動天然氣的廣泛應用。

截至二零二二年十二月三十一日,集團已在中華人民共和國(「中國」)13個省、直轄市及自治區擁有71項燃氣特許經營權,投資建成天然氣管道約20,620公里。集團為1,913,541戶居民用戶及16,696戶工商業用戶供應經濟、潔淨的天然氣。

(continued) (續)

For the year, the Group's total sales volume of natural gas was approximately 5,052 million m³, which is equivalent to the estimated reduction of approximately 6.72 million tonnes of coal used, and this contributed to the estimated reduction of carbon dioxide emissions by approximately 24.64 million tonnes. The Group continues to work together and makes contributions to the transformation of energy structure of the PRC and the reduction of carbon emissions and smog pollution.

Since its establishment, the Group emphasises the safety of the gas production and operation, and the Group strictly regulates every detail of the production process. During the year, no safety production liability accidents or casualties were recorded in the subsidiaries of the Group and the certification rate of safety management personnel is 100%.

To prevent and reduce the occurrence of safety incidents, the Group has established a comprehensive management system with clear accountability based on the laws and regulations promulgated by the PRC, such as the Guideline of China Occupational Safety and Health Management System (GB/ T 33000), the Safety Technical Specification for Operation, Maintenance and Rush-repair of City Gas Facilities and other standards. The Safety Supervision Department is responsible for supervising various safety activities and emergency drills, and safety audits are organised twice a year for each of the Group's subsidiaries. No severe safety accidents of general (level B) or higher severity were recorded from any subsidiaries of the Group in the year. Furthermore, the Group continues to optimise the information management platform, striving to build a highly efficient and intelligent enterprise to supply clean energy stably and reliably.

The Group firmly believes that human resources are the most valuable assets and the accomplishment of the Group today are attributed to the joint effort of our talents. To this end, the Group dedicates to establishing a learning enterprise. The Group invites senior management, industry experts, professional lecturers and internal trainers to impart skills and knowledge to employees, fostering talents and paving the way for business success.

In addition to providing employees with opportunities for continuous improvement to enhance their overall quality and professional skills, the Group also strives to create a harmonious and encouraging cultural atmosphere to help employees to have a strong work-life balance. The Group also offers reasonable salaries, well-rounded benefits and development opportunities. The Group strictly abides by the laws and regulations relating to labour in all locations of business and has established an excellent employment management system. The Group has also formulated an annual training plan and organises various activities to enrich the lives of employees and to grow together with employees.

於本年度,集團總天然氣銷售量約為5.052百萬 立方米,估計相當於減少使用煤炭約6.72百萬 噸,有助減少排放約24.64百萬噸二氧化碳。集 團 上下齊心,為我國能源結構低碳轉型及減碳 降霾持續作出貢獻。

自成立以來,集團高度重視燃氣生產運營安 全,並嚴格把控生產經營過程中的每一個環 節。於本年度內,集團各所屬公司概無錄得任 何生產安全責任事故或人員傷亡,安全管理人 員持證率為100%。

為防止及減少安全事故的發生,集團依據國家 頒佈的《企業安全生產標準化基本規範》(GB/T 33000)及《城鎮燃氣設施運行、維護和搶修安 全技術規程》等標準制定了全面細緻、責任明 確的安全相關管理辦法,並委派安全監察部負 責督促各所屬公司組織各項安全活動和應急演 練,以及每年組織兩次全覆蓋性的安全檢查。 於本年度,各所屬公司概無錄得任何一般(B級) 或以上安全生產責任事故。同時,集團持續優 化信息管理平台,致力打造一個全新的高效運 營智能化企業,以確保集團能夠穩定可靠地供 應清潔能源。

集團堅信員工是企業最大的財富,集團能發展 成如今的規模皆有賴團隊的共同努力。為此, 集團著力創建學習型企業,邀請集團高管、行 業專家、專業講師、企業內訓師為員工傳授技 能和知識,培養人才,為集團的事業發展奠定 基礎。

除了為員工提供持續進修的機會以提升員工的 綜合素質和職業技能外,集團亦注重營造和諧 向上的文化氛圍,努力幫助員工平衡工作與生 活,並提供合理的薪酬、完善的福利和發展機 會。集團認真遵守業務所在地有關勞工的法律 法規,建立了良好的用工管理制度,並且每年 制定年度培訓計劃及組織各項活動來豐富員工 的生活,實現員工和企業共同發展。



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In respect of the continuous development of the economy of the PRC, a safe, stable, clean and efficient energy system plays a pivotal role in the path of the country's sustainable development. As a clean energy company, the Group will persistently innovate and make energy-related technological breakthroughs with international competitiveness, satisfy the needs of economic development and safeguard the energy security of the PRC. In addition, the Group has set environmental targets since the financial year ended 31 December 2021 ("2021") for carbon reduction, waste reduction, energy saving and water conservation to promote green business. For more information on the progress, initiatives and performance, please refer to the sections headed "6. Dedication to Green Development" and "10. Sustainability Performance Data for 2022".

In the future, the Group will place even greater emphasis on sustainable development and continuous improvement. It will continue to deepen communication with stakeholders, constantly understand and respond to their concerns, and strive to become an influential clean energy company.

Xu Tie-liang

Chairman

未來,集團將會更加注重可持續發展和持續進步,繼續深化與利益相關方的溝通,持續了解和回應各方的關注事項,努力成為一家有影響力的清潔能源公司。

許鉄良

主席



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SUMMARY OF SUSTAINABLE PERFORMANCE FOR 2022

二零二二年可持續發展表現摘要



million HKD 百萬港元

Total Revenue 總營業額



5,052 million m³ 百萬立方米 Total Sales Volume of Natural Gas

總天然氣銷售量



million tonnes 6.72 百萬噸

Reduction of Coal Usage due to Natural Gas Sales (Estimated) 天然氣銷售協助減少的煤炭 使用量(估算)



24.64 million tonnes 百萬噸

Reduction of CO, Emissions due to Natural Gas Sales (Estimated) 天然氣銷售協助減少的二氧化碳 排放量(估算)



Reduction of SO₂ Emissions due to Natural Gas Sales (Estimated) 天然氣銷售協助減少的二氧化硫 排放量(估算)



Baccalieu's Oil Field Wastewater Recycling Rate 石油井區污水回收率

MANAGEMENT SYSTEM CERTIFICATION

管理體系認證



ISO9001 Quality Management System ISO9001 質量管理體系



ISO45001 Occupational Health and Safety Management System ISO45001 職業健康安全管理體系



ISO14001 Environmental Management System ISO14001 環境管理體系



Guideline of China Occupational Safety and Health Management System Production Safety Standardisation Level 3 Enterprise (City Gas), Production Safety Standardisation Level 3 Enterprise (Hazardous Chemicals)

《企業安全生產標準化基本規範》(GB/T 33000-2016) 一安全生產標準化三級企業(城鎮燃氣)、 安全生產標準化三級企業(危險化學品)



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1. ABOUT ESG REPORT

1.1 Reporting Basis

The ESG Report is prepared in accordance with the Environmental, Social and Governance Reporting Guide ("ESG Reporting Guide") set forth in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Stock Exchange"). This ESG Report discloses the Group's efforts in Environmental, Social and Governance ("ESG") aspects. In order to fully understand the environmental, social and corporate governance performance of the Group, this ESG Report should be read in conjunction with the "Corporate Governance Report" within the annual report.

During the preparation for the ESG Report, the Group has applied the reporting principles in the aforementioned ESG Reporting Guide as the following:

Materiality: Materiality assessment was conducted to identify material issues during the year, thereby adopting the confirmed material issues as the focus for the preparation of the ESG Report. The materiality of issues was reviewed and confirmed by the board of Directors of the Company (the "Board") through the environmental, social and governance committee of the Company (the "Committee"). Please refer to the section headed "Value the Participation of Stakeholders" for further details.

Quantitative: The standards and methodologies used in the calculation of the key performance indicators ("KPIs"), as well as the applicable assumptions are supplemented in notes.

Consistency: Unless otherwise stated, the ESG Report was prepared in the same methodology as 2021 for comparison purposes. Explanations will be provided regarding data in the event of any changes in the disclosure scope and calculation methodologies that may affect the comparison with previous reports.

1.2 Reporting Scope

Unless otherwise specified, the reporting scope is consistent with the annual report, which covers the core business of the Group in the PRC and the core business of the Group's subsidiary, Baccalieu Energy Inc. ("Baccalieu") in Canada for the year. The core business of the Group includes the operation of city gas pipelines, pipeline design and construction; transportation, distribution and sales of compressed natural gas ("CNG") and liquefied natural gas ("LNG"), and the development, production and sales of crude oil and natural gas, along with other upstream energy resources. Based on the materiality of the business segments and their relative environmental impacts, the ESG Report only includes environmental KPI data for the four business segments within the reporting scope. These segments include Baccalieu, Qinghai COG Pipeline Co., Ltd ("LNG processing plants"), Shandong Qizhi Equipment Manufacturing Co., Ltd ("Shandong Qizhi Equipment") and the Zhuhai head office.

1.3 Information and Feedback

For information on ESG aspects of the Group, please refer to the ESG Report on the Group's official website (www.hk603.com). If anyone has any comments, suggestions or feedback on the content of the ESG Report, please feel free to email us at info@hk603.com.

1. 關於ESG報告

1.1 編製基準

集團按照香港聯合交易所有限公司(「聯交所」)證券上市規則附錄二十七《環境、社會及管治報告指引》(「ESG報告指引」)編製ESG報告。ESG報告披露集團於本年度內在環境、社會及管治(「ESG」)方面所推行的各項工作。ESG報告應與年報中的「企業管治報告」章節一併閱覽,以便全面了解集團在環境、社會及企業管治方面的表現。

在編製ESG報告期間,集團採用了上述ESG報告 指引中的匯報原則,如下所示:

重要性:集團已於本年度進行重要性評估以識別重大議題,並將已確認的重大議題作為ESG報告的編製重點。議題的重要性已由公司董事局(「董事局」)經公司環境、社會及管治委員會(「委員會」)審閱及確認。有關進一步詳情,請參閱「重視利益相關方參與」一節。

量化:計算關鍵績效指標(「關鍵績效指標」)數據所使用的標準和方法以及適用的假設均已於註釋補充。

一致性:除非另有説明,ESG報告的編製方法 與二零二一年一致,以便進行比較。如披露範 圍及計算方法有任何變化,並可能影響與過往 報告的比較,集團將對相應的數據進行解釋。

1.2. 報告範圍

除有特別註明外,報告範圍與年報一致,其 涵蓋本年度內集團於中國以及集團附屬公司 加拿大的核心業務。集團重要的核心業務 城市管道燃氣營運、管道設計及建造;壓 然氣(「CNG」)及液化天然氣(「LNG」)之運輸、資 領及銷售;原油及天然氣(「LNG」)之運輸、資 開發、生產及銷售。由於大學之建設工程建設方 開發、生產及銷售。由於大學之建設工程 環境績效數據學,ESG報告僅包含報告範 提對的環境影響,ESG報告僅包含報告範 指對的環境影響,ESG報告僅包含報告範 指對的環境影響,ESG報告僅包含報告 類別報行標數據 分部包括Baccalieu公司、 有限公司(「LNG加工廠」)、山東齊智燃氣設備總 造有限責任公司(「山東齊智設備」)以及珠海總 造有限責任公司(「山東齊智設備」)以及 部辦公室。

1.3. 信息及反饋

有關集團ESG方面的資訊,請詳閱上載至集團官方網站(www.hk603.com)的ESG報告。如任何人士對ESG報告的內容有任何意見、建議或反饋,歡迎以電郵形式發送至info@hk603.com。

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2. ABOUT US

2.1 Corporate Profiles

The Group is principally engaged in the investment in natural gas and energy related business. Operations of the Group include piped city gas business, pipeline design and construction; transportation, distribution and sale of CNG and LNG; and development, production and sale of crude oil and gas and other upstream energy resources.

As a piped city natural gas service provider, the Group supplies city natural gas through long-distance transmission pipelines. With 71 concession rights, the Group has built up city pipeline networks which offer stable and sufficient natural gas resources to local household, industrial, commercial and other users. As a non-pipeline natural gas provider, the Group has established 2 LNG processing plants in Qinghai Province, the PRC. Meanwhile, the Group has also built certain CNG primary stations to ensure a smooth supply of natural gas all year round. These facilities support supplies of natural gas to cities not yet covered by pipeline networks and are treated as emergency backup gas sources for the Group.

As an operator of natural gas branch pipelines, the Group has already completed approximately 20,620 km natural gas pipelines in 13 provinces, cities and autonomous regions. Apart from bringing in stable natural gas transmission revenue, the branch pipelines constructions will also facilitate the development of projects along the down-stream.

The Group has established a large-scale natural gas transport and logistics operation in the PRC, including the set up of LNG and CNG fleets which have reinforced the mobility and coverage of our natural gas supplies.

As an upstream energy resources producer, the Group engages in the development, production and sale of crude oil and gas and other resources in Alberta of Canada. The exploration and production business of the Group has the proved reserves of approximately 25.95 million barrels of oil equivalent and the proved plus probable reserves of approximately 42.25 million barrels of oil equivalent. Its average daily production was 5,492 barrels of oil equivalent during the year. Our exploration and production business possesses energy business in production, a very experienced management team with proven track records, a stable production assets portfolio and strong profitability with considerable potential for growth.

2. 關於我們

2.1. 公司簡介

集團主要從事天然氣及能源相關業務之投資。 集團之業務包括城市管道燃氣營運、管道設計 及建造:CNG及LNG之運輸、分銷及銷售:及原 油及天然氣等其他上游能源資源開發、生產及 銷售。

作為城市管道燃氣服務供應商,集團透過長距離輸送管道供應城市天然氣。集團已獲得71個燃氣特許經營權,建立了城市管道網絡,為為天然氣等,是人人人人。 資源。作為非管道天然氣供應商,集團於內衛之子,然中 資源省建立了兩座LNG加工廠。同時,集氣國 建造多個CNG加氣母站,確保集團之一, 應全年保持穩定。該等設施有助於向尚未有團 道網絡覆蓋的城市供應天然氣,並被視為集團 之應急備用燃氣來源。

作為天然氣支線管道經營之營運商,集團已於 13個省、直轄市及自治區投資建成總長度約 20,620公里的天然氣管道,除了增加天然氣管 道運輸收入外,更可帶動下游沿線天然氣市場 的開發。

集團已於中國發展龐大的天然氣運輸及物流業務,已建立LNG及CNG運輸車隊,增強了集團 天然氣供應之流動性以及擴大了其覆蓋範圍。

作為上游能源資源之生產商,集團於加拿大阿爾伯塔省從事原油及天然氣等資源的開發、生產及銷售,集團油氣生產業務之探明儲量約為42.25百萬桶油當量,本年度平均每日產量為5,492桶油當量。集團之油氣生產業務擁有在產的能源業務及一個經驗豐富、業績卓越的管理團隊,具穩定的生產資產組合,較強的盈利能力及廣闊的增長空間。

NATURAL GAS DISTRIBUTION BUSINESS IN THE PRC 中國天然氣分銷業務

Main trunk pipelines 主要幹線管網

- West-to-East line 1 西氣東輸一線
- West-to-East line 2 西氣東輸二線
- West-to-East line 3 西葡萄輸三線
- Se-Ning-Lan line 澀寧蘭線
- Shaan-Jing line 3 陝京三線
- Shaan-Jing line 4 陝京四線
- Cang-Zi Line 滄淄線
- **Zhong-Wu Line** 忠武線
- ---- Myanmar-China Line 中缅線

Company operating assets / data 公司運營資產及數據

- Branch pipeline 公司自有支線管道
- City gas project with concession right 公司城市天然氣項目
- ▲ LNG processing plant 公司液化天然氣工廠
- CNG/LNG/L-CNG station
 - 公司天然氣加氣站
- Province with natural gas sales volume > 500mn m³ in 2022 公司二零二二年銷氣量5.0億立方米以上省份
- Province with natural gas sales volume between 100mn m³ and 500mn m³ in 2022 公司二零二二年銷氣量1.0-5.0億立方米省份
- Province with natural gas sales volume < 100mn m³ in 2022 公司二零二二年銷氣量1.0億立方米以下省份
- Province to enter in near term 公司於近期內準備開展業務的省份



(continued) (續)



OIL AND GAS PRODUCTION BUSINESS IN CANADA

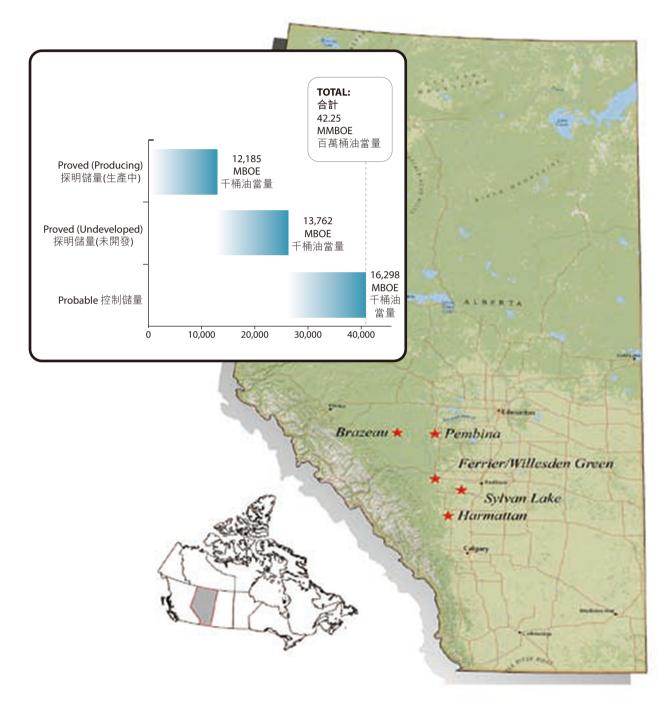
As at 31 December 2022

RESERVES

加拿大油氣生產業務

儲量

於二零二二年十二月三十一日





(continued) (續)

2.2 Enterprise Culture

2.2 企業文化





(continued) (續)



2.3 Concept of Sustainability

The Group is principally engaged in natural gas and energy related businesses. With the mission of to "Develop clean energy, Create better life", the Group has seized the opportunities arising from the carbon peak and carbon neutrality targets, leveraged its resources, optimised its strategic deployment, continuously improved the quality of its management and employees, and strengthened its risk management, in order to endeavour to provide stable natural gas supply, quality products and dedicated services to its customers. In response to the Paris Agreement and the national policy of "Reducing Carbon Emissions and Mitigating the Problem of Smog", the Group actively contributes to refining the energy mix in the PRC, increasing the market share of natural gas and strongly supporting the development of clean energy.

As a natural gas service provider, it is our duty to promote and spread the use of natural gas and make contributions to the improvement of the atmospheric environment. Through years of efforts and effective operational management, the Group contributed to ease global warming; during the year, approximately 5,052 million m³ of natural gas were successfully promoted and sold, which is equivalent to the estimated reduction of approximately 6.72 million tonnes of coal used, and this contributed to the estimated reduction of carbon dioxide emissions by approximately 24.64 million tonnes.

The Group concentrated in the investment of high-quality city gas projects, intensified efforts in developing possible markets and strived to obtain concession rights in various regions of the PRC; the Group seized every opportunity, improved efficiency, increased market share of gas and provided sufficient and clean natural gas resources for users in different regions. As of 31 December 2022, the Group has obtained 71 concession rights, and has provided clean and efficient natural gas to 1,913,541 residential users and 16,696 industrial and commercial users in 13 provinces, municipalities and autonomous regions of the PRC. The Group has accumulated investments in the construction of natural gas pipelines for approximately 20,620 km. Utilising a structure wherein city gas projects act as the primary body, and resource development and energy services act as the wings, the Group has composed a diversified and coordinated development of unified upstream and downstream operations. In the future, the Group will further explore the domestic market of gas, allocate resources accordingly, ensure the provision of stable gas supply and promote natural gas to become the main force in the energy consumption structure of the PRC.

2.3 可持續發展理念

集團主要從事天然氣及能源相關之業務。集團秉承「發展清潔能源,共創美好生活」的使命,把握碳達峰、碳中和目標帶來的機遇,發揮了源優勢,優化戰略佈局,不斷提升管理和員工素質,加強風險管理,竭盡全力為客戶提供穩定的天然氣供應、優質的產品和貼心的服務。為響應《巴黎協定》的簽定、國家「降碳除霾」政策的落實,集團積極配合調整能源結構並致力提高天然氣的市場佔比率,大力支持發展清潔能源的大方向。

集團作為燃氣公司,協助國家推廣天然氣的廣泛使用以貢獻空氣治理,我們責無旁貸,經過多年孜孜不倦的努力,配合行之有效的營運管理,集團本年度成功推廣及銷售天然氣約5,052百萬立方米,估計相當於減少使用煤炭約6.72百萬噸,減少排放二氧化碳當量約24.64萬噸,舒緩地球溫室效應。

(continued) (續)

In accordance with the national carbon peak and carbon neutrality goals and in line with the strategic development deployment and actions of advanced enterprises in the industry, the Group will conduct comprehensive research and studies on its medium-and long-term business development directions, and continue to optimise its core business positioning in the medium-and long-term in light of the prevailing circumstances. The Group will initiate the deployment of new businesses such as integrated energy services and new energy sources, explore the construction of the Group's ecological system to help the Group advance its new business strategies through ecological partners, and strongly promote the extensive development of ESG-related green industries such as photovoltaics, hydrogen energy utilisation, charging and wastewater utilisation by the Group and its project companies in various forms of cooperation and development.

2.4 ESG Governance Structure

The Group developed an ESG governance framework to ensure the alignment of ESG governance with our business strategy, while integrating ESG management into our business operations and decision-making process.

To manage the Group's ESG performance, related issues and potential risks, the Board has to take the overall responsibility for the Group's ESG issues and reporting, and discusses ESG-related issues collectively at least once a year. To improve ESG governance and enhance management capabilities, the Group has established the Committee, whose members have the appropriate skills, experience, knowledge and perspectives to oversee the Group's ESG issues. The key functions of the Committee include, but are not limited to:

- Supervise and review the formulation of the Group's ESG management policies and strategies to ensure compliance with applicable legal and regulatory requirements, and recommend improvement strategies;
- Oversee the formulation and implementation of the Group's ESG targets, including: setting the Group's ESG management performance targets; collecting and analysing ESG data to monitor and evaluate the Group's ESG performance; reviewing progress towards the achievement of the targets and providing recommendations on actions required to achieve the targets;
- Review the annual ESG report and other ESG-related disclosures and make recommendations to the Board for approval; and
- Identifying material ESG issues, risks and opportunities relevant to the company, assessing the impact of such risks or opportunities on the Group, and advising the Board on how the risks or opportunities should be addressed.

Under the authority of the Board, the Committee is responsible for the practical implementation of ESG issues in collaboration with independent third parties and meets formally at least once a year to regularly discuss ESG-related issues. The Committee is required to report to the Board on its decisions or recommendations in order to improve the overall performance of the ESG policy.

2.4 ESG管治架構

為將ESG理念融入至我們的業務營運及決策過程當中,集團已建立ESG管治架構,以確保ESG管治與我們的業務策略保持一致。

為了管理集團於ESG方面的表現、相關問題和潛在風險,董事局需對集團的ESG議題及匯報承擔整體責任,並至少每年一次集體討論ESG相關事宜。為完善ESG管治及提升管理能力,集團已成立委員會,其成員具備監督本集團ESG事宜所需的適當技能、經驗、知識及觀點。委員會主要工作職能包括但不限於:

- 監督及檢討集團ESG管理方針及策略的制定,確保符合適用的法律及監管要求,並 建議改善策略;
- 監察集團目標的制定和實施,包括:制定 集團ESG管理績效目標:收集和分析ESG 數據、監測和評估集團的ESG表現;檢討 目標實現的進度,並就實現目標所需採 取的行動提供建議;
- 審閱年度ESG報告及其他ESG相關披露信息,並向董事局提出建議以供批准;及
- 識別與集團有關的重要ESG事宜、風險與機遇,評估此類風險或機遇對集團的影響,並就風險或機遇的應對向董事局提供建議。

在董事局的授權下,委員會與獨立第三方合作 負責ESG事宜的具體執行,並每年至少安排一 次正式會議,定期就ESG相關事宜進行討論。 委員會需至少每年一次向董事局匯報其決定或 建議,以提高ESG政策的整體績效。

(continued) (續)



3. VALUE THE PARTICIPATION OF STAKEHOLDERS

In order to collect and understand the suggestions and opinions of stakeholders on the ESG aspects of the Group, we regularly communicate with stakeholders. Based on the ESG Reporting Guide stipulated by the Stock Exchange, the Group communicated with stakeholders through a diverse and unobstructed way to understand their expectations and needs, and adjusted the strategies and policies of sustainability development according to material issues prioritised by stakeholders in a timely manner.

3. 重視利益相關方參與

我們定期主動與利益相關方進行溝通,以便 收集且了解各利益相關方對集團在ESG方面的 意見與觀點。集團以聯交所ESG報告指引為基 礎,透過建立多元、通暢的溝通方式與利益相 關方進行溝通交流,了解利益相關方的期望與 需求,針對利益相關方優先關注的重要議題, 適時調整可持續發展策略及政策。

Stakeholders 利益相關方	Expectations and Concerns 期望及關注點	Communication Channels 溝通渠道	
Investors and shareholders 投資者及股東	 Corporate sustainable development 企業可持續發展 Protection of legitimate rights and interests 保障合法權益 Improve internal control and risk management 改善內部監控及風險管理 Financial performance 財務業績 Disclosing latest information of the corporate in due course 及時公佈企業最新信息 	 Announcements and circulars 公告及通函 Annual general meeting and other shareholder meetings 股東週年大會及其他股東會議 Financial reports 財務報告 	
Customers 客戶	 Safe and high-quality product and service 安全及優質的產品與服務 Protection of customer privacy 客戶隱私保護 Compliant operation 合規經營 	 Customer service counter 客戶服務窗口 Online platform such as WeChat official account 微信公眾號等網絡平台 Customer satisfaction survey 客戶滿意度調查 Telephone 電話溝通 	
Suppliers 供應商	 Win-win cooperation 合作共赢 Fair and open procurement 公平公開競爭 Business ethics and integrity 商業道德與誠信 	 Site visit 實地考察 Management meeting 管理層會議 Business discussion and negotiation 商務洽談 	
Employees 員工	 Remuneration and benefits 薪酬與福利 Healthy and safe working environment 健康安全的工作環境 Equal opportunity for promotion 平等晉升機會 Career development 職業發展 	 Intranet 內部網絡 Regular trainings 定期培訓 Regular meetings 定期會議 Employee announcement and broadcast 員工通訊和廣播 Performance appraisal 工作表現評核 	



(continued) (續)



3.1 Identifying and Prioritising Material Issues

With reference to international, national and industrial standards, and benchmarking with leading corporates in the industry, the Group identified 19 issues that reflect the sustainable development of the business. Through online questionnaires, the Group extensively consulted with both internal and external stakeholders as to their degree of concern for each issue.

3.1. 識別及釐定重要性議題的優先次序

集團參考國際、國內及行業標準,對比同行領 先企業,識別出反映集團業務可持續發展的議 題共19項,並透過線上問卷調查的方式,廣泛 諮詢內外利益相關方對各個可持續發展議題的 關注程度。

Identifying relevant issues 識別相關議題

- In accordance with the Stock Exchange's ESG Reporting Guide and based on results of past materiality analysis, we identify and formulate issues related to the Group's businesses and the development of the industry, which can be classified into five categories.
- 參考聯交所ESG報告指引,及根據過去的重要性分析結果,識別並擬定與集團業務與行業發展相關的議題,並分為五大類別。

Collecting opinions from stakeholders 收集利益相關方意見

- We invite stakeholders to submit their opinions on our sustainable development work through an anonymous online questionnaire, and understand the extent of stakeholders' concern for
- 我們設立網上問卷調查,邀請各 利益相關方以匿名的方式表達 對我們的可持續發展工作的意 見,並了解他們對各議題的關 注程度。

Analysing and reviewing the results 分析及審視結果

- the questionnaire, a
 materiality matrix is generated
 and reviewed by the Board
 through the Committee. We
 ensure that the identified
 material topics are covered in
 this ESG Report.
- 分析利益相關方問卷的結果 後,我們根據結果繪製重要性 矩陣,並由董事局經委員會進 行審查。我們確保本ESG報告 中涵蓋了已識別的重要議題。

(continued) (續)



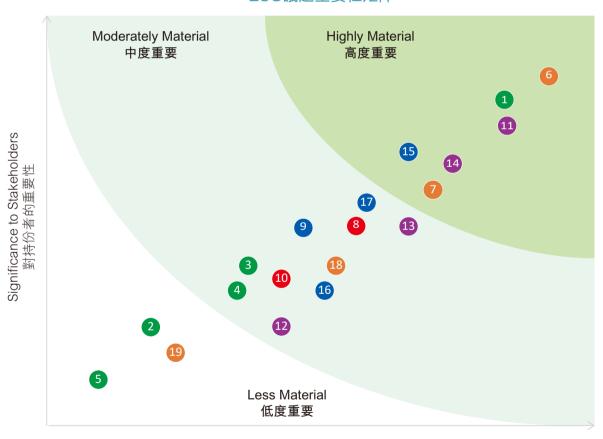
3.2 Materiality Analysis

Using the feedback and the questionnaire results from the stakeholders, the Group conducted materiality assessment and plotted the findings in the materiality matrix. The following materiality matrix shows how these 19 issues were prioritised. The closer an issue is to the upper right-hand corner, the more significant it is to the Group and the stakeholders. The closer an issue is to the lower left-hand corner, the less significant it is.

3.2 重要性分析

集團利用利益相關方的反饋與問卷結果對相關可持續發展議題進行重要性評估並繪製重要性矩陣。以下重要性矩陣展示了19項議題的優先次序。矩陣中越靠近右上角的議題對集團及利益相關方的重要性越高,越靠近左下角的議題重要性越低。

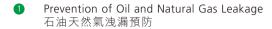
Materiality Matrix of ESG Issues ESG議題重要性矩陣



Impact of Our Business to the Economy, Environment and Society 業務對經濟、環境及社會的影響



(continued) (續)



- Resources Consumption (including Energy Consumption and Water Consumption) 資源消耗(包括能源消耗及水源消耗)
- 3 Emissions and Pollution Control 控制排放及污染
- 4 Waste Management 廢物處理
- 5 Climate Change 氣候變化
- 6 Safe and Stable Supply of Gas 安全穩定供氣
- **Ouality of Products and Services** 產品及服務質量
- 8 Customer Service Management 客戶服務管理
- 9 Reasonable Price 合理的價格
- Customer Privacy Protection 客戶隱私保護

- Protection of Employees' Rights 保護員工權益
- Employee Training and Development 員工培訓及發展
- (B) Caring for Employees 員工關愛
- Safeguard Occupational Health and Process Safety 保障職業健康與工藝安全
- (5) Compliance with Environment-related Laws and Regulations 遵守環境相關法規
- 6 Environmental and Social Risk Management in Supply Chain 供應鏈環境與社會風險管理
- Corruption and Fraud Prevention 防止貪污及舞弊
- (B) Corporate Social Responsibility 企業社會責任
- ⑥ Contribution to Local Economy 服務地方經濟

After considering the impact of our business to the economy, environment and society and the significance to stakeholders in respect of these ESG issues, 6 highly material issues, 10 moderately material issues and 3 less material issues were identified. While focusing on material issues, this ESG Report also responds to the major concerns of external stakeholders. The policies and management measures in all material aspects specified in the ESG Reporting Guide issued by the Stock Exchange are set out in the relevant sections of this ESG Report. For details, please refer to the index table in the appendix.

綜合考慮集團業務就這些ESG議題對經濟、環境及社會的影響及對利益相關方的重要性兩個層面後,我們確立了6項高度重要議題、10項中度重要議題以及3項次重要議題。本ESG報告將在聚焦重要議題的同時,回應外部利益相關方關注的主要事宜。聯交所ESG報告指引各重要層面的政策與管理措施於本ESG報告中的對應位置,詳見附錄中的索引表。

(continued) (續)



4. SAFE AND STABLE SUPPLY OF GAS

The Group upholds a strong sense of responsibility and commitment to ensure that our users enjoy a stable supply of gas and quality service. For this purpose, the Group selects suppliers rigorously to ensure a good quality of the gas, gas safety inspections are conducted regularly and gas safety is communicated to the public, so as to enhance the level of safety from the supply side to the end use of gas.

4.1 Procurement Management

In order to improve the overall control of the Group's supplies and to establish a safe and stable supplier team, the Group has improved its supplies procurement management and supervision mechanism and formulated the "Measures for the Management of Supplies", implemented the coordination and execution of the Group's supplies control department, regulated the centralised procurement of supply chain companies and the preparation procedures of procurement plans of each subsidiary. For projects with a procurement contract value of RMB300,000 or above, the tendering process must be initiated by the supplies control department in strict accordance with the Group's Tender Management Regulations, which may otherwise be conducted by way of competitive bidding.

The Group has established a supplier access management process and conducts annual supply surveys and factory inspections to monitor the production and management of suppliers. The Group requires its subsidiaries to examine the valuation in aspects such as service quality, safety, environmental protection awareness, market reputation and sales performance, as well as their relevant qualifications such as product certification and the ISO14001 Environmental Management System, in order to refrain from selecting suppliers with poor performance. The Group also chooses project suppliers carefully to ensure the quality of projects, to control project costs and to minimise procurement costs. Supplies procurement involving project investments must be approved by the Group and the local government before they can be implemented.

4. 安全穩定供氣

集團秉持高度的責任感和使命感全力確保燃氣 安全穩定供應,多方面保障穩定供氣,確保各 類用戶能安全及穩定地使用天然氣。為此,集 團嚴格挑選供應商、確保燃氣質量,同時定期 開展燃氣安全檢查、舉辦燃氣安全宣傳等,務 求由供氣到用氣全方位保障燃氣安全。

4.1. 採購管理

為提高集團物資整體管控水平,建立安全及穩定的供應商隊伍,集團已完善物資採購管理監督機制並制定《物資管理辦法》,落實集團物資管控部的統籌及執行工作,規範供應鏈公司採購計劃的編報程序。採購合同金額達到30萬元人民幣以上的項目,必須由物資管控部嚴格按照集團《招投標管理辦法》啟動招標投標程序,否則則可採用詢比價方式進行採購。

(continued) (續)

Meanwhile, we extended our management of material quality upstream by requiring suppliers to use specified brands for raw materials or core components to ensure that the quality and performance of their key products are up to standard. This is to prevent safety incidents caused by procured materials, parts and equipment, which comprehensively manages potential environmental and social risks in the supply chain. The Group will terminate the contract with any supplier found to be in serious breach of laws and regulations. In addition, the Group is committed to supporting the local economy by prioritising the procurement of goods and services from local suppliers, in a bid to reduce the carbon footprint during transportation. The Group also gives priority to suppliers using environmentally-friendly products and services in the selection process, striving to minimise potential environmental and social risks in the supply chain. During the year, the Group implemented practices regarding supplier engagement to all suppliers (2021: all). The Group will regularly monitor the implementation of such policies and measures to ensure their effectiveness.

Case: Training session on the procurement

During the year, the gas business department of Qinghai held a two-day training session on the procurement to ensure that the staff in charge were familiar with the Group's latest centralised supplies procurement management process, material classification and the operation of the relevant platforms.

案例:物資採購業務培訓會議

於本年度,青海燃氣事業部已舉行為期2天的物資採購業務培訓會議,以確保負責人員熟悉集團最新的物資集中採購管理流程、物資分類以及相關平台操作。



(continued) (續)



4.2 Safe Usage of Gas

In order to improve the safe usage of gas, all subsidiaries conduct gas safety inspections in their serving regions and regularly detect leakages through using advanced monitoring instruments, conducting safety assessments and providing regular inspections for households and residents. With the aim of building the sense of gas safety, the Group carries out activities to promote the knowledge of gas safety to the public, such as organising educational and promotional activities in communities and schools to teach the public on the proper use of gas facilities and procedures to handle gas hazards when discovered.

Case: Gas safety campaign

With the permission and assistance of the authorities, Guizhou COG Limited (貴州中油燃氣有限公司) organised a safety campaign with the theme of "Concern for Gas Safety, Build a Harmonious Home" at the city centre square during the year. The activities covered topics such as "Gas Safety Tips", "Gas Pipeline Protection" and "Gas Pipeline Occupancy Hazards". The event received enquiries from over 300 individuals, while 660 brochures were distributed and 13 households were inspected and provided with guidance, which earned the appreciation from the public.

4.2 用氣安全

為做好燃氣安全工作,各附屬公司在所服務地區開展燃氣安全檢查,利用先進儀器探測洩露風險及進行安全評估,為商戶及居民定期提供入戶檢查,確保用氣安全。同時開展普及燃氣安全知識的活動,包括在社區、學校舉辦宣傳活動,教授如何正確使用燃氣設施、發現燃氣隱患如何處理等基本用氣知識,共營安全用氣氛圍。

案例:燃氣安全宣傳活動

貴州中油燃氣有限公司經執法部門的許可及鼎力幫助下,於本年度在城市中心廣場開展了以「關注燃氣安全,構建和諧家園」為主題的安全宣傳活動。活動內容包括「燃氣使用安全小常識」、「燃氣管道保護」、「燃氣管道佔壓危害」等,現場接待客戶諮詢300餘人次,發放宣傳冊660份,入戶檢查指導13戶,贏得了群眾的稱贊。



(continued) (續)

Wuhan East COG Limited (武漢東方中油燃氣有限公司) has launched the "100 Days Campaign" in July during the year, and over 10 promotional activities have been held ever since. It visited the community with the local authorities to carry out gas safety campaigns with the theme of "Eliminate Hidden Dangers, Use Gas Safely and Stay Protected". Through hanging banners, setting up information booths, distributing safety promotional information and broadcasting, it introduced gas safety knowledge to residents who approached for advice.

武漢東方中油燃氣有限公司自本年度7月開展安全「百日行動」,舉行10餘次宣傳活動。其會同當地部門前往社區開展「除隱患,安全用氣保平安」為主題的燃氣安全宣傳的活動,通過懸掛橫幅、設立諮詢台、發放安全宣傳資料及廣播等形式,對前來諮詢的居民講解燃氣安全知識。



Case: Dedicated training for gas users in the catering industry on safe usage of gas

With a view to strengthening the safety management of gas users in the catering industry in usage of gas, as well as to preventing and reducing accidents, Binzhou COG Limited (濱州中油燃氣有限責任公司) ("Binzhou COG") conducted dedicated training on gas safety for gas users in the catering industry during the year, providing a comprehensive analysis of gas hazards, common safety hazards, safe operation procedures, self-inspection methods and preventive measures to equip users with knowledge on gas safety and raise their awareness of gas safety.

案例:燃氣餐飲用戶安全用氣專項培訓

為加強燃氣餐飲用戶在燃氣使用方面的安全管理,預防和減少事故發生,濱州中油燃氣有限責任公司(「濱州中油燃氣」)於本年度為燃氣餐飲用戶開展了安全用氣專項培訓,對燃氣危險性、常見安全隱患、安全規範操作流程、自檢方法及防範措施等方面深入剖析,讓用戶掌握燃氣安全知識,並增強其燃氣安全意識。



(continued) (續)



4.3 Process Safety

In accordance with the laws and regulations of the Production Safety Law of the People's Republic of China, the Regulation on the Administration of Urban Gas and the General Norms for Safety Production Standardization of Enterprises, the Group consolidated and compiled the Group's "Production Safety Management Manual", covering the "Measures for Safety Production Management", the "Regulations on the Main Responsibility of Production Safety", the "Site Safety Management System", the "Measures on Traffic Safety Management", the "Measures on Special Operations Management" and other provisions, in order to prevent and reduce safety incidents arising from production and transportation. Among other regulations, the Group has also formulated the "Measures on Safe Production Target Management", which requires each subsidiary to sign a production safety target responsibility statement, for the purpose of establishing a bottomup and hierarchical system of assurance and accountability for incident control. In accordance with the "Measures on Safe Production Supervision and Inspection Management", the safe production committee (the "safe production committee") of each Group company is required to lead the Safety Production supervision and management department (the "safety supervision department"), the Safety Production Protection Agency and the trade union organisations to carry out comprehensive safety production supervision and management. The Group requires the safety supervision department to organise two major production safety inspections each year and to carry out targeted production safety inspections on a regular basis for specific safety issues or general safety problems, and to impose rectification plans on departments that do not meet the standards in the safety inspections and follow up on the rectification status.

Baccalieu has also formulated the "Safety Management System" for its oil and gas production operations, which establishes a "Health, Safety and Environmental Policy" to govern safety management and allocation of responsibilities to various personnel. The "Safety Management System" and the "Safety Operation Procedures" have also set out the implementation details and a comprehensive monitoring mechanism for each process with potentially significant safety hazards. Currently, the confined space working system, the hot work permit system, the lock-up and signage procedures and the safe transportation of dangerous goods system have been covered to prevent the occurrence of major accidents.

4.3 工藝安全

集團依據《中華人民共和國安全生產法》、《城 鎮燃氣管理條例》及《企業安全生產標準化基 本規範》等法律法規,整合並編製集團《安全生 產管理手冊》,涵蓋《安全生產管理辦法》、《安 全生產主體責任規定》、《現場安全管理制度》、 《交通安全管理辦法》、《特殊作業管理辦法》等 規定,以防止和減少因生產或運輸產生的安全 事故。其中,集團亦有制定《安全生產目標管 理辦法》,要求各附屬公司簽訂安全生產目標 責任書,以建立自下而上、分級控制事故的保 證及問責體系。按照《安全生產監督檢查管理 辦法》,集團各所屬公司安全生產委員會(「安委 會」)需領導安全生產監督管理部門(「安全監察 部」)、安全生產保障機構以及工會組織實行全 面安全生產監督管理。集團要求安全監察部每 年組織兩次安全生產大檢查,並需定期對專項 安全問題或存在的普遍性安全問題開展定向專 項安全生產檢查,對安全檢查中不合格的部門 下發整改計劃並跟進整改情況。

Baccalieu公司亦有就其油氣生產業務編製《安全管理制度》,其中制定《健康、安全及環境政策》,以規範安全管理工作及各人員的責任分配。《安全管理制度》以及《安全操作程序》亦有針對各項有潛在重大安全危害之工序制定安全生產實施細則及完善的監測機制。目前其已涵蓋密閉空間工作制度、熱工作許可證制度、上鎖掛牌程序以及安全運送危險品制度等,以期杜絕重大安全事故的發生。

(continued) (續)

Moreover, the Group regularly organised safe production committee safety management meetings, safety production analysis meetings, occupational safety meetings, and regular transportation safety meetings to implement the laws, regulations and safety instructions and obligations from superiors, and to discuss and formulate specific work programmes. The main contents of the work programme include conducting safety inspections regularly, strengthening the ability of employees to perform safety operations, providing safety education and training and carrying out rectifications of hazardous and emergency accidents. During the year, all subsidiaries of the Group were recognised by various parties and their safety management efforts and were awarded the titles of "Advanced Gas Enterprise in 2021", "Advanced Basic Level Unit in Production Safety in 2021" and "Advanced Enterprise for Safety Production in 2021", respectively, undertaking to continue their efforts in promoting as safety management and promoting the sustainable and safe development of the Company.

此外,集團會定期舉辦安委會安全管理工作會議、安全生產形勢分析會、職工安全大會、現安全大會、職工安全大會,以實徹各項法律法規、上級的安全指示及責任精神,並討論制定是共為的安全指示及責任精神,並討論制定至全操作自主性、提供安全教育。於本年度,集團各附屬公司均於安全管理工企之,是2021年度安全生產工作先進單位」、「2021年度安全生產工作先進層,促進集價的方面,與2021年度安全生產工作先進層,與30分類。

Case: Safety hazard inspection

A 6.9-magnitude earthquake struck Menyuan County in Haibei Prefecture, Qinghai Province during the year. To ensure the safe and stable supply of urban gas, Xining COG Limited (西寧中油燃氣有限責任公司) ("Xining COG") has taken this seriously and responded swiftly by arranging a post-earthquake inspection of potential hazards in a timely manner and maintaining close communication with authorities including the municipal government, the Ministry of Emergency Management and the Ministry of Housing and Urban-Rural Development to cooperate with the post-earthquake safety production.

案例:安全隱患排查工作

於本年度,青海省海北州門源縣發生6.9級地震。為確保城市燃氣安全平穩供應,西寧中油燃氣有限責任公司(「西寧中油燃氣」)高度重視,迅速響應,及時安排震後隱患大排查,並與市政府、應急局、建設局等部門保持緊密溝通,配合做好震後安全生產工作。







Pingxiang Gas Limited (萍鄉市燃氣有限公司) is committed to ensuring the safe and stable supply of gas by actively carrying out maintenance of pipeline network facilities, service enhancement and emergency gas resources, and conducting special inspections of gas safety hazards during periods such as after adverse weather and before high school examinations.

萍鄉市燃氣有限公司積極做好管網設施維護、 服務提升、應急氣源儲備等各項保障工作,於 惡劣天氣後、高考前等時期深修開展燃氣安全 隱患專項檢查活動,確保燃氣安全穩定供應。





(continued) (續)

4.4 Occupational Safety

The Group values the safety and health of its employees and stipulates the "Occupational Health Management System", the "Measures on Labour Protection Equipment Management" and other measures in the "Production Safety Management Manual" of the Group, standardising the prevention, training and control process for occupational hazards as well as the regulations on the use of labour protection products, the Group ensures that labour safety meets the standards specified by the relevant authorities in the places of operation. The Group also distributed the "Employee Safety Handbook" to its employees to enhance their safety awareness. During the year, the Group was not aware of any material breaches of laws and regulations relevant to health and safety that had a significant impact on the Group, including but not limited to the Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases, the Labor Law of the People's Republic of China and the Occupational Health and Safety Act of Alberta, Canada.

The Group's subsidiary, Qinghai Hongli Gas Pipeline Installation Engineering Limited (青海宏利燃氣管道安裝工程有限責任公司) ("Qinghai Hongli"), arranged safety inspections which were provided by safety management personnel during the construction period. The inspections included checking of high-risk processes, the uses of protective mask and fire extinguisher during welding and painting works, inspecting the conditions, the antifreezing and anti-slippery functions of safety rope, the use of anti-skid measures, safety ropes, escape ladders, ventilation systems, and toxic gas emissions for the employees working in confined spaces such as trenches and wells. Qinghai Hongli also provides clear policies regarding safety operation procedures. It ensures that on-site facilities, equipment and tools meet safety standards, a flat and barrier-free working environment and emergency escape route are provided, adequate lighting is provided for works conducted at night, anti-explosive lighting fixtures are used, distinctive warning signage is provided for works at road sides to caution pedestrians and vehicles and signal lights and on-duty personnel are provided for road side works in the dark.

In order to strengthen the safety awareness of employees, regular hazard identification training courses are provided at LNG processing plants every year. Employees engaged in dangerous works are equipped with personal protection equipment such as gas masks, safety helmets and anti-static workwear. To further reduce the possibility of occupational hazards occurring, LNG processing plants report possible occupational hazards to the local safety production supervision bureaus regularly and implement proper mitigation measures whenever necessary. Facilities and equipment are operated by trained operators with professional qualifications. For employees responsible for the transportation of natural gas, their special equipment operator certificate is reviewed and audited by relevant departments every review cycle. A daily safety meeting is held in Baccalieu to monitor the safety status of the working environment, rectify the identified problems or hidden dangers immediately and provide summaries and improvement of safety management

4.4 職業安全

集團重視員工的安全與健康,嚴格遵循《中華人民共和國職業病防治法》等規定,於集團《安全生產管理手冊》中訂明《職業健度管理辦法》、《勞動防護用品管理辦法》等,規範職業危害用品管理辦法》等,規範職業危害用品管理辦法》等,規範職工度的標準。集團亦向員工發放《員工安全手冊》,提升其安全意識。於本年度,集團並不知規規,但新生之之。 是一個關鍵,但其個不限於《中華人民共和國職業病防治法》、《中華人民共和國職業病防治法》、《中華人民共和國聯業病防治法》、《中華人民共和國勞動法》及加拿大阿爾伯塔省的《職業健康與安全法》。

集團附屬公司青海宏利燃氣管道安裝有限責任 公司(「青海宏利」)於施工期間會安排安全管理 人員現場檢查高危工序的進行,檢查工作包括 在進行焊接和刷漆作業時,檢查工人的防護面 罩、滅火器佩戴情況等;高空作業時檢查安全 繩佩戴情況、防凍、防滑措施的使用情况等; 以及員工於溝內、井下等密閉空間作業時檢查 安全繩、逃生梯、通風系統及有毒氣體排放等 情況,確保員工在安全情況下工作。青海宏利 亦對施工人員的安全作業制定明確的規定,確 保現場設備、工具和材料擺放等須符合安全標 準;作業現場必須保持平整暢通,設置緊急逃 生通道等。夜間施工場地須設置足夠的照明, 並確保作業帶內使用的照明燈具符合防爆要 求。路邊作業須設置明顯的安全警示標誌,提 醒行人和車輛注意過路安全,防止人員或車輛 誤入作業坑。天黑後路邊作業亦須設置信號燈 及配備值班人員,以策安全。

(continued) (續)

Currently, each of the Group's subsidiaries has ISO45001 Occupational Health and Safety Management System certification, the Production Safety Standardisation Level 3 Enterprise (City Gas) certification and Production Safety Standardisation Level 3 Enterprise (Hazardous Chemicals) certification. There were no work-related fatalities that occurred in each of the past three years including the year. During the year, the Group also did not record any lost days due to work-related injuries (2021: Nil).

Case: Safety production month

The Group's subsidiaries took the "Safety Production Month" as an opportunity to strengthen the safety awareness of all employees through various forms of safety education activities, such as learning and education, potential dangers investigation and emergency drills.

目前,集團各附屬公司分別擁有ISO45001職業健康安全管理體系認證、安全生產標準化三級企業(城鎮燃氣)認證及安全生產標準化三級企業(危險化學品)認證。於過去三年(包括本年度),集團無錄得任何無因工作關係而死亡的事件。於本年度,集團亦無錄得任何因工傷而損失的工作日數(二零二一年:無)。

案例:安全生產月

集團各附屬公司以「安全生產月」活動為契機, 通過開展學習教育、隱患排查、應急演練等形 式多樣的安全教育活動,強化全員安全意識。



Case: Safety knowledge contest

The business department in Shandong held a safety law and regulation knowledge contest for all of its subsidiaries in the hope of promoting a positive learning atmosphere in the company and hoping that employees would strictly perform their duties and make due contributions to the Group's safe and stable gas supply.

案例:安全知識競賽活動

山東事業部為下屬所有公司舉辦安全法律法規知識競賽活動,期望帶動該公司良好的學習氛圍,希望員工嚴格履行崗位職責,為集團安全穩定供氣作出應有的貢獻。





(continued) (續)

4.5 Risk Management

In order to ensure safe and stable gas supply of the Group's natural gas transmission and distribution system, and to improve the rapid response and emergency response capability in the case of major accidents in the natural gas system, the Group established risk management documents such as "Measures for Safety Production Risk Management and Control Management", "Measures for Production Accident Potential Dangers Management", "Measures for Emergency Management" and "Regulations for Incident Management" in its "Safety Production Management Manual", based on the "Emergency Response Law of the People's Republic of China", "Regulation on Emergency Responses to Work Safety Accidents", and "Measures for the Administration of Contingency Plans for Work Safety Incidents". These risk management documents formulate emergency plans and on-site emergency disposal plans for various major accidents such as leakage accidents, fire accidents, explosion accidents, force majeure. etc. in the operating area, and clarifies the responsibilities of the relevant departments and related personnel in each process.

The Group continues to improve its risk management system, particularly risk management of oil and gas leakages, which is the top priority of environmental management. The Group has also formulated the "Criteria for Determining Municipal Major Gas Production Safety Accidents" and the "Guidelines for Preparation and Exercise of Production Safety Accident Emergency Plans" to perfect the emergency management system for the identification of accident risks and the preparation and exercise of emergency response plans. The Group has stipulated that each subsidiary shall, according to their own business characteristics, formulate emergency response plans ("ERP"), and organise emergency training and annual emergency drills. Each ERP is reviewed and approved by the safety supervision department of the Group to ensure that accidents are handled guickly and effectively, and the impacts of the accidents are kept to a minimum. Baccalieu has designed a corporate ERP under the requirements to ensure that environmental emergency operations can be carried out promptly and orderly in the event of an accident. As a member of the Spill Co-ops, a spill emergency response cooperation, Baccalieu often liaises closely with several agencies to ensure that Baccalieu can mobilise resources in a timely manner and conduct collaborative rescues with agencies when spills or other emergencies occur.

In the event of an emergency, the 24-hour on-duty personnel of the Group's station will cut off the gas supply at the station, notify upstream distribution stations to suspend transmission, and notify downstream users about the incident. The Group's chief safety manager will initiate the emergency plan instructions. The operation and management department organises operations personnel to conduct emergency rescue. In the case of insufficient manpower, the Group's engineering project department organises the Group's construction team personnel to provide emergency support. According to the severity of the incident, the general manager of the Group reports to the local gas authority, the urban management bureau, the emergency management department and the relevant government departments to request support. After completing the rescue mission, the supply of gas will be resumed under safe conditions.

4.5 風險管理

集團持續完善其風險管理制度,尤其重視石油 天然氣泄漏的風險管理,視之為環境管理的重 中之重。針對事故隱患識別工作及應急預案編 製及演練工作,集團亦特別制定《城鎮燃氣重 大生產安全事故隱患判定標準》及《生產安全事 故應急預案編製及演練指引》,以完善應急管理 體系。集團規定各附屬公司按自身業務特點設 計應急預案([ERP]),舉辦應急培訓及年度演練 計劃等,ERP需通過集團安全監察部作最後審 核和批准,確保事故發生後迅速有效應對,將 事故影響降至最低。Baccalieu公司已按照規定 設計企業ERP,確保緊急事件發生時能迅速有序 地開展環境應急行動。同時, Baccalieu公司作 為Spill Co-ops泄漏應急合作社的成員,經常透 過合作社與個別機構保持緊密聯繫,確保發生 重大泄漏事件或其他緊急情況時,Baccalieu公 司能及時動員四海,發揮協作力量應急救援, 攜手對抗緊急事故。

(continued) (續)



Case: Emergency drill for gas accidents

In order to modernise emergency rescue of gas accidents, improve the ability to rescue and repair gas facilities after damage, to protect the lives and property of the people, Liling COG Limited (醴陵中油燃氣有限責任公司) ("Liling COG") has launched a special emergency drill for LNG storage and distribution station leak and on-site emergency exercise for the handling of emergencies during the year, training the ability of personnel from different departments to coordinate the handling of large emergencies.

案例:燃氣事故應急演練活動

為提高燃氣事故應急搶險現代化水平,提升燃氣設施損壞後的搶險搶修能力,保障人民群眾生命和財產安全,醴陵中油燃氣有限責任公司(「醴陵中油燃氣」)已於本年度開展了LNG儲配站泄漏專項應急演練及現場突發事件處置應急演練,鍛煉各部門協同處置大型突發事件的能力。



Binzhou COG participated in the "Shandong Province Emergency Rescue Exercise for Gas Transmission and Distribution Pipeline Network Fire and Flaring Incident" during the year. Its outstanding contribution was fully recognized and highly praised by the Emergency Management Bureau of Binzhou City in a letter of appreciation.

濱州中油燃氣於本年度參與「山東省燃氣輸配管網火災爆燃事故應急救援演練」。其突出貢獻獲濱州市應急管理局發來的感謝信充分認可和高度贊譽。



(continued) (續)

Case: Emergency response work

After a landslide occurred in Jiujiawan Village, north of Xining City, the gas business department in Qinghai and each company immediately organised an emergency repair command team. They coordinated and communicated with each other to fully support emergency repair work and completed repair tasks in a timely manner to ensure a stable gas supply before the heating season.

案例:應急搶險工作

西寧城北九家灣村發生山體滑坡後,青海燃氣 事業部各公司立即組織應急搶修指揮小組,事 業部各公司互相協調、溝通,全力支持應急搶 修工程工作,及時完成搶修任務,確保在採暖 期前保持穩定供氣。



After receiving notification of the fire incident, Xining COG promptly arranged for emergency response, customer service, engineering, and safety control personnel to the site for emergency handling, cut off the main line and surrounding gas supply, set up a cordon, evacuated nearby personnel, cooperated with firefighters to handle the situation, and arranged for the resumption of gas supply for affected customers.

西寧中油燃氣收到突發火災事故通知後,及時安排應急、客服、工程、安控人員前往事發地點緊急處置,切斷主線及周邊用戶氣源,設置警戒線,疏散附近人員,配合消防做好相關險情處置,並安排為受影響的用戶恢復供氣。



(continued) (續)



4.6 Measures Taken in Response to the COVID-19 Pandemic

In response to the COVID-19 pandemic, the Group established the emergency leading group for COVID-19 prevention and control, established a comprehensive coordination mechanism, and adopted various measures to prevent the spread of the virus and protect the health and safety of employees. The Group formulated a "Work Plan for the Prevention and Control of COVID-19", "Detailed Rules for Implementation", "Guidelines for Epidemic Prevention and Control and Measures for the Management of Protective Supplies" and other related policies, providing guidance for implementation.

The Group strengthens safety management and risk prevention. The Group strictly restricts employees from travelling to areas with newly confirmed cases, asymptomatic cases, or suspected cases and requires companies in the vicinity of affected areas to strictly implement local governments' epidemic prevention and control requirements. Where exposure to people from medium-risk areas is necessary for business purposes, relevant companies will comprehensively identify and control the risks of direct or indirect contact between employees and relevant personnel, strengthen protection for the employees, strictly implement local epidemic prevention requirements, monitor the epidemic situation and provide early warnings, and track the employees' travel records. If an employee has a fever or other symptoms, they are asked to visit the fever clinic of their nearest medical institution without delay. The Group requires all its subsidiaries to increase infection prevention and control supplies such as masks and disinfectants based on their needs to ensure that the supplies can be used immediately in any case of emergency.

We procured protective equipment and emergency supplies through multiple channels, and prepared and stored related goods. Shifts were adjusted appropriately and employees were provided with protective equipment. Employees followed standardised procedures at work, taking temperature every day, wearing face masks in high-risk times and keeping social distance. Employees are asked to reduce unnecessary outings and travels and avoid crowded places. Employees worked from home and were subject to quarantine when necessary. Employees are encouraged to get vaccinated. Business halls, gas stations and offices increased disinfection and ventilation, and verified and registered access personnel and vehicles. Staff canteens serve meals separately. Conferences and training were held remotely over the internet during the pandemic.

4.6. 2019新型冠狀病毒病疫情應對措施

為應對2019新型冠狀病毒病疫情,集團成立2019新型冠狀病毒防控應急領導小組,建立綜合協調機制,採取多種措施防止病毒傳播,保障員工的健康和安全。集團制定《疫情防控工作方案》、《防控實施細則》、《疫情防控指導手冊》、《疫期防護用品管理辦法》等政策,為執行提供指導。

我們通過多種渠道採購防護用品和應急物資以加強物資的儲備、合理安排上班時間,以加強物資的儲備、合理安排上班時間,開工提供防護物資。員工需每日利量體體、內學,保持社交距離。們亦要求員工減少不必要的外出活動和旅行取分。我們於必要時採別分數分,我,以對營業廳、和納公場所的消毒和與對營業配來往人員和車輛,食堂實養和開風,核實登記來往人員和車輛,食堂實議和開展員工遠程培訓。

(continued) (續)

Case: Constructing a comprehensive defence against pandemic

In response to the severe pandemic during the year, all subsidiaries of the Group immediately organised meetings to implement various pandemic prevention measures and conducted comprehensive checks on employees, incoming and outgoing vehicles, and personnel trips via "travel codes", "health codes", nucleic acid tests, body temperature tests, and mask wear checks.

案例:全面構築防疫安全屏障

針對本年度來勢洶湧的疫情,集團各附屬公司 立即組織召開會議,落實各項防疫措施,通過 「行程碼」、「健康碼」、核酸檢測、體溫檢測、口 罩佩戴檢查等對員工、出入車輛及人員行程進 行全面排查。



Case: Staying at their posts, fighting against the pandemic and ensuring the supply

In the face of the serious prevention and control situation, the Group's subsidiaries quickly deployed, and timely started the emergency plans for pandemic prevention and control to ensure the supply. In some areas after the release of the lockdown-lifted notice, self-protection was required for security personnel during the safety inspection of households, to eliminate safety concerns for customers, and to protect the safety use of gas for customers.

案例:堅守崗位戰疫情全力以赴保供應

面對嚴峻的防控形勢,集團各附屬公司迅速部署,及時啟動疫情防控保供應急預案。在部分區域解封通知發佈後,安檢負責人員需做好自我防護後進行入戶安全檢查工作,為用戶排除安全隱患,保障用戶端用氣安全。



(continued) (續)



EXCEPTIONAL OUALITY

The Group persistently operates with integrity and strictly follows national and operating location-specific standards, and strives to elevate the standard of the operational management system toward perfection. The Group strives to optimise procurement management, enhance the quality of products and services and actively boost the level of customer satisfaction in various aspects. Concurrently, the Group strictly complies with the laws and regulations relating to the protection of customer privacy, advertising, labels and intellectual property rights.

5.1 **Quality of Products**

In order to ensure product quality, the Group requires all upstream gas suppliers to supply gas that meets the Class 1 or Class 2 standard outlined in the national quality standard — Natural Gas (GB17820-2012). In order for the Group to monitor the quality of natural gas effectively, all gas suppliers are required to provide periodical gas quality reports and specify gas composition in contracts. Each subsidiary formulates standards and policies based on their business characteristics. For example, the quality of LNG produced and supplied by the LNG processing plants must meet national and industry standards such as the General Characteristics of Liquefied Natural Gas and Quality Assessment Criteria for Import and Export of Liquefied Natural Gas; the quality of CNG supplied by CNG filling stations must meet the requirements of Compressed Natural Gas for Vehicles. In addition, to ensure product quality, Shandong Qizhi Equipment arranges for all pipeline products to be sent to the Binzhou Special Equipment Inspection Institution for inspection before they are sold. Currently, Shandong Qizhi Equipment is certified with the ISO9001 Quality Management System. During the year, Shandong Qizhi Equipment Testing Center (山東齊智 設備檢測中心) received the Certificate of Laboratory Accreditation by China National Accreditation Service for Conformity Assessment (CNAS); and Qinghai Hongli was granted GA1, GA2, GB1 and GC1 pressure piping installation licence certificates by the State Administration of Market Regulation; while each subsidiary was also awarded as the Advanced Unit, the Excellent Unit and the High-tech Enterprise respectively. These recognitions indicated that the testing capability, technical innovation and management level of each unit of the Group have reached a new height. The Group is committed to making unremitting efforts to achieve further success.

The Group implements sales and credit control to eliminate the use of false and misleading statements in the process of product promotion and trading. In addition, the Group has formulated the "Regulations on the Management of Trade Secrets" to regulate confidentiality and intellectual property management, and has pledged not to infringe on the intellectual property rights, patents, copyrights, and other rights and interests of others.

5. 打造卓越品質

集團堅持誠信經營,嚴守國家與營運所在地的 各項標準和要求,抱著力臻完美的決心提升營 運管理水平。集團努力優化採購管理,積極提 升產品與服務的質量,於多方面積極提高客戶 的滿意度。同時,集團嚴格遵守有關維護客戶 私隱、廣告、標籤及知識產權等的法律法規。

產品質量

為保證產品的質量,集團要求上游氣源供應 商提供的管道天然氣需符合國家品質標準 — 《天然氣》(GB 17820-2012)中的一類氣或二類氣 標準。為更有效監控天然氣的質量,集團要求 氣源供應商定期提供氣質報告,並於供氣合同 中列明氣體成分。各附屬公司亦會因其業務特 性,制定相關的標準制度。例如LNG加工廠生 產供應的LNG品質需滿足《液化天然氣的一般 特性》、《進出口液化天然氣品質評價標準》等 的國家及行業標準; CNG加氣站供應的CNG品 質需滿足《車用壓縮天然氣》的規定等。此外, 山東齊智設備為確保產品質量,於管道產品出 售前均安排送往濱州市特種設備檢測所進行檢 驗。目前,山東齊智設備擁有ISO9001質量管理 體系認證。於本年度,山東齊智設備檢測中心 更獲得中國合格評定國家認可委員會(CNAS)頒 發的實驗室認可證書; 青海宏利則經國家市場 監督管理總局核准獲批GA1、GA2、GB1和GC1 壓力管道安裝許可資質證書;各附屬公司亦分 別獲得先進單位、優秀單位、高新技術企業等 榮譽。這些認可標著集團各單位的檢測能力、 技術創新能力及管理水平等均達到新的高度。 集團承諾將不懈努力,再創佳績。

集團落實執行銷售和信用管制,杜絕在產品 宣傳和交易過程中使用虛假及誤導性説明的行 為。另外,集團已制定《商業秘密管理規定》, 以規範保密及知識產權管理工作,承諾不侵犯 他人知識產權、專利權、版權等權益。

(continued) (續)

During the year, the Group did not recall any products due to safety and health reasons (2021: Nil), and was not aware of any material non-compliance with relevant laws and regulations concerning health and safety, advertising, labelling and privacy matters relating to products and services and methods of redress that would have a significant impact on the Group, including but not limited to the Law of the People's Republic of China on Protection of Consumer Rights and Interests, the Product Quality Law of the People's Republic of China, the Advertising Law of the People's Republic of China, the Patent Law of the People's Republic of China and the Personal Information Protection Act of Alberta, Canada.

5.2 Excellent Services

The Group has always been committed to improving customer service levels and has formulated comprehensive "Customer Service Management Measures". Customers can provide opinions or make complaints about products and services through various channels, such as the lobby manager, 24-hour complaint hotline, fax, suggestion box, suggestion book, company website, etc., at any time. During the year, the Group did not receive any complaints regarding products and services (2021: Nil). If a customer expresses dissatisfaction or makes a complaint about a product or service, the customer service team of each subsidiary will initiate standardised complaint handling procedures. If any employee is found to have ignored customer complaints, delayed complaint handling without justifiable reasons, concealed customer complaints, fabricated false information. or failed to report or take measures in a timely manner when significant incidents occurred, they will be punished accordingly. In addition, personnel handling customer information and complaint content have a confidentiality obligation. Each subsidiary has also established a dedicated task force for customers to actively communicate with customers and provide 24-hour fault repair services, with an aim to achieve the goal of "responding whenever reports are received, providing the best solutions to the problem" and hence satisfying customers' needs. To ensure service quality, repair personnel need to depart within 5 minutes after receiving a gas leakage accident warning and arrive at the scene within 30 minutes to handle the situation. During the year, each of the Group's subsidiary companies received a number of silk banners from their clients in recognition of their passionate service and efficient professionalism.

於本年度,集團並無因安全與健康理由而須召回產品(二零二一年:無),亦並不知悉任何嚴重違反與產品及服務相關的健康與安全、廣告、標籤及私隱事宜以及補救方法有關的法律及法規而對集團造成重大影響的情況,包括但不解於《中華人民共和國消費者權益保護法》、《中華人民共和國產品質量法》、《中華人民共和國商標法》、《中華人民共和國專利法》及加拿大阿爾伯塔省的《個人資料保護法》。

5.2. 服務周到

集團一向致力提高客戶服務水平,並制定完善 的《客戶服務管理辦法》,客戶可通過大堂經理、 24小時投訴電話、傳真、意見箱、意見簿、公 司網站等渠道,於任何時候對產品和服務提出 意見或進行投訴。於本年度,集團並無接獲任 何關於產品及服務的投訴(二零二一年:無)。 如收到客戶對產品或服務提出的不滿或投訴, 各附屬公司的客戶服務部會啓動規範化的客戶 投訴處理程序,如發現忽視客戶投訴、無故拖 延投訴處理時限、隱瞞客戶投訴、編造虛假資 訊、重大事件發生時未有及時報告或採取措施 等情况,將會處分負責的員工。此外,對於客 戶資訊及投訴內容,處理客戶投訴的相關人員 負有保密責任。各附屬公司同時成立客戶專責 小組,積極與客戶溝通,並提供全天候的故障 報修服務,做到「有報必到,修必修好」,滿足 客戶所需。為確保服務質素,搶修人員需要在 接到燃氣泄漏事故警報後的5分鐘內出發,在 30分鐘內到達現場處理。於本年度,集團各附 屬公司分別收到多名客戶贈送的錦旗,高度肯 定其熱情服務及高效的專業能力。

(continued) (續)



Case: Field visit activity

During the year, Xining COG conducted on-site visits to large customers, sending them blessings and greetings for the holidays, followed by a detailed explanation of the current gas supply situation in Xining City, advocating for gas conservation and gas transmission reduction for large customers. At the same time, we also listened to the valuable opinions of customers on the daily gas service and received full support and understanding from all customers.

案例: 實地走訪活動

西寧中油燃氣於本年度開展大用戶實地走訪活 動,向大用戶送上節日的祝福和問候,隨後向 用戶詳細説明瞭西寧市目前的供氣形勢,倡導 大用戶節約用氣並對接氣量壓減事宜。同時, 我們亦聆聽各用戶就燃氣日常服務提出的寶貴 意見,得到各大用戶的全力支持和理解。



5.3 Protection of Customer Privacy

The Group attaches great importance on customer privacy protection and handles customer information with care. The Group has formulated internal regulations on confidentiality management and classified data according to the degree of confidentiality. The Group strictly prohibits employees from accessing and using confidential information improperly, unless approved by the customer in advance. Employees cannot mention customer information in personal communication and correspondence, or discuss the Group's trade secrets in public places. The Group continuously optimises information management, improves employees' awareness of information security, and ensures that customer information and privacy are properly protected and managed.

5.3. 保障客戶私隱

集團高度重視客戶私隱保護,謹慎處理客戶信 息。集團已制定內部保密管理的規定,就資料 的保密程度分級管理。集團嚴禁員工不當存取 及使用保密資料,除非事先得到客戶批准,員 工不可在私人交往和通訊中提及客戶資料,或 在公共場所談論集團商業秘密。集團不斷優化 信息管理,持續提升員工的信息安全意識,確 保客戶信息和私隱得到妥善的保護和管理。



(continued) (續)

6. DEDICATION TO GREEN DEVELOPMENT

Climate change has caused major environmental and social impacts on today's society. In order to cope with the rapid deterioration of the environment and ecosystem, the Group is dedicated to promoting the green business, aiming for the balance of long-term corporate development, economic interests and environmental protection, and improving itself to be an outstanding and sustainable corporation. Moreover, to fulfil corporate social responsibility, the Group never ceases to listen and respond to the ever changing needs of stakeholders and strives to protect the environment at all times.

6.1 Environmental Management

As an enterprise mainly engaged in the sale and supply of gas, environmental management is essential for the Group's foundation. The Group has specified the "Management Regulations on Environmental Protection and Energy Saving and Emission Reduction" in the "Safety Production Management Manual" to strengthen the management of environmental protection and energy saving and emission reduction of the Group and its subsidiaries, and to promote the regularisation, standardisation and proceduralisation of environmental management in order to achieve cost reduction. Baccalieu has also developed a "Health, Safety and Environment Policy" within its "Safety Management System", aiming to comply with and exceed the regulations on the exploration, storage, and sale of oil and gas at the federal in Canada and provincial levels in Alberta, while also adhering to various regulations issued by the Alberta Energy Regulator ("AER"). Currently, the Group's subsidiaries, including Shandong Qizhi Equipment, have obtained ISO14001 Environmental Management System certification.

The Group strictly complies with environmental protection laws, regulations, and industry standards in the PRC and other operating locations. During the year, the Group was not aware of any material non-compliance with relevant laws and regulations relating to air and greenhouse gas ("GHG") emissions, discharges into water and land, and generation of hazardous and non-hazardous waste that would have a significant impact on the Group, including but not limited to the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on Environmental Impact Assessment, the Law of the People's Republic of China on the Prevention and Control of Water Pollution, the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, the Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste and the Environmental Protection and Enhancement Act of Alberta, Canada.

6. 深耕綠色發展

氣候變化為現今社會帶來重大的環境及社會問題。為應對環境及生態系統的急劇惡化,集團致力推動綠色事業,以平衡企業的長遠發展、經濟利益及環境保護為目標,使集團成為可持續發展的優秀企業。與此同時,集團細心聆聽各利益相關方的訴求,積極回應利益相關方不斷變化的需要,力求時刻保護環境,勇於承擔企業社會責任。

6.1 環境管理

集團嚴格遵守中國及其他營運所在地有關環境保護的法律法規和行業標準。於本年度,集團並不知悉任何嚴重違反有關空氣及溫室氣體(「溫室氣體」)排放、向水及土地排污以及有害及無害廢棄物的產生的法例及法規而對集團造成重大影響的情況,包括但不限於《中華人民共和國環境保護法》、《中華人民共和國水污染防治法》、《中華人民共和國大氣污染防治法》、《中華人民共和國大氣污染防治法》、《中華人民共和國大氣污染防治法》、《中華人民共和國大氣污染防治法》、《中華人民共和國大氣污染防治法》、《中華人民共和國固體廢物污染環境防治法》及加拿大阿爾伯塔省的《環境保護與改善法》。

(continued) (續)



6.2 Air Emissions Control

The Group has always adhered to the concept of environmental protection and promotes the development direction of green, low-carbon, environmental protection, and energy saving. The Group pays attention to the emissions of air pollutants from its business operations, establishes a sound monitoring system, and actively uses advanced technology to control emissions. The Group has set a target to continuously optimise its process flow, timely eliminate outdated equipment, and reduce the emissions of air pollutants. The target will be carried forward to the year ended on 31 December 2023 ("2023"). Regarding the emissions of air pollutants, the LNG processing plants actively invest in low-energy consumption and high-efficiency equipment during the production of LNG. For example, they use 13X molecular sieves to adsorb trace amounts of water and carbon dioxide in natural gas, and use the expansion cooling process to reduce energy input and simplify the treatment system to reduce reliance on heating furnaces. In addition, Baccalieu implements the provincial standards for the emissions of air pollutants from oil wells and facilities in accordance with AER Directive 60, and is committed to controlling emissions.

The Group adheres to the concept of green development and pays attention to the emissions of GHG. The Group has set a target to actively respond to and cooperate with the government's emission reduction goals, striving to achieve carbon peaking and emission reduction targets within the target period. The Group will continue to adhere to the target for 2023. With the support of the national policy of "coal-to-gas project", the Group is actively improving and establishing a clean energy system to align with the national goals of "carbon peaking and carbon neutrality". The Group is now committed to the extensive implementation of piped natural gas in rural areas and has planned to adopt distributed heat sources to meet the new demand for centralised heating in southern cities.

Baccalieu has also been closely monitoring GHG emissions to ensure compliance with federal and provincial laws and regulations, as well as various regulations issued by the AER. The main sources of Baccalieu's GHG emissions are the combustion of vent flares during crude oil extraction, natural gas consumption, electricity use, methane emissions from oil storage tank venting, pneumatic instruments and compressor seals, and liquefied petroleum gas ("LPG") consumption. In response to potential methane leakage risks, Baccalieu strictly complies with AER directives on upstream oil industry emissions, conducts annual measurements and inspections, and submits relevant reports to ensure gas safety and reduce GHG emissions. During the year, Baccalieu has replaced all high-emission pneumatic controllers and installed vent gas burners on battery storage tanks to reduce methane emissions. Additionally, the oil field has implemented electrification, converting natural gas-driven pump trucks to electric engines, and retrofitting 8 wells with gas lift systems to minimise emissions and obtain carbon offset credits.

6.2 空氣治理

集團始終堅持環保理念,推進綠色、低碳、環保及節能的發展方向。集團關注業務營運中大氣污染物的排放情況,建立完善的監測至立積極利用先進技術控制排放。集團已設備,持續優化工藝流程,適時淘汰落後設備,大氣污染物排放。二零二三年十二月层出財政年度(「二零二三年」)將會沿門上則政年度(「二零二三年」)將會沿門上則大氣污染物排放,LNG加工廠於LNG加工廠於LNG加工廠於LNG加工廠於LNG加工廠於LNG加工廠於是與程中積極投入能耗低且效能高的改設備,和大量過程中積極投入能耗低且效能高的改設備,和大量的代號;採用膨脹製冷工藝減少能源。此外,與個間化處理系統減少對加熱爐的依賴。此外,與個間化處理系統減少對加熱爐的依賴。此外,對個間化處理系統減少對加熱爐的依賴。此外,對個間化處理系統減少對加熱爐的依賴。此外,執過間化處理系統減少對加熱爐的依賴。此外,執過間不過過數,對於

集團秉持綠色發展理念,關注集團溫室氣體的排放情況。集團已訂立目標,積極響應並配合政府的減排計劃目標,力爭於目標期內完成碳達峰及減排任務。二零二三年將會沿用此目標。在「煤改氣」的國家政策支持下,集團積內等並建立清潔能源體系,助力國家「雙碳」目標的實現。集團現致力在廣大農村地區推行管道天然氣,並已計劃採用分佈式熱源,以集中供暖方式滿足南方城市採暖的新需求。

Baccalieu公司亦一直密切監察溫室氣體的排放, 確保其排放符合聯邦及省級法律法規以及AER 頒佈的各項規定。Baccalieu公司所產生的溫室 氣體排放主要來自於原油開採過程中放空火炬 的燃燒、天然氣消耗、電力使用、由儲油罐通 風口、氣動儀器和壓縮機密封件產生的甲烷排 放以及液化石油氣(「LPG」)消耗。針對潛在的甲 烷泄漏風險,Baccalieu公司嚴格遵守AER有關上 游石油工業排放的指令,並進行年度測量、檢 查及提交相關報告,以確保燃氣安全及減少溫 室氣體排放。於本年度, Baccalieu公司已更換 所有高放氣量的氣動控制器,並於電池的儲油 罐上安裝通風氣體燃燒器,以減少甲烷排放。 此外,油田亦已實施電氣化,將天然氣驅動的 泵車發動機改造為電動發動機,並對8口井進 行氣舉改造,以盡力降低排放,並獲得碳抵銷 信用額度。



(continued) (續)

In addition, the main sources of LNG processing plants' GHG emissions are electricity, natural gas boilers, vehicles and refrigerants. To achieve energy efficiency and conservation, the LNG processing plants use advanced technology to recycle flash gas generated during the liquefaction of natural gas. The main component of this flash gas is methane, which poses potential risks when directly emitted and is also a waste of energy. In response to this, the LNG processing plants has launched a flash gas recovery program to return it to the city gas pipeline network with the expansion gas. Furthermore, the Group pays close attention to international trends and actively seeks out lower-carbon, energy-saving, and environmentally friendly technologies to lead the enterprise towards achieving sustainable development goals. Through the implementation of these measures, employee awareness of reducing GHG emissions can be raised.

Due to Baccalieu's use of nitrogen for hydraulic fracturing operations during the year, post-operation flaring of gas was required until residual nitrogen levels were low enough to meet sales pipeline specifications, resulting in an increase in hydrocarbon emissions and flaring volume. Excluding the gas flared during this operation, flaring emissions and flaring volumes for the year decreased year-on-year. As a result of the increase in emissions and flaring volume, total GHG emissions for the year increased slightly by approximately 7.08% compared to 2021. However, due to the greater increase in revenue, the total GHG emissions intensity decreased by approximately 11.85%.

6.3 Handling of Waste

The Group strictly monitors the waste generated in daily operations and handles it in accordance with national and local laws and regulations. The Group implements source control and process control to reduce the discharge of waste into the land and water bodies through a sound waste management system. Hazardous waste generated in the Group's operations is entrusted to qualified units for disposal, and other waste is treated in accordance with national and local emission standards. In the construction of gas pipeline projects, the Group strictly supervises the management and disposal of waste at construction sites. Qinghai Hongli strictly implements the Group's "Environmental Protection and Energy Conservation and Emissions Reduction Management Measures", which include: 1) separate treatment of domestic waste and industrial waste, collection and unified recycling of reusable waste such as plastic bags and mineral water bottles; 2) centralised collection and treatment of sewage and the waste generated during pipeline commissioning and cleaning, waste anti-corrosion materials and waste sand produced during sandblasting and rust removal operations; 3) setting up special recovery devices to collect industrial waste oil, waste engine oil, antifreeze, and wastewater generated during construction processes, and transporting them to specialised treatment plants for disposal; and 4) sending other domestic waste to designated disposal sites near the construction site. If there is no disposal site, domestic waste will be buried in a landfill permitted by the local authorities, ensuring a depth of at least 1 meter. As most of the construction projects are contracted to external contractors, it is difficult to statistically analyse the quantity of packaging materials and waste generated during the process. Therefore, these data are not reflected in this ESG Report. In the future, the Group will establish a data collection system for engineering projects.

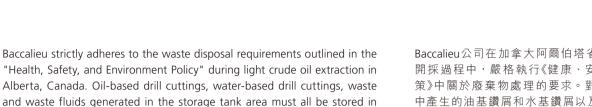
另外,LNG加工廠所產生的溫室氣體排放主要源於電力、天然氣鍋爐、車輛及製冷劑使用、為實現節能減耗,LNG加工廠使用先進的技術。 自收於天然氣液化過程中產生的閃蒸氣體, 主要成分為甲烷,直接排放既存在潛在的稅 一種能源的浪費。有見及此,LNG加工廠開展回收閃蒸氣體工作,使其隨膨脹氣體四送城市燃氣,此外,集團時常留意納門,積極尋找更低碳、節能及環保的技術,帶領企業實現可持續發展的目標。通過實際,帶領企業實現可持續發展的目標。通過實際,帶領企業實現可持續發展的目標。通過實際,提高。

由於Baccalieu公司於本年度利用氮氣進行水力壓裂作業,作業後需燃燒氣體直到殘餘氮含量低到足以滿足銷售管道規格,導致碳氫化合物排放及燃燒量增加。排除在該操作中燃燒的氣體,本年度的燃燒排放及燃燒量同比有所減少。由於排放及燃燒量增加,本年度溫室氣體排放總量相較二零二一年輕微上升約7.08%。但由於營業額增長幅度較大,溫室氣體排放總量密度下降約11.85%。

6.3 廢物處理

集團嚴格監控日常營運中所產生的廢棄物,並 按照國家及營運所在地的法律法規進行處理。 集團通過完善的廢棄物管理,實行源頭治理和 過程控制以減少向土地和水體等排放廢棄物。 集團營運中產生的危險廢棄物均委託有資質的 單位進行處理,其他廢棄物亦按照國家及營運 所在地的排放標準進行處理。在燃氣管道鋪設 工程方面,集團嚴格監管施工現場廢棄物的管 理和處置。青海宏利嚴格執行集團《環境保護 及節能減排管理辦法》,包括:1)生活垃圾與工 業廢棄物分開處理,對可再利用的廢棄物如塑 料袋、礦泉水瓶等分類收集並統一回收;2)管 道投產及清管作業清出的污物、施工現場對管 線進行防腐補口時產生的廢棄防腐材料、噴砂 除銹產生的廢砂等,均需進行集中回收處理;3) 設置專用回收裝置收集施工過程中產生的工業 污油、廢機油、防凍液和污水等廢液,並運到 專門處理廠進行處理;及4)其他生活垃圾送到 施工現場附近指定的處理場。如無處理場,生 活垃圾會被埋入當地有關部門許可的填埋地, 並保證填埋深達到1米或以上。由於集團大部 分的建設工程均聘請外部承包商,故難以對工 程使用的包裝物料及產生的廢棄物數量作出統 計,因此有關數據未能在本ESG報告反映。未 來,集團將建立工程項目數據收集體系。

(continued) (續)



The Group's office collects waste generated during daily operations, including recyclable waste such as waste paper, waste batteries, and waste ink cartridges, which are handed over to the property management company for recycling. Other office waste is disposed of by the local municipal department. Domestic sewage generated in the office is discharged directly into the municipal pipeline network, and the Group insists on not polluting local water resources with discharge. The Group has set a target to actively encourage employees to reuse office supplies such as paper to reduce waste emissions. The target will be carried forward to 2023. The Group has implemented an electronic office system to replace traditional paper-based office work; encourages employees to print on both sides of the paper, use environmentally friendly paper for printing publications and promotional materials; and save unused promotional materials for future use, among other resource-saving measures.

accordance with the Alberta Transportation Guidelines and disposed of in

accordance with various regulations issued by the AER before they can be

transported to approved provincial government landfills.

Compared to 2021, the Group generated less oil-based drill cuttings and more water-based drill cuttings in 2022. This is due to the fact that some of the water-based drill cuttings have been stored together with oil-based drill cuttings and disposed of together after obtaining a discharge permit of oil-based drill cuttings. Additionally, as the Group has actively implemented resource-saving measures and digitised some document work, paper and office waste have decreased in 2022 compared to 2021.

6.4 Utilisation of Resources

The Group places the efficient use of resource at the core of its business, and it constantly reviews natural resource management systems while emphasising source control to improve resource utilisation efficiency. During the year, Baccalieu did not find any violations of federal, provincial, and AER laws and regulations related to resource utilisation. During the operation of oil well areas and storage tank areas, Baccalieu mainly uses natural gas, followed by electricity and LPG. Other subsidiaries also consume electricity, natural gas, diesel and petrol during operations. The Group has set a target to continuously advocate for water and electricity conservation and the use of energy-saving equipment by employee to improve resource utilisation efficiency. The target will be carried forward to 2023. In terms of water management, Baccalieu recycles and treats wastewater generated during the hydraulic fracturing process in light crude oil extraction and reuses it in the process of extracting oil and natural gas. This not only reduces water resource usage but also reduces the amount of wastewater generated and stored. Baccalieu also commits to achieving a 100% wastewater recycling rate in the oil well area. The Group did not encountered any problems in sourcing water that is fit for purpose.

Baccalieu公司在加拿大阿爾伯塔省的輕質原油開採過程中,嚴格執行《健康、安全及環境政策》中關於廢棄物處理的要求。對於開採過程中產生的油基鑽屑和水基鑽屑以及儲油罐區產生的廢棄物和廢液等,均需按照阿爾伯塔省運輸準則(Alberta Transportation Guidelines)進行儲存以及按AER頒佈的各項規定進行處置,方可運輸至核准的省政府填埋場。

相較二零二一年,集團二零二二年所產生的油 基鑽屑較少,而水基鑽屑則較高。這是由於部 分水基鑽屑已與油基鑽屑合併存放,於統一獲 取油基鑽屑排放許可後一併處置。此外,由於 集團已積極實施節約資源措拖,並將部分文書 工作電子化,因此二零二二年紙張及辦公室廢 物較二零二一年減少。

6.4 善用資源

集團以善用資源為核心,時刻審視天然資源管 理制度,同時重視源頭管控,提升資源使用效 率。本年度, Baccalieu公司並無發現違反聯邦 及省級及AER頒佈有關資源使用的法律法規。 在營運石油井區及儲油罐區過程中,Baccalieu 主要的資源使用為天然氣,其次為電力和LPG。 其他分部亦於營運期間消耗電力、天然氣、柴 油及汽油。集團已訂立目標,持續通過倡導員 工節約用水、節約用電以及使用節能設備等方 法提高資源耗用效率。二零二三年將會沿用此 目標。針對用水管理,Baccalieu公司會對輕質 石油開採過程中水力壓裂產生的廢水進行回收 處理,並重複利用於萃取石油及天然氣的過程 中,既可減少水資源使用,亦可減少廢水量的 產生及儲存。Baccalieu公司亦承諾在石油井區 的污水回收利用率是100%。集團在獲取適用 水資源時並無遇到任何問題。



(continued) (續)

Qinghai Hongli requires employees to turn off the power of machinery and equipment during intermittent construction periods to reduce energy consumption. In terms of daily office operations, the Group installs energy-efficient equipment such as T5 fluorescent lamps and light-emitting diodes ("LED") lamps and installs water-saving features such as faucets, dual flush toilets, and toilets with water-saving functions in restrooms. At the same time, the Group advocates for green office practices and encourages employees to turn off facilities such as computers, printers, electric lights and water dispensers during non-office hours. The Group also controls the air conditioning temperature to approximately 25 degrees Celsius and uses email, posters and the intranet to promote resource conservation. Through the implementation of these measures, employees' awareness of energy and water conservation has been improved.

During the year, Baccalieu has successfully reduced natural gas consumption by converting some of its natural gas-driven pump trucks to electric motors. In addition, due to the impact of COVID-19 lockdown measures, the total energy and water consumption intensities have decreased by approximately 29.61% and 21.13%, respectively, compared to the year 2021.

6.5 Caring for the Environment

As a responsible energy company, the Group has always attached great importance to environmental protection and is committed to preventing major environmental pollution and ecological damage accidents. For construction projects, Qinghai Hongli has taken the following measures to protect the local ecological environment and prevent environmental pollution at the construction site: 1) covering the soil that cannot be transported in time with dust-proof nets during excavation operations and watering the site to reduce dust; 2) protecting vegetation cover such as trees and grass during operations and planting them after construction is completed; 3) using the original soil for backfilling as much as possible to ensure the original topography, and any additional soil for backfilling must be obtained from a designated soil collection site approved by local authorities; 4) for pedestrian walkway construction, fully considering environmental requirements, setting up residual slurry sedimentation tanks to prevent slurry water from entering rivers; 5) when encountering river construction, using bridge crossing or directional drilling technology; 6) when conducting mechanical equipment maintenance at the construction site, placing pads under the machinery to prevent fuel, oil, lubricants or other materials from flowing into the soil or water; and 7) providing education on soil and water conservation for all employees to raise their awareness of soil and water conservation. Baccalieu has also taken measures related to environmental protection during oil extraction, mainly including using batch drilling technology to reduce the number of drilling machines and drilling times and avoiding large-scale land damage. Additionally, Baccalieu pledges not to operate in ecologically vulnerable areas.

青海宏利要求員工在各機械設備間斷性施工期間,及時關閉其電源以減少能源消耗。日常辦公室營運方面,集團安裝T5熒光燈及發光二極管(「LED」)燈具等節能設備,並於衛生間安裝器有節水功能的水龍頭、雙沖水的小便器和在集團倡導綠色辦公,鼓勵員工工數的水機、電燈、飲水機等設施,並將空調溫度控制於約攝氏25度,飲水機等設施,並將空調溫度控制於約攝氏25度,於約資源。通過實施上述措施,員工對節約能源和節約用水的意識得以提高。

本年度Baccalieu公司已將部分天然氣驅動的泵車發動機改造為電動發動機,成功減少天然氣消耗。另外受疫情封控措施影響,能源及水源消耗總量密度相較二零二一年分別下降約29.61%及21.13%。

6.5 愛護環境

作為負責任的能源企業,集團一直重視環境保 護,致力杜絕重大環境污染和生態破壞事故的 發生。對於施工項目,青海宏利採取以下措施 保護當地生態環境,避免施工現場發生環境污 染:1)開挖作業時對不能及時運走的堆土進行 防塵網覆蓋,現場進行灑水降塵;2)植被覆蓋 地作業時,對林木、草皮覆蓋層等進行保護性 轉移,待施工完畢後進行種植;3)施工完畢後 盡量使用原土回填,保證地貌的原有性,額外 回填的泥土需在當地有關部門規定的取土場上 取土;4)人行道施工時,充分考慮環保要求,設 置剩餘泥漿沉澱池,防止泥漿水進入河道;5) 遇河道施工時,採用隨橋跨越或定向鑽技術; 6)在施工現場進行機械設備維修時,需在機械 設備下鋪墊以防燃油、機油、潤滑油或其他材 料流入土壤或水中;及7)各施工單位對職工進 行水土保持知識教育,提高員工水土保持的意 識。Baccalieu公司在石油開採過程中亦採取有 關環境保護的措施,主要包括:使用批量鑽井 技術以減少投入鑽井的機械,減少鑽土次數和 避免大面積的土地破壞。同時,Baccalieu公司 承諾不在生態易受破壞的地區運作。

(continued) (續)

Regarding noise pollution, a certain intensity of noise will be generated during LNG production, compressors, expanders, pumps, and other production equipment. To prevent and control noise pollution, the Group has developed a construction plan for urban pipeline operations, which includes measures such as installing mufflers on noise emission sources; regularly inviting qualified institutions to conduct occupational hazard factor testing, providing annual occupational health examinations for personnel exposed to noise hazards; coordinating the sequence of construction sections based on the traffic conditions of each road section; fencing off the construction site; prohibiting the use of high-noise equipment during nighttime and noon break periods; and developing traffic adjustment and announcement plans.

During the year, the Group has started the "Green Enterprise, Beautiful Home" tree-planting activity. All subsidiaries of the Group actively responded to the event, with a total of 300 employees participating and 450 trees planted. The Group hopes that the tree-planting activities can strengthen the awareness of staff collaboration, enhance their environmental and ecological consciousness, and contribute to the building of a green enterprise.

噪音污染方面,在LNG生產過程中,壓縮機、 膨脹機、泵等生產設備運行會產生一定強度的 噪音,針對噪音污染的防治,集團編製城區 管作業施工方案,措施主要包括:於噪音排 源加裝消音器等設施;定期請有資質的機構 職業病危害因素檢測,對接觸噪音危害的 提供年度職業健康檢查:在方案中根據對 提供年度職業健康檢查:在方案中根據對施工 投資。 場地進行圍封;嚴禁高噪聲設備在夜間和中午 休息時間使用:並做好交通調整計劃 。

本年度,集團已開展「綠色企業、美麗家園」植樹活動。集團各附屬公司積極響應,參與人數共約300人,共計植樹數量約450棵。集團期望可透過舉辦植樹綠化活動,加強員工協作意識,並增強其環保及生態意識,為建設綠色企業貢獻力量。





6.6 Climate Change

The risks and challenges posed by climate change to the global economy are constantly escalating, and the Group is aware of the need to take action. Based on the international recommendations of the Task Force on Climate-related Financial Disclosures established by the Financial Stability Board, the Group has assessed and recognised the climate-related risks and opportunities that affect its business.

The Group manages climate change-related issues in accordance with the ESG governance structure as detailed in the "2.4 ESG Governance Structure" section. The Group has implemented a "Climate Change Policy" to establish a process for identifying climate change risks and to set out management policies for climate change mitigation, adaptation and resilience, with an aim to timely take measures to minimise and adapt to these risks in daily business operations. The climate-related risks identified can be divided into two categories:

6.6 氣候變化

氣候變化為全球經濟帶來的風險和挑戰不斷升級,集團意識到採取行動的必要性。根據金融穩定委員會成立的氣候相關財務信息披露工作組的國際建議,集團已評估並認識到對集團業務有所影響的氣候相關風險及相應的機遇。

集團按照ESG管治架構管理氣候變化相關事宜, 詳請可參考「2.4 ESG管治架構」一節。集團已實 施《氣候變化政策》建立氣候變化風險識別流 程,並定立集團對減緩、適應和抵禦氣候變化 的管理方針,以在日常業務營運中及時採取措 施盡力降低及適應該等風險。我們識別的氣候 相關風險可分為兩大類:



(continued) (續)

Physical risks: The Group's operational assets, such as gas pipelines, gas facilities, and factories, are located in inland areas of Canada and across China. Due to their geographical location, these assets may be susceptible to damage from extreme weather events such as heavy rainfall and flooding, which could threaten the safe and stable supply of gas, increase operational and maintenance costs, and lead to higher insurance investments. As a response measure, the Group continuously strengthens the maintenance and management of the gas pipeline network and enhances safety protection. We also closely monitor the latest weather updates and recommendations from local governments to develop emergency plans for extreme weather conditions. In the event of any extreme weather event, the Group will follow the work deployment of flood prevention, supply protection and safety protection, arrange maintenance personnel to arrive at disaster areas for emergency disposal, and strengthen warning forecasts and emergency response to reduce or avoid property losses when extreme weather affects the Group's operating locations. To respond to potential flood disasters, the Group's subsidiary has purchased inflatable boats and provided training in boat driving skills for maintenance and repair personnel to improve their flood resistance and rescue capabilities.

Transition risk: In order to achieve sustainable development, governments around the world have successively formulated climate-related legislation or tightened regulations to support the global decarbonisation vision. For example, Canada will implement a climate plan to cap emissions from the oil and gas industry and strive for net zero emissions by 2050. The PRC government will also increase its contribution to national emissions reduction efforts, aiming to peak carbon emissions before 2030 and achieve carbon neutrality by 2060. As relevant policies become more stringent, the Group will also be subject to carbon emission restrictions, which may lead to increased compliance costs and operational costs. To mitigate the impact of these policies on the Group, we regularly monitor existing and emerging trends and policies related to climate change, strengthen communication and contact with regulatory authorities, timely adjust the company's risk management measures, reasonably arrange project development and construction, improve compliance and quality in emissions and climate change disclosure, and regularly communicate with different stakeholders on their views on climate-related issues to avoid reputational risks caused by delayed responses.

The Group uses annual GHG emissions as a metric to assess and manage climate-related issues. For relevant data and target set, please refer to the "6.2 Air Emissions Control" and "10. Sustainability Performance Data for 2022" sections. To further enhance its environmental performance, the Group is actively exploring green finance-related opportunities to improve equipment efficiency, develop new energy technology projects, etc., in the hope of better monitoring and managing carbon emissions to mitigate climate-related risks.

實體風險:集團的營運地點位於加拿大的內陸 地區及橫跨中國。受地理位置影響,集團的營 運資產,如輸氣管網、燃氣設施、工廠等,有 可能會因暴雨及洪水等極端天氣事件而遭到破 壞,使安全穩定供氣受到威脅,也會使營運及 維護成本增加以及保險投資增加。作為應對措 施,集團會持續增強燃氣管網的維護管理與安 全保障。我們亦會密切關注當地政府發佈的最 新天氣消息及建議,制訂針對極端天氣狀況的 應急計劃。如發生任何極端天氣事件,集團會 按照防汛度汛、保供保安全的工作部署,安排 維修人員到達災區域進行應急處置,並強化預 警預報和應急處置,以在極端天氣影響集團經 營場所時減少或避免財產損失。為應對可能發 生的洪水災害,集團附屬公司已購置衝鋒舟, 並為維搶修隊員開展衝鋒舟駕駛技能培訓,提 升抗洪搶修救援能力。

轉型風險:為實現可持續發展,各地政府相繼 制訂氣候相關立法或收緊法規,以支持全球脱 碳願景。例如加拿大將推行氣候計劃,率先對 石油和天然氣行業的污染設限封頂,爭取二零 五零年實現淨零排放。而中國政府亦將提高國 家自主減排貢獻力度,力爭於二零三零年前碳 達峰,二零六零年前實現碳中和。隨著相關政 策的收緊,集團也將受到有關碳排放的限制, 可能導致合規成本及營運成本的增加。為減輕 相關政策對集團的影響,我們將會定期監測與 氣候有關的現有及新興趨勢和政策,加強與各 監管部門的溝通聯繫,及時調整公司風險管理 辦法,合理安排工程開發與項目建設,提高其 在排放及氣候變化披露方面的合規性及質素, 並定期與不同利益相關方就其對氣候相關問題 的觀點進行溝通,以避免因反應遲緩而導致的 聲譽風險。

集團以年度溫室氣體排放量作為評估和管理 氣候相關議題的指標。有關數據及目標設定, 請參考[6.2空氣治理]以及[10.二零二二年可持 續發展續效數據]兩節。為進一步提升其環保 方面的表現,集團正積極探索綠色金融相關機 遇,藉此提升設備效能、開發新能源技術項目 等,期望做好碳排效監察及管理,以減輕氣候 相關風險。

(continued) (續)



7. CARING FOR EMPLOYEES

The Group has always regarded its employees as its most valuable asset and is committed to safeguarding their labor rights in accordance with the law and actively striving to improve their working conditions. The Group focuses on building a diverse human resources team, respects employees from different cultural backgrounds, and attaches importance to protecting their privacy. The Group hopes to provide employees with ideal career development opportunities while creating a healthy and happy work environment and fostering a rich and warm cultural life.

7.1 Employee Rights

The Group strictly establish a comprehensive human resources management system in accordance with laws. Employment policies such as the "Employee Recruitment Management Measures" and the "Salary Management Measures" are formally compiled in the Group's "Administrative Office Management Manual" and "Human Resources Management Manual". The Group takes pride in its diverse human resources team, adheres to the principle of non-discrimination, and treats employees from different races, nationalities, beliefs, genders, ages, marital statuses, and those protected by special laws equally in the recruitment, training, promotion, and salary setting processes, ensuring that all employees have equal development opportunities. In the recruitment process, the human resources department verifies the identity documents of the prospective employees to prevent the employment of child labor. The Group has the right to terminate the labor contract with employees who violate the Group's rules and regulations or engage in illegal activities. The Group provides employees with opportunities for promotion, salary increases, or rewards based on their performance and contributions, and provides benefits such as pension, medical, work injury, maternity, social insurance, housing provident fund, and festival allowances in accordance with relevant laws and regulations in the location of operation.

Regarding working hours, the Group implements three systems: standard working hours, flexible working hours, and comprehensive calculation of working hours. Each subsidiary can flexibly arrange suitable working hour systems for employees based on their business characteristics and job requirements after approval and agreement by the human resources department, while firmly rejecting forced labor. Each subsidiary must also arrange compensatory leave or pay overtime pay in accordance with national and the Group's regulations for employees who work overtime. Regarding holidays, employees are entitled to sick leave, personal leave, marriage leave, bereavement leave, maternity leave, work injury leave, annual leave and statutory holidays in accordance with the law.

7. 關注員工需求

集團一直視員工為最寶貴的資產,致力保障員工依法享有勞工權益,並積極爭取改善勞工待遇。集團專注建設多元化的人事團隊,尊重來自不同文化背景的員工,並注重保障員工的私隱。集團期望能為員工提供理想的職業發展,同時營造健康愉快的工作環境,締造豐富溫馨的文化生活。

7.1. 員工權益

集團嚴格依法建立完善的人力資源管理程序。 《員工招聘管理辦法》、《薪酬管理辦法》等僱傭 政策正式編製在集團《行政辦公管理手冊》及《人 力資源管理手冊》內。集團以多元化的人事團 隊為傲,堅守反歧視的原則,在招聘、培訓、 晉升和薪酬制定等流程中,堅持對不同種族、 國籍、信仰、性別、年齡、婚姻狀況及受特殊 法律保護的員工-視同仁,確保所有員工享有 平等的發展機會。在招聘的過程中,人力資源 部會核實擬錄用人員的身份證件,杜絕僱用童 工。如員工違反集團規章制度或違法犯罪,集 團有權與其解除勞動合同。集團根據績效和貢 獻給予員工晉升、調薪或獎勵的機會,並依照 營運所在地的相關法律法規為員工提供養老、 醫療、工傷、生育社會保險、住房公積金、過 節費等福利。

工作時數方面,集團實行標準工時制、不定時制和綜合計算工時制3種工時制度。各別屬公司可根據業務特點和崗位需要,經人力的屬源部審批並同意後,彈性為員工安排適合附屬計,同時堅決拒絕強制勞工工作。各附團引亦須為加班員工安排補休或按國家、集團規定支付加班費。在假期方面,員工依法享有假、事假、婚假、变假、產假、工傷假、有假及法定節假日。

(continued) (續)

In accordance with relevant laws and regulations, the Group strictly prohibits child labor and forced labor in the recruitment process. The Group strictly adheres to local laws and will not employ children who have not reached the legally defined minimum working age as stipulated by applicable laws and regulations. Personal information such as identity documents will be collected during the recruitment process to verify the identity of the interviewee. The Group shall not use any form of force, coercion, punishment, or intimidation related to work to force employees to work against their will. In the event of any violations, the Group shall handle them according to the circumstances.

During the year, the Group was not aware of any material non-compliance with employment-related 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 that would have a significant impact on the Group, including but not limited to Labour Law of the People's Republic of China, Labour Contract Law of the People's Republic of China and Employment Standards Code of Alberta, Canada. During the year, Qinghai East COG Limited, a subsidiary of the Group, was awarded the "2021 Haidong City Labor Security Compliance and Integrity Grade A (Excellent) Unit" by the Human Resources and Social Security Bureau of Haidong City, Qinghai Province, after comprehensive assessment and examination by the National Development and Reform Commission, Ministry of Housing and Urban-Rural Development, State Administration for Market Regulation, State Taxation Administration, and All-China Federation of Trade Unions in accordance with the requirements of the Labour Law of the People's Republic of China. The award acknowledges the Group's outstanding management of legal and normative employment practices.

Case: Providing heartfelt comfort to the families of employees

To ensure that employees truly recognise the Group's compassion and consideration, and fully leverage the bridge and bond function of the labour union, the general manager of Huimin COG Limited (惠民中油燃氣有限責任公司) ("Huimin COG"), together with the union chairman, visited the sick family members of two employees this year and presented condolence gifts on behalf of the labour union, sending care and warmth to the families in need.

根據法律及法規規定,在招聘過程中嚴格禁止 童工及強制勞工。集團嚴格遵守本地法律,不 會聘用未達到下文所述的相關法例及規例所界 定法定工作年齡的兒童。身份證等個人資料將 於招聘過程中被收集,以核實面試人的身份。 集團不得以任何形式的武力或恐嚇,或與工作 相關的任何類型的體罰或脅迫強制僱員違背 意願工作。倘發生違規行為,集團將按情況處 理。

案例:暖心慰問員工家屬

為讓員工切實感受到來自集團的關懷,並充分發揮工會組織密切聯繫職工的橋樑紐帶作用, 惠民中油燃氣有限責任公司(「惠民中油燃氣」) 總經理連同工會主席於本年度登門看望了兩位 員工的患病家屬,代表工會送去了慰問品,獻 上了來自組織的關懷和溫暖。



(continued) (續)



7.2 Platform for Growth

The Group places great importance on employee training and regards talent as a driving force for sustainable development. The Group actively promotes various talent training programmes, focuses on paving the way for employee development, and strives to achieve the ideal of shared growth between employees and the Group. The Group's human resources department develops a comprehensive employee training plan every year, providing ongoing training and diverse development opportunities based on employees' career paths.

Each subsidiary also provides specialised and themed training for employees in different positions, arranges for participation in knowledge and skills competitions, and participates in theme speech activities to enhance employees' comprehensive abilities. To continuously improve the skills of internal trainers, further improve the internal curriculum system, inherit corporate culture and management experience, the Group also organises internal training teams. During the year, the Group held training sessions on corporate culture construction, safety production management, financial information systems, material procurement processes, vocational skills, construction project management, value-added business and insurance business. During the severe pandemic period, the Group also continued to provide training for employees working from home through online meetings, providing learning opportunities for employees while ensuring the smooth progress of business.

Safety training is an important part of the Group's training program. The Group provides effective and diverse training methods, classifies and trains employees at different levels, and takes multiple measures to enhance employees' safety awareness and responsibility. The Group requires new frontline employees to participate in comprehensive safety education and training. During the year, subsidiaries also held activities such as safety production themed training, gas special equipment welding certification training, fire safety training, and emergency drills. To effectively maintain the safety management level of safety management personnel, the Group requires subsidiaries to regularly hold safety knowledge examinations, ensuring that employees always grasp safety knowledge, improve safety theoretical knowledge and enhance safety culture qualities.

7.2. 成長平台

集團重視員工培訓,視人才為企業可持續發展的推動力。集團積極推進各項人才培訓,注重為員工鋪排發展的道路,實現員工與集團共同成長的理想。集團人力資源部每年均會制定完善的員工培訓計劃,按員工的職業生涯提供持續培訓和多元化的發展機會。

(continued) (續)

Case: Knowledge and skills competition

The business department in Shandong arranged for Huimin COG, its subsidiary, to participate in the "2022 Citywide Gas Industry Skills Competition", which was organised by the Municipal Federation of Trade Unions in conjunction with the Municipal Bureau of Housing and Urban-Rural Development and hosted by the Municipal Gas and Heat Association. With the opportunity to get familiarised with gas-related skills and knowledge, the participating employees performed well in the competition, winning first place in theory, practical exercises and overall results.

案例:知識技能競賽

山東事業部安排下屬公司惠民中油燃氣參與由市總工會聯合市住房和城鄉建設局主辦、市燃氣熱力協會承辦的「2022年度全市城鎮燃氣行業技能競賽」,參賽員工藉此機會熟習燃氣相關技能及知識,於比賽中出色發揮,獲得理論、實操、總成績第一名的優異成績。



During the year, Liling COG also organised the third corporate culture knowledge contest under the theme of "promoting corporate culture and practising the concept of corporate love" of the 20th-anniversary series of activities, with the aim to promote the corporate culture of the group company, continue to facilitate the construction of the corporate culture of Liling COG, further promote the core values of the Group and reinforce a solid foundation for corporate culture.

體陵中油燃氣亦於本年度組織開展了20周年系列活動之「弘揚企業文化,踐行愛企理念」主題的第三屆企業文化知識競賽,旨在宣貫集團公司企業文化,持續推進醴陵中油燃氣企業文化建設,進一步弘揚集團核心價值觀,打造強有力的企業文化陣地。



(continued) (續)



8. PRACTICE INTEGRITY

The Group regards a culture of integrity as an inseparable part of corporate construction. The Group adheres to laws and regulations such as the Criminal Law of the People's Republic of China, the Anti-Corruption Law of the People's Republic of China, and the Anti-Money Laundering Law of the People's Republic of China, and eliminates any form of interest transmission and corrupt bribery behavior. In engineering services and material procurement bidding, the Group strictly complies with the e Bidding Law of the People's Republic of China and formulates the "Material Management Measures", which stipulate that bidding and tendering activities should follow the principles of openness, fairness, impartiality, and honesty and trustworthiness. Multiple regulations are established during the bidding, evaluation, and awarding process, such as prohibiting bidders from exerting pressure on the tenderer during the bidding review, clarification, evaluation, comparison, and evaluation process to eliminate any form of corrupt bribery behavior. In addition, the Group has established the "Code of Ethics for Executives", which requires executives to sign the "Letter of Commitment for Ethics" and the "Letter of Commitment for Anti-Corruption" upon assuming office, and promise to firmly resist any form of bribery, extortion, fraud, intentionally making transactions with improper parties, money laundering, etc. The letters of commitment also specify if an employee violates their commitments, they must take responsibility for breach of contract and legal consequences. The Group has also formulated written procedures for the management of petitioning and reporting, standardised the process of receiving various types of reporting and complaints against disciplinary actions or proceedings, and regularly reported the results of petitioning and reporting to senior management. Baccalieu has formulated the "Management Practices Concerning Commercial Conduct and Ethics" to regulate conflicts of interest, receiving bribery, privacy confidentiality, etc., and to encourage the reporting of any illegal or unethical behaviour.

During the year, the Group was not aware of any material non-compliance with relevant laws and regulations of bribery, extortion, fraud and money laundering that would have a significant impact on the Group, including but not limited to Anti-Unfair Competition Law of the People's Republic of China and Criminal Law of the People's Republic of China and Criminal Code of Canada. Also, there were no concluded legal cases regarding corrupt practices during the year (2021: Nil). The Group's subsidiaries were also awarded the "Outstanding Gas Management Unit of 2021" in the area of integrity building during the year.

The Group arranges anti-corruption training at least once a year. During the year, the Group has provided a total of approximately 16,422.00 hours of anti-corruption training to a total of 654 managerial staff of directors, senior management and subsidiaries above the middle level, and a total of approximately 125,454.00 hours of anti-corruption training to 3,155 employees (2021: 501 managerial staff participated in a total of approximately 17,535.00 hours; 4,187 employees participated in a total of approximately 146,545.00 hours). The training program covers the Group's risk prevention and control management system to cultivate employees' anti-corruption awareness and good professional ethics, and to comply with regulations in Hong Kong and the PRC.

8. 廉潔從業

集團把廉潔文化視為企業建設的重要部分。集 **團恪守《中華人民共和國刑法》、《中華人民共** 和國反貪污賄賂法》、《中華人民共和國反洗錢 法》等法律法規,杜絕任何形式的利益輸送和 貪腐賄賂的行為。在工程服務及物資採購招投 標中,集團嚴格遵守《中華人民共和國招標投 標法》並制定《物資管理辦法》,當中訂明招投 標活動應當遵循公開、公平、公正和誠實信用 的原則。於開標、評標、定標過程中訂立多項 規定,如投標人在投標審查、澄清、評價、比 較及評標的過程中,禁止對招標人施加壓力, 以杜絕任何形式的貪污受賄行為。另外,集團 制定《高管人員職業道德規範》,規定高管人員 上任時須簽署《職業道德規範承諾書》和《反舞 弊承諾書》,承諾堅決抵制任何形式的賄賂、勒 索、欺詐、故意與不當關聯方交易、進行洗黑 錢行為等。承諾書上亦訂明如員工違反承諾, 需要承擔違諾責任和法律後果。集團亦就信訪 舉報管理制定書面程序,規範有關受理各類舉 報以及不服處分或處理的申訴流程,並定期向 上級報告信訪舉報工作結果。Baccalieu公司已 制定《商業行為和道德守則》,規範利益衝突、 收受賄賂、私隱保密等事宜,鼓勵舉報任何非 法或不道德行為。

於本年度,集團並不知悉任何嚴重違反賄賂、勒索、欺詐及洗錢的相關法例及法規而對集團造成重大影響的情況,包括但不限於《中華人民共和國反不正當競爭法》、《中華人民共和國刑法》及加拿大的《刑法典》。本年度亦無任何已審結的貪污訴訟案件(二零二一年:無)。集團附屬公司更於本年度在廉政建設工作方面榮獲[2021年度燃氣管理工作突出單位]稱號。

集團至少每年一次安排反貪污培訓。於本年度,集團已向董事、高管及子公司中層以上共654名管理人員提供合共約16,422.00小時反貪污培訓,以及向3,155名員工提供合共約125,454.00小時反貪污培訓(二零二一年:501名管理人員參與合共約17,535.00小時:4,187名員工參與合共約146,545.00小時)。該培訓內容涵蓋集團風險防控管理制度,以培養員工的反貪意識及良好的專業操守,遵守香港及中國大陸的法規。



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9. ENGAGING WITH THE COMMUNITY

The Group actively responds to the United Nations' 2030 Agenda for Sustainable Development Goals, understands the needs of different people in society, and is committed to giving back to society, spreading warmth, and taking practical actions to develop public welfare undertakings comprehensively. The Group has formulated internal regulations regarding community participation, focusing on providing assistance to vulnerable communities and establishing the COG volunteer team to encourage employees to participate in voluntary work, including visiting the elderly, assisting in disaster relief, and other activities, demonstrating the love and dedication of the enterprise and employees. During the year, the Group's subsidiaries participated in different social welfare activities including the donation of pandemic prevention supplies, visits, blood donation, and voluntary tree-planting activity, etc. At the same time, the Group regularly holds gas safety knowledge lectures in communities and schools to raise users' awareness of gas safety. Baccalieu also encourages employees to join volunteer organisations and actively supports community charity events in the Calgary and other operating locations. In the future, the Group will continue to shoulder the mission of serving society, using small acts of kindness to achieve great love and give back to society.

Case: Donation of pandemic prevention supplies

Anyi COG Limited (g 義中油燃氣有限責任公司) donated a batch of pandemic prevention supplies to Wanbuzhen, Anyi County, to actively fulfil corporate social responsibility and contribute to the prevention and control of the pandemic in Anyi County with practical actions. Its contributions were recognised with a certificate of donation from the county government.

9. 温暖同行

集團積極回應聯合國《二零三零年可持續發展 議程》目標倡議,切身處地體會社會不同人士 的需要,致力回饋社會,傳播溫暖,並付諸實 際行動,全方位發展公益事業。集團已制定有 關社區參與的內部規定,專注向各方弱勢社群 提供援助,並成立中油燃氣義工隊,鼓勵員工 參加義務工作,包括慰問老人、協助救災等活 動,展現企業和員工的愛心和奉獻精神。於本 年度,集團各附屬公司參與的社會公益活動包 括防疫物資捐贈、走訪慰問、獻血活動、義務 植樹活動等。同時,集團不定期到社區及學校 舉辦燃氣安全知識講座,提高用戶的燃氣安 全意識。Baccalieu公司亦鼓勵員工加入義工組 織,積極支持卡加利地區和其他營運所在地的 社區慈善活動。未來,集團將繼續肩負服務社 會的使命,以點滴善行成就大愛,回饋社會。

案例:防疫物資捐贈

安義中油燃氣有限責任公司向安義縣萬埠鎮捐助一批防疫物資,以實際行動積極履行企業社會責任,為助力安義縣疫情防控工作貢獻一份力量。其貢獻獲得由縣委縣政府頒發的捐贈證書。



(continued) (續)



10. SUSTAINABILITY PERFORMANCE DATA FOR 2022

The Group formulated this performance data summary according to the Stock Exchange's ESG Reporting Guide. Due to the fact that the Group hires external contractors for most of its construction projects, it is difficult to provide environmental performance data in terms of construction projects for this year. In the future, the Group will actively collect environmental data related to construction projects and establish an environmental performance management system.

10. 二零二二年可持續發展績效 數據

集團根據聯交所之ESG報告指引制定以下績效 數據匯總表。由於集團大部分建設工程均聘請 外部承包商,本年度難以提供工程建設方面的 環境績效數據。未來,集團將積極收集工程建 設環境數據,並建立環境績效管理系統。

Environmental Performance ¹	Unit	Quantity		Intensity ² (Ui million HKD) 密度 ²	
環境表現 ¹ Resources Consumption 資源耗用	單位	數量 2022 二零二二年	2021 二零二一年	(單位/億港 2022 二零二二年	2021 二零二一年
Direct Energy Consumption ³ 直接能源消耗 ³	MWh 兆瓦時	65,495.48	74,644.75	375.98	520.54
Diesel 柴油	MWh 兆瓦時	1,920.63	1,836.92	11.03	12.81
Petrol 汽油	MWh 兆瓦時	407.83	539.02	2.34	3.76
Natural gas 天然氣	MWh 兆瓦時	61,067.36	69,572.66	350.56	485.16
LPG LPG	MWh 兆瓦時	2,099.66	2,696.15	12.05	18.80
Indirect Energy Consumption 間接能源消耗	MWh 兆瓦時	33,123.75	40,691.27	190.15	283.76
Purchased Electricity 外購電力	MWh 兆瓦時	33,123.75	40,691.27	190.15	283.76
Total Energy Consumption 能源消耗總量	MWh 兆瓦時	98,619.23	115,336.02	566.13	804.30
Total Water Consumption 水源消耗總量	MWh 立方米	94,580.87	98,716.00	542.94	688.40
Wastewater 廢水量	MWh 立方米	44,804.50	39,865.00	257.20	278.00

直接能源消耗數據的單位換算方法乃根據國 際能源署所發佈之《能源數據手冊》所制訂。



Environmental performance data were derived from the Group's 4 selected

During the year, the Group's revenue was approximately 174.2 hundred million HKD (2021: 143.4 hundred million HKD). The data are used for the calculation of

The unit conversion method of energy consumption data is based on the Energy Statistics Manual issued by the International Energy Agency.

環境績效數據來自集團選定的4個部門。

於本年度,集團的營業額為約174.2億港元(二 零二一年:143.4億港元)。該數據用於密度的

Environmental Performance ¹	Unit	Quantity		Intensity² (Uni million HKD R 密度²	
環境表現1	單位	數量	數量		元營業額)
Wastes Disposal ⁴ 廢棄物棄置 ⁴		2022 二零二二年	2021 二零二一年	2022 二零二二年	2021 二零二一年
Hazardous Wastes 有害廢棄物	tonnes 噸	3,005.06	5,635.04	17.25	39.30
Oil-based Drill Cutting 油基鑽屑	tonnes 噸	3,004.95	5,634.92	17.25	39.30
Ink Cartridge 墨盒	tonnes 噸	0.10	0.11	0.001	0.001
Battery 電池	tonnes 噸	0.01	0.01	0.00006	0.00007
Non-hazardous Wastes 無害廢棄物	tonnes 噸	2,566.84	742.68	14.74	5.18
Water-based Drill Cutting 水基鑽屑	tonnes 噸	2,562.59	737.40	14.71	5.14
Paper 紙張	tonnes 噸	4.11	5.04	0.02	0.04
Office Wastes 辦公室廢物	tonnes 噸	0.14	0.24	0.001	0.002
Air Pollution Emissions⁵ 大氣污染物排放量⁵					
Nitrogen Oxides (NO _x) 氮氧化物(NO _x)	tonnes 噸	1,950.22	2,238.36	11.20	15.61
Sulphur Oxides (SO _x) 硫氧化物(SO _x)	tonnes 噸	0.004	0.004	0.00002	0.00003
Particulate Matter (PM) 顆粒物(PM)	tonnes 噸	0.15	0.15	0.0009	0.001
Volatile Organic Compounds (VOCs) 揮發性有機化合物(VOCs)	tonnes 噸	88.13	78.30	0.51	0.55

- Oil-based and water-based drill cutting were generated from Baccalieu's operations. Other waste was generated from the operations in the PRC.
 - The calculation method and respective emission factors of air emissions are based on How to prepare an ESG report Appendix 2: Reporting Guidance on Environmental KPIs issued by the Stock Exchange and the 4430 Factor Handbook of Industrial Boilers of Thermal Supply Industries published by the Ministry of Ecology and Environment of the People's Republic of China.
- 4 油基鑽屑和水基鑽屑屬於Baccalieu公司業務的 廢棄物,其餘廢棄物則屬於中國業務的廢棄 物。
- 5 廢氣排放的計算方法及相關排放系數計算乃 根據聯交所發佈的《如何準備ESG報告 — 附錄 二:環境關鍵績效指標匯報指引》、中國生態 環境部最新發佈的《4430工業鍋爐(熱力供應) 行業系數手冊》所制訂。







Environmental Performance ¹	Unit	Quantity		Intensity² (Un million HKD R 密度²	
環境表現1	單位	數量			
GHG Emissions ⁶		2022	2021	2022	2021
溫室氣體排放6		二零二二年	二零二一年	二零二二年	二零二一年
Direct GHG Emissions (Scope 1) 直接溫室氣體排放(範圍一) — Hydrocarbons Venting and Flaring 碳氫化合物排放及燃燒 — Natural Gas and LPG Consumption 天然氣及LPG消耗 — Direct Emissions ⁷ 直接排放 ⁷ — Vehicles Usage 車輛使用 — Refrigerant Consumption 製冷劑消耗	tCO ₂ e 噸二氧化碳當量	283,755.85	254,810.08	1,628.91	1,776.92
Energy Indirect GHG Emissions (Scope 2) 能源間接溫室氣體排放 (範圍二) — Purchased Electricity 外購電力	tCO ₂ e 噸二氧化碳當量	18,983.93	27,907.47	108.98	194.61
Total GHG Emissions 溫室氣體排放總量	tCO ₂ e 噸二氧化碳當量	302,739.78	282,717.55	1,737.89	1,971.53
Hydrocarbons Venting and Flaring 碳氫化合物排放及燃燒					
Hydrocarbons (Vented) 碳氫化合物排放量	′000 m³ 千立方米	1,007.86	904.20	5.79	6.31
Hydrocarbons (Flared) 碳氫化合物燃燒量	′000 m³ 千立方米	570.00	469.10	3.27	3.27

- The calculation method and respective emission factors of direct GHG emissions (Scope 1) are based on the Intergovernmental Panel on Climate Change ("IPCC")'s 2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 2 Energy and How to prepare an ESG report — Appendix 2: Reporting Guidance on Environmental KPIs issued by the Stock Exchange. The calculation method and respective emission factors of energy indirect GHG emissions (Scope 2) are based on the Notice on the Management of Enterprise Greenhouse Gas Emissions Reporting for Power Industry from 2023 to 2025 published by the Ministry of Ecology and Environment of the People's Republic of China.
- Direct emissions refer to the methane emissions generated from oil storage tank venting, pneumatic instruments, and compressor seals.
- 直接溫室氣體排放(範圍一)的計算方法及相 關排放系數計算乃根據、政府間氣候變化專 門委員會(「IPCC」)發佈的《2006年IPCC國家溫 室氣體清單指南第2卷能源》以及聯交所發佈 的《如何準備ESG報告 — 附錄二:環境關鍵績 效指標匯報指引》所制訂。而能源間接溫室氣 體排放。(範圍二)的計算方法及相關排放系數 計算乃根據中國生態環境部發佈的《關於做好 2023-2025年發電行業企業溫室氣體排放報告 管理有關工作的通知》所制訂。
- 直接排放是指儲油罐通風口、氣動儀器和壓 縮機密封件產生的甲烷排放。



		As at 31 December	As at 31 December
Social Performance	Unit	2022 数本一零一一年	2021 截至二零二一年
社會表現	單位		十二月三十一日
Total Number of Employees	People	4,837	4,704
員工總數	人	,,,,,,	.,
Proportion of Employees by Gender 按性別分類的員工比例			
Male 男性	% 百分比	67.36	66.58
Female	%	32.64	33.42
女性	百分比		
Proportion of Employees by Age Group 按年齡組別分類的員工比例			
Aged 30 or Below	%	25.39	26.00
30歲或以下	百分比		
Aged 31 to 50	% 百分比	65.70	64.09
31歲至50歲 Aged 51 or Above	ョカル %	8.91	9.91
51歲或以上	百分比	0.51	5.51
Proportion of Employee by Business Type 按業務類型分類的員工比例			
Supply of Pipeline Gas 管道燃氣供應	% 百分比	68.04	68.60
Logistics and Transportation 物流運輸	% 百分比	0.41	0.55
LNG Production LNG生產	% 百分比	1.90	1.32
Exploitation and Production of Crude Oil and Natural Gas 開採及生產原油及天然氣	% 百分比	16.25	15.31
Others: Energy Equipment, Financial Leasing, Real Estate, etc. 其他:能源裝備、金融租賃、房地產等	% 百分比	13.40	14.22
Proportion of Employee by Employment Type 按僱傭類型分類的員工比例			
Full-time	%	100.00	99.96
全職	百分比		
Part-time 兼職	% 百分比	-	0.04
Proportion of Employees by Geographical Region 按地區分類的員工比例			
PRC	%	99.60	99.58
中國內地	百分比	0.40	0.40
Hong Kong 香港	% 百分比	0.19	0.19
育心 Canada	ョカル %	0.21	0.23
加拿大	百分比	3. <u>-</u> .	





Social Performance 社會表現	Unit 單位	2022 二零二二年	2021 二零二一年
Overall Employee Turnover Rate ⁸ 總員工流失率 ⁸ Employee Turnover Rate by Gender ⁹	% 百分比	14.62	11.08
按性別分類的員工流失率 ⁹ Male 男性	% 百分比	17.10	12.77
Female 女性	6分比 % 百分比	9.50	7.70
Employee Turnover Rate by Age Group ⁹ 按年齡組別分類的員工流失率 ⁹			
Aged 30 or Below 30歲或以下	% 百分比	18.81	17.66
Aged 31 to 50 31歲至50歲	% 百分比	11.36	8.72
Aged 51 or Above 51歲或以上	% 百分比	26.68	9.01
Employee Turnover Rate by Business Type ⁹ 按業務類型分類的員工流失率 ⁹			
Supply of Pipeline Gas 管道燃氣供應	% 百分比	9.88	8.89
Logistics and Transportation 物流運輸	% 百分比	30.00	23.08
LNG Production LNG生產	% 百分比	14.13	24.19
Exploitation and Production of Crude Oil and Natural Gas 開採及生產原油及天然氣	% 百分比	35.24	17.36
Others: Energy Equipment, Financial Leasing, Real Estate, etc. 其他:能源裝備、金融租賃、房地產等	% 百分比	13.27	13.15
Employee Turnover Rate by Geographical Region ⁹ 按地區分類的員工流失率 ⁹			
PRC 中國內地	% 百分比	14.65	11.06
Hong Kong 香港	% 百分比	_	11.11
Canada 加拿大	% 百分比	10.00	18.18



Social Performance 社會表現	Unit 單位	2022 二零二二年	2021 二零二一年
Overall Percentage of Employee Trained¹º 總受訓員工百分比¹º	% 百分比	93.20	99.96
Average Training Hours Completed per Employee ¹¹ 每名僱員完成受訓的平均時數 ¹¹	Hours 小時	236.20	255.98
Proportion of Employee Trained by Gender ¹² 按性別分類的受訓員工比例 ¹²			
Male	% = ^ \	69.43	66.61
男性 Female	百分比 %	30.57	33.39
女性	76 百分比	30.37	33.33
Proportion of Employee Trained by Business Type ¹²	H 73 23		
按業務類型分類的受訓員工比例12			
Supply of Pipeline Gas	%	68.55	68.63
管道燃氣供應	百分比	0.44	0.55
Logistics and Transportation 物流運輸	% 百分比	0.44	0.55
NG Production	н л ш %	1.60	1.32
LNG生產	百分比		1.32
Exploitation and Production of Crude Oil and Natural Gas	%	15.24	15.27
開採及生產原油及天然氣	百分比		
Others: Energy Equipment, Finance Leasing, Real Estate, etc.	%	14.17	14.23
其他:能源裝備、金融租賃、房地產等	百分比		
Average Training Hours Completed per Employee by Gender ¹³ 按性別分類的員工平均受訓時數 ¹³			
Male	Hours	243.63	256.41
男性	小時 ··	222.04	255.44
Female 女性	Hours 小時	220.86	255.11
Average Training Hours Completed per Employee by Business Type ¹			
按業務類型分類的員工平均受訓時數13			
Supply of Pipeline Gas	Hours	238.26	257.00
管道燃氣供應	小時		
Logistics and Transportation 物流運輸	Hours 小時	317.50	257.00
LNG Production LNG生產	Hours 小時	165.65	257.00
Exploitation and Production of Crude Oil and Natural Gas 開採及生產原油及天然氣	Hours 小時	222.01	253.42
Others: Energy Equipment, Finance Leasing, Real Estate, etc. 其他:能源裝備、金融租賃、房地產等	Hours 小時	250.47	253.68







Social Performance 社會表現	Unit 單位	2022 二零二二年	2021 二零二一年	_
Number of Suppliers by Geographical Region 按地區分類的供應商數量				
PRC	Number	181	118	
中國內地	家			
Overseas	Number	548	620	
海外	家			

- The overall employee turnover rate is calculated by dividing the total number of employees who left during the year by the total number of employees at the end of the year, then multiplied by 100%.
- The employee turnover rate for each category is calculated by dividing the number of employees who left in the category during the year by the number of employees in the category at the end of the year, then multiplied by 100%.
- The overall percentage of employee trained is calculated by dividing the total number of employees trained during the year by the total number of employees at the end of the year, then multiplied by 100%.
- The average training hours completed per employee is calculated by dividing the total training hours received by employees during the year by the total number of employees at the end of the year.
- The proportion of employee trained for each category is calculated by dividing the number of employees trained in the category during the year by the total number of employees trained during the year, then multiplied by 100%.
- The average training hours completed per employee for each category is calculated by dividing the training hours received by employees in the category during the year by the number of employees in the category at the end of the year.

- 總員工流失率是按全年離職員工總人數除以年 末員工總人數,再乘以100%計算。
- 9 各類別的員工流失率是按全年該類別的離職 員工人數除以年末該類別的員工人數,再乘以 100%計算。
- 10 總受訓員工百分比是按全年總受訓員工人數除 以年末員工總人數,再乘以100%計算。
- 5 每名員工完成受訓的平均時數是按全年員工受訓總時數除以年末員工總人數計算。
- 12 各類別受訓員工比例是按全年該類別的受訓員工人數除以全年受訓員工總人數,再乘以100%計算。
- 13 各類別員工平均受訓時數是按全年該類別的員工受訓時數除以年末該類別的員工人數計算。



APPENDIX: INDEX TABLE OF THE STOCK EXCHANGE'S ESG REPORTING GUIDE 附錄: 聯交所之ESG報告指引索引

Mandatory Disclosure R 強制披露規定	equirements Section 章節		Page 頁 碼
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General Disclosures and KPIs 一般披露及	Description	Section	Page
關鍵績效指標	描述	章節	頁碼
	Environmental Aspect		
Aspect A1: Emission	環境範疇		
層面A1:排放物			
General Disclosure	Information on:	6	34–37
	 (a) the policies; and (b) compliance with relevant laws and regulations that significant impact on the issuer relating to air and greenhouse gas emissions, discharges into 	o water	
一般披露	and land, and generation of hazardous and non-hazardous 有關廢氣及溫室氣體排放、向水及土地的排污、有害廢棄物的產生等的: (a) 政策;及	及無害	
KDI A4 4	(b) 遵守對發行人有重大影響的相關法律及規例的資		40
KPI A1.1 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。	10	48
M 英 頑 及 珀 示 A L L	Direct (Scope 1) and energy indirect (Scope 2) greenhou	use gas 10	49
	emissions (in tonnes) and, where appropriate, intensity (e.g.)		.5
關鍵績效指標A1.2	of production volume, per facility). 直接(範圍1)及能源間接(範圍2)溫室氣體排放量(以噸記 (如適用)密度(如以每產量單位、每項設施計算)。	十算)及	
KPI A1.3	Total hazardous waste produced (in tonnes) and,	where 10	48
	appropriate, intensity (e.g. per unit of production volum facility).	•	
關鍵績效指標A1.3	所產生有害廢棄物總量(以噸計算)及(如適用)密度(如 量單位、每項設施計算)。	以母産	
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, appropriate, intensity (e.g. per unit of production volur		48
關鍵績效指標A1.4	facility). 所產生無害廢棄物總量(以噸計算)及(如適用)密度(如 量單位、每項設施計算)。	以每產	
KPI A1.5	Description of emissions target(s) set and steps taken to them.	achieve 6	35–36
關鍵績效指標A1.5	描述所訂立的排放量目標及為達到這些目標所採取的		26. 27
KPI A1.6	Description of how hazardous and non-hazardous was handled, and a description of reduction target(s) set an taken to achieve them.		36–37
關鍵績效指標A1.6	描述處理有害及無害廢棄物的方法,及描述所訂立的標及為達到這些目標所採取的步驟。	減廢目	



General Disclosures			
and KPIs 一般披露及	Description	Section	Page
關鍵績效指標	描述	章節	頁碼
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Use of Resources 層面A2:資源使用			
General Disclosure	Policies on the efficient use of resources, including energy, water	6	37–38
dericial Disclosure	and other raw materials.	Ü	3, 30
一般披露	有效使用資源(包括能源、水及其他原材料)的政策。		
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity,	10	47
	gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of		
關鍵績效指標A2.1	production volume, per facility). 按類型劃分的直接及/或間接能源(如電、氣或油)總耗量(以		
開 挺 縜 双 拍 标 AZ.I	按照空劃分的直接及/ 蚁间按能源(如电、黑蚁油)總托里(以 千個千瓦時計算)及密度(如以每產量單位、每項設施計算)。		
KPI A2.2	Water consumption in total and intensity (e.g. per unit of	10	47
	production volume, per facility).		
關鍵績效指標A2.2	總耗水量及密度(如以每產量單位、每項設施計算)。		
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to	6	37–38
思 <i>始</i> 徒 並 松 無 ^ 2 2	achieve them.		
關鍵績效指標A2.3	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。		
KPI A2.4	Description of whether there is any issue in sourcing water that	6	37–38
	is fit for purpose, water efficiency target(s) set and steps taken to		
	achieve them.		
關鍵績效指標A2.4	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		
KPI A2.5	目標及為達到這些目標所採取的步驟。 Total packaging material used for finished products (in tonnes) and,	N/A	N/A
NPI AZ.5	if applicable, with reference to per unit produced.	N/A	IV/A
關鍵績效指標A2.5	製成品所用包裝材料的總量(以噸計算)及(如適用)每生產單	不適用	不適用
	位佔量。		
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一般披露	減低發行人對環境及天然資源造成重大影響的政策。		
KPI A3.1	Description of the significant impacts of activities on the	6	38–39
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	關影響的行動。		



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General Disclosure	Policies on identification and mitigation of significant climate- related issues which have impacted, and those which may impact, the issuer.	6	39
一般披露	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。		
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	6	39–40
關鍵績效指標A4.1	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。		
	Social Aspect 社會範疇		
Employment and Labour Practices 僱傭及勞工常規 Aspect B1: Employment 層面B1:僱傭	↑1. 自 早 0 º時		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	7	41–42
一般披露	有關薪酬及解僱、招聘及晉升、工作時數、假期、平等機會、 多元化、反歧視以及其他待遇及福利的: (a) 政策:及 (b) 遵守對發行人有重大影響的相關法律及規例的資料。		
KPI B1.1	Total workforce by gender, employment type (for example, full-or part-time), age group and geographical region.	10	50
關鍵績效指標B1.1	按性別、僱傭類型(如全職或兼職)、年齡組別及地區劃分的僱員總數。		
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	10	51
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。		





General Disclosures			
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關鍵績效指標	描述	章節	頁碼
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	(a) the policies; and		29-30
	(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.		
一般披露	有關提供安全工作環境及保障僱員避免職業性危害的:		
	(a) 政策;及		
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KPI B2.2	Lost days due to work injury.	4	25
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KPI B2.3	Description of occupational health and safety measures adopted,	4	24–25,
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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。		
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層面B3:發展及培訓		_	
General Disclosure	Policies on improving employee knowledge and skills for	7	43–44
40.14.=	discharging duties at work. Description of training activities.		
一般披露	有關提升僱員履行工作職責的知識及技能的政策。描述培訓		
	活動。		
KPI B3.1	The percentage of employees trained by gender and employee	10	52
	category (e.g. senior management, middle management).		
關鍵績效指標B3.1	按性別及僱員類別(如高級管理層、中級管理層)劃分的受訓		
1/2/22	僱員百分比。		
KPI B3.2	The average training hours completed per employee by gender and	10	52–53
	employee category.		
關鍵績效指標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。		



General Disclosures			
and KPIs	Description	Section	Page
一般披露及			
關鍵績效指標	描述	章節	頁碼
Aspect B4:			
Labour Standards			
層面B4:勞工準則			
General Disclosure	Information on:	7	41–42
	(a) the policies; and		
	(b) compliance with relevant laws and regulations that have a		
	significant impact on the issuer		
40.14.75	relating to preventing child and forced labour.		
一般披露	有關防止童工或強制勞工的:		
	(a) 政策;及		
KPI B4.1	(b) 遵守對發行人有重大影響的相關法律及規例的資料。	7	41–42
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	/	41-42
關鍵績效指標B4.1	描述檢討招聘慣例的措施以避免童工及強制勞工。		
KPI B4.2	Description of steps taken to eliminate such practices when	7	41–42
N11 54.2	discovered.	,	71 72
關鍵績效指標B4.2	描述在發現違規情況時消除有關情況所採取的步驟。		
Operating Practices			
· · · · · · · · · · · · · · · · · · ·			
Aspect B5:			
Supply Chain Management			
層面B5:供應鏈管理			
General Disclosure	Policies on managing environmental and social risks of the supply	4	17
	chain.		
一般披露	管理供應鏈的環境及社會風險政策。		
KPI B5.1	Number of suppliers by geographical region.	10	53
關鍵績效指標B5.1	按地區劃分的供應商數目。	4	47.40
KPI B5.2	Description of practices relating to engaging suppliers, number of	4	17–18
	suppliers where the practices are being implemented, and how they are implemented and monitored.		
關鍵績效指標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		
野 女 i 八 1 小 D J . C	目,以及相關執行及監察方法。		
KPI B5.3	Description of practices used to identify environmental and social	4	17–18
(1,1,5,5,5)	risks along the supply chain, and how they are implemented and		1, 10
	monitored.		
關鍵績效指標B5.3	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。		





General Disclosures and KPIs	Description	Section	Page
一般披露及 關鍵績效指標	描述	章節	頁碼
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	4	17–18
關鍵績效指標B5.4	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。		
Aspect B6: Product Responsibility 層面B6:產品責任			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	4, 5	19–23, 26–33
一般披露	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。		
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	5	32
關鍵績效指標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。		
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	5	32–33
關鍵績效指標B6.2 KPI B6.3	接獲關於產品及服務的投訴數目以及應對方法。 Description of practices relating to observing and protecting intellectual property rights.	5	31
關鍵績效指標B6.3 KPI B6.4 關鍵績效指標B6.4	描述與維護及保障知識產權有關的慣例。 Description of quality assurance process and recall procedures. 描述質量檢定過程及產品回收程序。	5	31
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	5	33
關鍵績效指標B6.5	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。		



General Disclosures			
and KPIs	Description	Section	Page
一般披露及 關鍵績效指標	描述	章節	頁碼
Aspect B7: Anticorruption			
層面 B7 :反貪污			
General Disclosure	Information on:	8	45
	(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.		
一般披露	有關防止賄賂、勒索、欺詐及洗黑錢的:		
	(a) 政策;及		
KDI D7.4	(b) 遵守對發行人有重大影響的相關法律及規例的資料。	0	45
KPI B7.1	Number of concluded legal cases regarding corrupt practices	8	45
	brought against the issuer or its employees during the reporting period and the outcomes of the cases.		
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		
1963 AC 1952 790 THE INC. 1	的數目及訴訟結果。		
KPI B7.2	Description of preventive measures and whistle-blowing	8	45
	procedures, and how they are implemented and monitored.		
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 B7.3	Description of anti-corruption training provided to directors and staff.	8	45
關鍵績效指標B7.3	描述向董事及員工提供的反貪污培訓。		
Community			
社區			
Aspect B8:			
Community Investment			
層面B8:社區投資	Deliaire and a second of the	0	4.0
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities	9	46
	take into consideration the communities' interests.		
一般披露	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		
73/ 30/ 30-1	會考慮社區利益的政策。		
KPI B8.1	Focus areas of contribution (e.g. education, environmental	9	46
	concerns, labour needs, health, culture, sport).		
關鍵績效指標B8.1	專注貢獻範疇(如教育、環境事宜、勞工需求、健康、文化、		
IVDI DO 3	體育)。	0	4.6
KPI B8.2 關鍵績效指標B8.2	Resources contributed (e.g. money or time) to the focus area. 在專注範疇所動用資源(如金錢或時間)。	9	46
卵蜓線XX1111示DO.Z	<u>但守江乳睛川刬用具师(邓亚线以时间)。</u>		

