



CHINA VANADIUM
TITANO-MAGNETITE MINING
COMPANY LIMITED
中國鈮鈦磁鐵礦業有限公司

(Incorporated in the Cayman Islands with limited liability)
(於開曼群島註冊成立之有限公司)
(Stock Code 股份代號: 00893)

謀定而動 順勢而為

CONSOLIDATE THE FOUNDATION WITH
INCLUSIVENESS AND ADAPTABILITY

ENVIRONMENTAL, SOCIAL
AND GOVERNANCE REPORT

2019 環境、社會及
管治報告

We aim to be a
TOP-NOTCH ENTERPRISE

打造一流企業



- CORE VALUE**
核心價值
 - We deliver with integrity
 - We explore opportunities
 - We uphold the essence of commitment and responsibility
 - 誠信、開拓、責任
- VISION**
願景
 - To explore exceptional potential in mining
 - 中國鐵鈦，太（鈦）不平凡（鈦）
- MISSION**
使命
 - We reward shareholders
 - We care for the community
 - 回報股東，回報社會

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ABOUT THIS REPORT

China Vanadium Titano-Magnetite Mining Company Limited is publishing its Environmental, Social and Governance report (“ESG Report”) for the financial year ended 31 December 2019. This report presents the Company’s concepts, action plans and performance in sustainable development to stakeholders.

Scope

This report discloses the information on the Group in fulfilling its economic, environmental and social responsibilities. This report covers the period from 1 January 2019 to 31 December 2019. Some content may look back upon the performance of the Group in past years to present the report in a more informative and comparable manner.

Reporting Period

This is an annual report.

Reporting Guidelines

The report is prepared according to the “comply or explain” approach of the *Environmental, Social and Governance Reporting Guide* (the “ESG Reporting Guide”) set out in Appendix 27 to the *Rules Governing the Listing of Securities on The Hong Kong Stock Exchange* (“HKEX”).

Data Collection

Financial data in the report are extracted from the 2019 Annual Report. Other data are extracted from the Group’s internal management system and statistics and partly consist of data for previous years. Unless otherwise stated, RMB is used in this report as its functional currency.

Report Availability

The report is issued in electronic versions. Please visit www.chinavtmmining.com or www.hkex.com.hk to download the report.

Contacts

We value stakeholders’ views and suggestions. Please let us know your feedback on our ESG management and reporting via ir@chinavtmmining.com.

關於本報告

中國鈦鐵磁鐵礦業有限公司謹此發表其截至2019年12月31日止財政年度的環境、社會及管治報告（「ESG報告」）。本報告旨在向權益人闡述本公司在可持續發展方面的理念、行動計劃及表現。

範圍

本報告披露本集團在2019年1月1日至2019年12月31日期間履行經濟、環境及社會責任方面的資料。為提供更多相關資訊及更易於比較，報告內呈列的部分內容可能引用本集團過往年度的表現數據。

報告週期

此報告為年度報告。

報告指引

本報告按照《香港聯交所（「港交所」）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」）的「不遵守就解釋」方針編製。

資料收集

本報告內的財務數據乃摘錄自2019年年報。其他數據乃摘錄自本集團的內部管理系統及統計數字，當中部分包括往年數據。除非另有指明，否則人民幣將用作本報告的功能貨幣。

報告獲取

本報告以電子版本發出，請於 www.chinavtmmining.com 或 www.hkex.com.hk 下載。

聯絡資料

我們重視權益人的意見及建議。如閣下對我們的ESG管理及報告有任何反饋，歡迎透過 ir@chinavtmmining.com 告知我們。

CHAIRMAN'S STATEMENT

Dear Stakeholders,

As I wrote in my Chairman's Statement for the Annual Report 2019, we are operating in a highly unpredictable environment while facing acute market uncertainty. The global coronavirus pandemic in early this year has adversely affected overall market sentiment, disrupted key supply chain and posed significant downside risks on the pace of demand recovery. More recently, we learn that China did not set any economic growth target for FY2020 and the reasons are quite obvious. Despite these new challenges, key stakeholders expect mining companies to strategically and uninterruptedly deal with the Environmental, Social and Governance (ESG) matters as part of the capitalism for mining companies – we agree, as it is a good cause.

Amidst the unpredictability of the pandemic this year and the rain-triggered disaster last year, we released several important announcements to update our shareholders. In these announcements, we highlighted disruptions, restrictions, conditions, actions and control measures in connection with these unprecedented and exceptional events. We take our duty to update shareholders in a timely manner seriously and you would have noted in these key announcements that we have been emphasising the importance of good workplace safety and health practices, which must not be compromised and must be prioritised at all times. More recently, we updated that we have received approvals from the local government to resume our operations in full while keeping in mind that the safety and health of our workers cannot be traded off.

During this critical time, we have trained our workers to improve on self-protection ability while promoting personal and workplace hygiene. We continue to create safety awareness amongst the working groups and have been tracking their health conditions. We remain vigilant and stay in close contact with the local government in monitoring the pandemic situation. We have seen the coordinated actions of the government in the pandemic containment and we make concerted efforts to support the communities in response to these commitments. It has been remarkable.

主席報告書

致各權益人：

在本人撰寫2019年年報的主席報告書的時候，本集團的經營環境極難預料，市場上充斥不明朗因素。本年年初爆發全球冠狀病毒大流行，嚴重影響整體市道，主要供應鏈受到干擾，令需求復甦進程面對重大下行風險。最近，我們得知中國並無為2020財政年度定下任何經濟增長目標，理由顯而易見。儘管面對此等新挑戰，主要權益人仍然期望礦業公司有策略地在不受干擾的情況下處理環境、社會及管治(ESG)事項，這是資本主義中對礦業公司的期許，而我們奉行不悖，理所當然。

本年爆發大流行，去年暴雨成災，在此等不可預料的情況下，我們發表多項重要公告，為股東提供最新資料。在該等公告中，我們提供有關此等史無前例特殊情況的干擾、限制、情況、行動及控制措施的摘要。我們克盡及時為股東提供最新情況之責，相信閣下可能從該等重要公告中注意到，我們一直重視良好工作場所安全及健康慣例的重要性，絕不放鬆懈怠。最近，我們提供的最新資料指出，我們已獲地方政府批准全面恢復營運，同時時刻緊記不會犧牲旗下工人的安全與健康。

在此艱難時刻，我們為工人提供培訓，提升彼等的自我保護能力，同時提倡個人及工作場所衛生。我們繼續提高各工作小組的安全意識，並追蹤彼等的健康狀況。我們保持警惕，與地方政府維持緊密聯繫，監察大流行情況。我們見到政府就大流行疫情控制作出協調行動，我們亦同心協力支持各社區以作響應。成果顯著。

Back to our mining business – those days, stakeholders of the mining companies in China were focused on capacity efficiency in order to produce the highest volumes at the lowest costs. Nowadays, key stakeholders expect mining companies to be proactive, productive, profitable, sustainable and responsible. Whilst this is not something new, the mining industry is now facing these challenges amidst the global recession risk and weak market sentiment. Improving production efficiency while reducing energy consumption are now very basic yardsticks which most mining companies should reasonably aim to achieve.

Operationally, we did a few improvements during the year for better resource utilisation and mine rehabilitation. Specifically, (i) we modified our environmental protection equipment (such as the tailing treatment system) for discharge compliance with external drainage; (ii) we recycled tailings and waste rocks to improve the resource utilisation and reduce wastage; (iii) we initiated mine geological environment treatment and land reclamation projects in order to reduce water and soil pollution around the mining area while gradually restoring surface vegetation and groundwater levels to enhance biodiversity and environment protection.

As one of the largest iron ore producers and mine operators in Sichuan Province, we must instill faith into our working groups and the local communities. Nothing has changed since I wrote to you last year in spite of the weak market sentiment. As reiterated, I continue to believe that we must bring transformational change to our shareholders over a longer term. We must think ahead and plan ahead towards integrating societal value with our future corporate strategies. Our management team is hardworking, supportive and confident (as they have always been). From managing our existing mines to implementing our future strategies, we will continue to promote a fair, safe, healthy and friendly working environment for our employees. We appreciate team effort; we encourage idea sharing and we must avoid spreading emotional contagion amongst our key management members and staff. Again, we reaffirm our commitment here.

Teh Wing Kwan
Chairman

Hong Kong, 29 June 2020

至於旗下開採業務，過往，中國礦業公司的權益人關注的是產能效益，從而以最低成本達至最大產量。而現在，主要權益人期望礦業公司積極作為，保持生產，維持盈利，以可持續方式經營，盡職盡責。雖然太陽底下無新事，惟面對全球衰退風險及市道疲弱，礦業現時受到上述挑戰。提高生產效益同時降低能耗已是現時最基本的標準，大部分礦業公司應在合理情況下力求達到。

營運方面，我們在年內作出了多項改善措施，提升資源利用及礦場復墾效率。尤其是，(i)我們調整了旗下環保設備（如尾礦處理系統），以符合外部排水的排污標準；(ii)回收尾礦及廢礦石，改善資源利用率及減少浪費；(iii)開展礦場地質環境改善及土地復原項目，以減少開採範圍週邊的水土污染，同時逐步恢復地表植被及地下水位，從而提高生物多樣性及環保水平。

作為四川省最大型鐵礦石生產商及礦場營運商之一，我們必須得到旗下工作小組及地方社區的信任。自本人於去年市道疲弱之際致函閣下以來，我們一直堅守信念。謹此重申，本人仍然相信，我們在較長期內必須為股東帶來變革轉型。我們必須未雨綢繆，將社會價值融入未來企業策略之中。我們的管理團隊一如以往，勤勉盡責、互相支持、充滿自信。不論是管理現有礦場，還是推行未來策略，我們將繼續提倡為僱員營造公平、安全、健康及友善的工作環境。我們重視團隊合作，鼓勵分享理念，同時避免主要管理人員與員工滋長歪風。我們再次確認肩負有關使命。

主席
鄭永權

香港，2020年6月29日

GROUP PROFILE

The Company has been listed on the main board of the Hong Kong Stock Exchange since 8 October 2009. During the year ended 31 December 2019, the Group was principally engaged in mining and ore processing, sale of self-produced products, trading of coals and steels, management of strategic investments and providing specialised mining services. As at 31 December 2019, the Group owned one ordinary iron ore mine (namely the Maoling-Yanglongshan Mine), one gypsum mine (namely the Shigou Gypsum Mine) and one processing plant (namely the Maoling Processing Plant). All mines and processing plant are located in Sichuan, China.

As at 31 December 2019, the total number of shares of the Company in issue was 2,249,015,410 and the percentage holding of the Company's subsidiaries was as follows:

集團簡介

本公司自2009年10月8日起於香港聯交所主板上市。於截至2019年12月31日止年度，本集團的主要業務為採礦及礦石洗選、銷售自產產品、買賣煤炭及鋼鐵、策略性投資管理，以及提供專業開採服務。於2019年12月31日，本集團擁有一個普通鐵礦（即毛嶺—羊龍山鐵礦）、一個石膏礦（即石溝石膏礦）及一座洗選廠（即毛嶺洗選廠）。全部鐵礦及洗選廠均位於中國四川。

於2019年12月31日，本公司的已發行股份總數為2,249,015,410股，而本公司持有子公司的權益百分比如下：



As Mancala Asia is contractually entitled to appoint a majority of members in the members' council of MCL Vietnam and to control the operations of MCL Vietnam, MCL Vietnam is accounted as a subsidiary of Mancala Asia.

由於香港曼卡拉按照合約有權委任越南曼卡拉董事會大多數成員，並可控制越南曼卡拉的營運，故越南曼卡拉入賬列作香港曼卡拉的子公司。

CORPORATE GOVERNANCE

The Company is committed to upholding corporate governance to ensure that formal and transparent procedures are in place to protect and maximise the interests of its shareholders. Under the supervision of the Board, the management is responsible for designing and implementing the Group's risk management and internal control systems. The Group has set up three lines of defence for risk management. As the first line of defence, the business units (e.g., sales department and production department) are responsible for identifying and assessing business risks and developing risk mitigation measures. As the second line of defence, the functional departments (e.g., compliance department and finance department) are responsible for assisting the business units to improve the risk management and monitoring the effectiveness of risk management. As the third line of defence, the internal audit function assists the Board and the audit committee to review the effectiveness of the Group's risk management and internal control systems.

As and when required during the year, the management convened meetings which were chaired by the senior management with attendants including, managers from subsidiaries and department heads from the headquarters. The Group's decisions on operations, implementation of investment projects, financial issues, and the updates on risk management and internal control were considered and determined in these meetings. For more information about the Group's corporate governance, please refer to the Corporate Governance Report in the 2019 Annual Report.

企業管治

本公司致力維持企業管治，確保以正式、透明度高的程序保障及提升股東的權益。在董事會的監督下，管理層負責設計及實行本集團的風險管理及內部監控系統。本集團為風險管理制定三條防線。第一條防線為業務單位（如銷售部門及生產部門），負責識別及評估業務風險，並制定減低風險措施。第二條防線為職能部門（如合規部門及財務部門），負責協助業務單位改善風險管理，監察風險管理成效。第三條防線為內部核數功能，協助董事會及審核委員會檢討本集團風險管理及內部監控系統的成效。

年內如有需要，管理層會召開由高級管理層出任主席的大會，與會者包括子公司的經理及總部的部門主管。本集團的營運決策、投資項目的實行、財務事宜和風險管理及內部監控的最新情況均於該等會議上省覽及決定。更多關於本集團企業管治的資訊，請參閱2019年年報中的企業管治報告。

ESG MANAGEMENT

Committed to pursuing a high-level of corporate governance, the Company has established well-defined and highly transparent corporate governance structures and systems to guarantee long-term development of the Company and safeguard the interests of shareholders of the Company. After extensive study, the Company has published the *Guideline on Environment, Social and Governance Working Group* and formally established an ESG working group and its associated ESG executive team.

The ESG working group is led by the Company's financial controller, supported by the chief executive officer and the head of compliance department of the Company. The ESG working group regularly reports ESG related policies and issues to the Board and assists to effectively evaluate risks and opportunities arising from the Group's operations; develops strategies for ESG reporting, ESG management and maps out a medium to long-term ESG management plan to enhance the Group's capability in internal control and risk mitigation, establishes and maintains a healthy relationship with stakeholders to ensure a proper materiality assessment, instructs the ESG executive team to establish working mechanisms and approval processes, and evaluates the achievements of the ESG executive team.

Under the leadership of the ESG working group, the Company has also established an ESG executive team led by the head of compliance department of the Company and has assigned a full-time employee to manage the daily ESG issues and help set up an ESG contact network. Apart from the designated ESG representative from the compliance department, other members making up the ESG executive team are the senior management of the Company's subsidiaries and department heads from finance, general management, production and operation departments etc. The ESG executive team assists to carry out and execute instructions given by the ESG working group and organises stakeholder communication and ESG reporting, ensure ESG issues are well incorporated into the Group's daily operation.

The dual settings in organisational structures facilitate the Company to better understand stakeholders' concerns and obtain timely feedback. The engagement of the Board and senior management of the Company's subsidiaries further reinforces the importance of ESG issues and ensures that the views of the ESG management are given due weight in the Group's daily operations.

ESG管理

本公司致力實行高水平的企業管治，因此已建立權限清晰且透明度高的企業管治架構及制度，確保本公司可長遠發展及保障本公司股東利益。經廣泛研究後，本公司已制訂《環境、社會及管治(ESG)小組工作制度》，並正式設立ESG工作小組及其附屬ESG執行團隊。

在本公司財務總監帶領以及首席執行官和合規部主管支持下，ESG工作小組定期向董事會匯報ESG相關政策及議題，並協助有效地評估本集團營運所引起的風險及帶來的機遇；制訂ESG報告與ESG管理策略以及擬訂中長期ESG管理計劃，以提升本集團內部監控及減低風險的能力；與權益人建立並保持良好關係，確保重要性評估恰當；委託ESG執行團隊設立工作機制及審批程序；以及評價ESG執行團隊的表現。

本公司亦已在ESG工作小組的領導下成立以本公司合規部門主管為首的ESG執行團隊，並指派一名全職僱員負責管理日常ESG議題及協助建立ESG聯繫網絡。除該名由合規部門指定的ESG代表外，組成ESG執行團隊的其他成員為本公司各子公司的高級管理層以及財務、綜合管理、生產及營運等部門的主管。ESG執行團隊協助實行及執行ESG工作小組作出的指示，以及安排權益人溝通及ESG報告事宜，確保本集團的日常運作充分考慮ESG各項事宜。

雙向組織架構使本公司能更瞭解權益人關注的事宜並適時取得反饋。董事會及本公司各子公司高級管理層的參與進一步確認ESG議題的重要性，並確保本集團的日常運作妥善顧及ESG管理意見。

STAKEHOLDER ENGAGEMENT

Stakeholder engagement is a core part of the Company's sustainable development. The Company strives to establish a regular communication mechanism with stakeholders and has set up online and offline communication channels. These inform stakeholders of the Company's strategic plan and performance in sustainable development and ensure timely feedback from its stakeholders, so that the Group's business practices are able to meet their expectations.

The Company defines its stakeholders as individuals or organisations that interact with the Group and are influenced by, have an influence on, or have a vested interest in, the Group. Stakeholders of the Company include not only internal stakeholders such as the employees, but also external stakeholders such as the shareholders, clients, suppliers, communities, and the government. The Company communicates with its stakeholders on various issues through different channels.

權益人參與

權益人的參與乃本公司可持續發展的核心部分。本公司致力與權益人建立定期溝通機制，並設有線上線下溝通渠道，從而告知權益人本公司在可持續發展方面的策略計劃及表現，確保適時向其權益人取得反饋，使本集團的業務常規符合彼等的期望。

本公司將其權益人識別為與本集團互動、受本集團影響、對本集團有影響力或於本集團有既得利益的人士或組織。本公司的權益人不僅包括僱員等內部權益人，亦包括外部權益人，例如股東、客戶、供應商、社區及政府。本公司透過不同渠道與權益人討論各種議題。

Communication with stakeholders 與權益人的溝通

Types of Stakeholders 權益人類別	Needs 需求	Responses 回應	Communication Channels 溝通渠道
Shareholders 股東	<ul style="list-style-type: none"> Continuous and stable investment returns 持續及穩定的投資回報 Timely and fair disclosure of information 適時中肯地披露資訊 Enterprise operations complying with relevant laws and regulations 企業以符合相關法律及法規的方式營運 	<ul style="list-style-type: none"> Improve business portfolio diversity and operating cash flow 提高業務多元性及加強營運現金流 Establish a sound system for disclosure of regular and ad hoc information 設立完善系統披露定期及特別資訊 Improve internal compliance system 改善內部合規系統 	<ul style="list-style-type: none"> Annual and interim reports 年報及中期報告 Corporate announcements 公司公告 Press releases 新聞稿

Communication with stakeholders

與權益人的溝通

Types of Stakeholders 權益人類別	Needs 需求	Responses 回應	Communication Channels 溝通渠道
Clients 客戶	<ul style="list-style-type: none"> Sustainable, reliable and safe supply of products and services 可靠及安全地持續供應產品及服務 Timely response to clients' demands 適時回應客戶需求 Improvement in product and service quality 提升產品及服務質素 	<ul style="list-style-type: none"> Establish a comprehensive safety supervision system and response system 設立全面的安全監督系統及回應制度 Establish a responsible identification system for clients' needs 設立負責任的客戶需求識別系統 	<ul style="list-style-type: none"> Continuous communication through physical visits, emails and other official channels 以親身拜訪、電郵及其他正式渠道持續溝通 Entering into long-term cooperation agreements 訂立長期合作協議
Employees 僱員	<ul style="list-style-type: none"> Adequate health and safety protection 足夠的健康及安全保障 Decent working environment 理想的工作環境 Plenty of opportunities for career development 充足的事業發展機會 	<ul style="list-style-type: none"> Establish work safety and health policies in line with relevant laws and regulations 制定符合相關法律及法規的工作健康及安全政策 Improve internal systems for managing staff recruitment and promotion 改善內部員工招聘及晉升管理制度 Enrich employee' daily lives 使僱員日常生活更充實 Provide diversified employee benefits 提供多元化的僱員福利 	<ul style="list-style-type: none"> Internal memos 內部備忘 Team building exercises 團隊建立活動 Staff counselling 員工輔導

Communication with stakeholders

與權益人的溝通

Types of Stakeholders 權益人類別	Needs 需求	Responses 回應	Communication Channels 溝通渠道
Suppliers 供應商	<ul style="list-style-type: none"> Fair, just and open procurement process 公平、公正、公開的採購過程 Punctual fulfilment of contractual obligations 準時履行合約責任 	<ul style="list-style-type: none"> Ensure transparency in the procurement process with internal and external supervision 確保採購過程具透明度，接受內部及外部監督 Reasonable management and control of cash flow to ensure timely payment 合理管理及監控現金流，確保適時付款 	<ul style="list-style-type: none"> Communicate with suppliers from internal management suppliers' list 通過內部管理供應商名錄與供應商溝通 Provide a dedicated hotline for reporting corporate corruption 提供公司貪污舉報專線
Government 政府	<ul style="list-style-type: none"> Promote local and peripheral industry development 推動地方及週邊地區的行業發展 Enterprise operates in compliance with relevant laws and regulations 企業以符合相關法律及法規的方式營運 	<ul style="list-style-type: none"> Provide job opportunities and tax contribution at the location of operations 於營運所在地提供工作機會及繳納稅項 Receive supervision from the government and improve the internal compliance monitoring system 接受政府監督，加強內部遵例監察制度 Ensure compliance with relevant laws and regulations regarding environment, safety and integrity 確保符合有關環境、安全及誠信的相關法律及法規 	<ul style="list-style-type: none"> Participate in government meetings and pay regular visits to the government authorities 參與政府會議，定期造訪政府機關

Communication with stakeholders 與權益人的溝通			
Types of Stakeholders 權益人類別	Needs 需求	Responses 回應	Communication Channels 溝通渠道
Community 社區	<ul style="list-style-type: none"> Contribute to community development 為社區發展作出貢獻 Engage in community activities and maintain good communication 參與社區活動，保持良好溝通 	<ul style="list-style-type: none"> Improve local infrastructure construction 改善當地基礎建設 Maintain good communication with local residents 與當地居民保持良好溝通 	<ul style="list-style-type: none"> Survey of community representatives 社區代表調查 Regular visits 定期拜訪 Community Services 社區服務
Banks 銀行	<ul style="list-style-type: none"> Good creditworthiness and ability to pay debts 信譽良好，有能力清償債務 Stable business development 穩定的業務發展 	<ul style="list-style-type: none"> Pay debts on time to maintain good creditworthiness 準時清償債務，以維持良好信譽 	<ul style="list-style-type: none"> Regular and direct communication 定期直接溝通

ESG REPORTING PRINCIPLES

Materiality

In order to clarify the key areas of ESG practice and information disclosure and improve the relevance of the report, the Company identified ESG issues and conduct materiality assessment in accordance with the requirements of the HKEX's ESG Reporting Guide to ensure that the ESG issues that are material to the Company and stakeholders are disclosed.

ESG匯報原則

重要性

為識別出ESG慣例及資料披露的主要範疇，以及提升報告的關聯性，本公司已按照港交所ESG報告指引的規定識別出若干ESG議題，並進行重要性評估，以確保所披露的ESG議題均對本公司及權益人屬重要。

Screening Process of ESG Issues ESG議題篩選過程

Source of ESG Issues

ESG議題來源

- Recommendations from the Company's management
- 本公司管理層的建議
- Internal and external experts' analysis and suggestions
- 內部及外部專家的分析及提議
- Multimedia information analysis
- 多媒體資料分析
- Peer benchmarking
- 同業基準化分析
- ESG related standards and guidelines
- ESG相關準則及指引

Screening Criteria

篩選標準

- Contribution to sustainable development
- 對可持續發展的貢獻
- Stakeholders' general concern
- 權益人的一般關注
- ESG-related guidelines for materiality
- ESG相關重要性指引
- In accordance with the Company's strategic development needs
- 視乎本公司策略性發展需要

In 2019, the Company continued to use questionnaires to gain a full understanding of stakeholders' view on relevant ESG work and to receive stakeholder advice. Twelve issues were identified with reference to the scope of this ESG Report by taking into account the features of the Group's business. These issues covered areas including environment, employment practice, occupational health and safety, labour standards, supplier management, product responsibility, anti-corruption, and community investments. Internal and external stakeholders were invited to rate the materiality of the twelve issues through questionnaires and then ranked the twelve issues by their materiality ratings. Through materiality rating, combined with the consideration of the disclosure of the Group's business highlights and industry information, the key issues of disclosure for this Report were derived, and a materiality matrix was formed (see Figure 1 for details).

本公司於2019年繼續以問卷方式全面瞭解權益人對相關ESG工作的意見及收集權益人的建議。經參考本ESG報告的披露範圍和結合本集團業務的實際情況後，本集團已識別出12個議題，涵蓋環境、僱傭慣例、職業健康與安全、勞工準則、供應商管理、產品責任、反貪污及社區投資等範疇。本公司邀請內外部權益人以問卷為該12個議題的重要性評分，並隨後按得分進行排序。考慮到本集團業務重點及行業資料的披露事項，藉助重要性評分得出於本報告內披露的主要議題，並編製出重要性矩陣（詳情見圖1）。



Figure 1 Materiality Matrix for China VTM Mining in 2019

圖1 2019年中國鐵鈦重要性矩陣

Results of the stakeholder survey provided useful references for future adjustments to the Company's sustainable actions. Subject to the disclosure requirements of the ESG Reporting Guide, this Report sets out the issues which the Company's stakeholders are more concerned about in greater details. In addition, the results of the materiality assessment would be used to guide the strategic goals and plans for ESG management in the next year, thereby driving the continuous progress of sustainable development.

Quantitative

This Report's quantitative key disclosure indicators of all "Subject Area A. Environmental" categories and some "Subject Area B. Social" categories are regularly collected and summarised by the ESG executive team during the year to form this report. For ESG detailed quantitative data, statistical scope and methods involved, please refer to each section of this ESG Report.

Consistency

The quantification of relevant disclosure indicators covers the period from 1 January 2019 to 30 July 2019 in respect of the Discontinued Operations as a result of the Disposal completed on 30 July 2019. Save as disclosed above, the approach to detailing the disclosure indicators corresponding to the ESG Reporting Guidelines and the statistical methods of each disclosure indicators remains the same as previous reports. For details, please refer to each section of this ESG Report.

OPERATIONAL PRACTICE

The Group has always adhered to the philosophy of "Integrity Comes First", resolutely avoids illegal acts such as corruption, bribery and commercial fraud, and maintains a healthy and good business environment. At the same time, the Group is committed to building a green supply chain and constantly regulating procurement and supplier management practices. Through strictly implementing product quality inspection procedures, and establishing a good communication mechanism with customers, the Group effectively guarantees the quality of products and services to achieve sustainable corporate development.

權益人調查結果為本公司日後調整可持續行動提供有用的參考資料。在ESG報告指引披露規定的規限下，本報告更詳細地載列本公司的權益人較為關注的議題。此外，重要性評估的結果將用作下一年度ESG管理策略目標及計劃的指引，從而推動可持續發展的進程。

量化

本報告所有「範疇A. 環境」類別及部分「範疇B. 社區」類別的量化關鍵披露指標於年內由ESG執行團隊定期收集匯總，以編製本報告。有關ESG詳細量化數據、統計範圍與涉及的方法，請參閱本ESG報告各章節。

一致性

就已終止經營業務而言，由於出售事項於2019年7月30日完成，故相關披露指標的量化範圍涵蓋2019年1月1日至2019年7月30日期間。除上文所披露者外，詳列ESG報告指引相關披露指標的方法及各披露指標的統計方法與過往報告相同。有關詳情請參與本ESG報告各章節。

營運慣例

本集團一直恪守「誠信為先」的理念，嚴防貪污、賄賂及商業詐騙等不法行為，並維持健康良好的營商環境。與此同時，本集團致力建立綠色供應鏈，持續規管採購及供應商管理慣例。透過嚴格執行產品質量檢定程序及建立良好的客戶溝通機制，本集團有效保證產品及服務質量，成就可持續企業發展。

Anti-Corruption

The Group follows a zero-tolerance policy against any form of bribery, extortion, fraud and money laundering, and prohibits for the use of powers and positions in the Company, customers, suppliers and other third parties in pursuit of private interests. The Group strictly abides by the *Prevention of Bribery Ordinance* (Chapter 201 of the Laws of Hong Kong) and *Ordinance on Disciplinary Sanctions in the Communist Party of China*. The compliance department of the Group is guided by relevant laws, regulations, and the *Toolkit on Directors' Ethics* from the Hong Kong Independent Commission Against Corruption (ICAC) and has developed a series of policies and appropriate management measures such as the *Administrative Measures of Aba Mining on Staff Rewards and Punishments* and the *Administrative Measures of China VTM Mining on Staff Rewards and Punishments* to prevent fraud or unethical behaviour.

The Group has implemented a series of measures to strengthen compliance management and is committed to maintaining a transparent, fair and healthy operating environment. The Group has also set out a code of ethics and conflict of interests, and principles against unfair competition in its *Employee Handbook*, to increase the awareness of anti-corruption and the self-discipline of employees. Each employee is required to make a declaration to abide by the rules set out in the *Employee Handbook* to guard against corruption upon signing the labour contract with the Group. In addition, the Group has also organised anti-corruption training and various educational and promotional activities. In 2019, Aba Mining organised anti-corruption training for managers, to raise employees' awareness of the relevant legal requirements and self-discipline.

Meanwhile, the Group has dedicated anti-corruption personnel and mechanisms in place and has set up anti-corruption reporting channels for all stakeholders including internal staff, suppliers and customers. The Group has established reporting channels and hotlines and taken measures to protect whistleblowers to encourage all parties to make reports as well as strengthen the communication between the Group and the staff in terms of anti-corruption and anti-bribery. In 2019, Aba Mining issued clean and honest administration construction cards to suppliers and asked them to sign for confirmation.

In 2019, there was no major breach of conduct by the employees within the Group nor legal cases regarding corrupt practices.

反貪污

本集團對任何形式的賄賂、敲詐、欺詐及洗錢活動均採取零容忍政策，禁止使用職權於本公司、客戶、供應商及其他第三方謀取私利。本集團嚴格遵守香港法例第201章《防止賄賂條例》及《中國共產黨紀律處分條例》。本集團合規部以相關法律、規例及香港廉政公署（「ICAC」）的《董事誠信實務指南》為行事指引，並已制訂一系列政策及合適管理措施，例如《阿壩礦業公司員工獎懲管理辦法》和《中國鐵鈦獎懲管理辦法》，以防範欺詐或不道德行為。

本集團推行一系列措施加強合規管理，致力維持具透明度、公平而健康的經營環境。本集團亦已於《員工手冊》內載列道德及利益衝突守則以及反對不公平競爭的原則，以提高僱員的反貪污及律己意識。各僱員與本集團簽署勞動合同時須聲明服膺於《員工手冊》所列的防止貪污規則。此外，本集團亦籌辦反貪污培訓以及不同教育及推廣活動，於2019年，阿壩礦業安排各經理參與反貪污培訓，加深僱員對相關法律規定及紀律的認知。

同時，本集團已指派專門處理反貪污事宜的人員及設有機制，為全體權益人（包括內部員工、供應商及客戶）設立反貪污舉報渠道。本集團已設置舉報渠道及熱線，採取措施保護舉報人，鼓勵各方人士作出舉報，加強本集團與員工之間在反貪污及反賄賂方面的溝通。於2019年，阿壩礦業向供應商發出廉潔誠信管理建設卡，並要求簽署以表確認。

於2019年，本集團並無僱員嚴重違反操守，亦無涉及因貪污而引發的法律案件。

Supply Chain Management

A healthy and sustainable green supply chain is an important foundation for the long-term development of the Group. The Group values cooperation and interactions with its suppliers and is committed to working and maintaining long-term relationship with suppliers.

The Group continues to improve its procurement and supplier management systems, standardising procurement methods, tendering and bidding, and supplier evaluation process. In this regard, the Group has implemented, among other things, Aba Mining formulated *the Aba Mining Customer Relationship Management Measures*, *Aba Mining Invitation and Bid Management Measures* and *Aba Mining Co., Ltd. Procurement Management Measures*. The Group adheres to open, fair and impartial procurement principles. In order to strictly implement procurement procedures, the Group requires its suppliers to undergo a comprehensive assessment to ensure the quality of procurement. The assessment criteria of suppliers include their commercial and professional credentials, productivity, product quality, service capabilities, and credibility. At the same time, the Group also considers the environmental and social risks of suppliers and contractors and chooses those suppliers who have satisfactorily fulfilled the assessment criteria, with an aim to promote sustainable development of the supply chain.

Every year, the Group invites relevant experts from various departments to evaluate suppliers' performance. The Group updates the list of qualified suppliers based on their evaluations to ensure the stability and safety of the Group's product quality. In 2019, the total number of suppliers was 63.

供應鏈管理

健康而可持續的綠色供應鏈為本集團長遠發展的重要基石。本集團重視與供應商合作及交流，並致力與供應商攜手合作，保持長遠關係。

本集團不斷改善其採購及供應商管理系統，標準化採購方法、招標及投標以及供應商評價程序。為此，本集團實行了（其中包括）《阿壩礦業客戶關係管理辦法》、《阿壩礦業招議標管理辦法》及《阿壩礦業有限公司採購管理辦法》。本集團緊守公開、公平及完整採購原則。為嚴格實行採購程序，本集團要求供應商進行全面評估，確保採購質量。供應商評核標準包括商業及專業資歷、生產力、產品質量、服務能力及信譽。與此同時，本集團亦會考慮供應商及承包商的環境及社會風險，挑選符合評核標準的供應商，以促進供應鏈的可持續發展。

本集團每年邀請各部門的相關專家評價供應商的表現。本集團根據評價更新合資格供應商名單，確保本集團產品質量的穩定性及安全度。於2019年，供應商總數為63名。

Number of Suppliers in 2019 2019年供應商數目

		Number of Suppliers 供應商數目
Aba Mining	阿壩礦業	13
Mancala Group	曼卡拉集團	50

Product Responsibility

The Group attaches importance to the quality of production and service, and strictly implements product quality management in accordance with the relevant national laws and regulations and industry standards. The Group has developed and implemented measures on the management of product quality and enhanced product quality inspections to ensure that superior products are offered to clients.

To strengthen quality control, and stabilise and improve product quality, the Group strictly follows the *Factory Selection Assessment Methods* which sets out the quality goals as below:

- guaranteed grading of Fe in magnetite fine iron concentrate > 64.5%;
- guaranteed grading of Fe in magnetite high purity iron concentrate > 71.5%;
- no less than 50% of magnetite iron concentrate particles of -200 mesh.

To stabilise and improve product quality, the Group has formulated a set of quality management procedures detailing the accountability of responsible managers and employees. The Group has further reinforced its management of production units regarding quality control and risk mitigation. Each production unit has to, by 31 March of each year, establish an annual "Enterprise Quality File" for the basic conditions of quality management, quality inspections and laboratory personnel, and file the same to the production and operation department for record. Besides, the quality management department conducts sampling and testing according to the GB/T 10322.1-2014 *Iron Ore Sampling and Sample Preparation Methods* and other relevant product varieties, specifications and technical conditions. In addition, the quality inspection personnel of each production unit must conduct an inspection or test according to the inspection items, batches, frequency, sampling methods and time specified in the inspection procedures. The inspection and test must be completed within the specified time, and the results must be transmitted to the relevant units in time to ensure the smooth and punctual production as well as delivery of the products. During the routine reviews, if the samples test results fail, the related production unit would be informed immediately.

The Group strictly complies with the *Measures on Dispute Treatment of Product Quality*, which specifies price adjustments mechanisms based on differences in appearance quality, failed chemical composition, and its characteristics. Mancala Group implements the *Quality Management Policy* and achieves the requirements of ISO9001 Quality Management Systems.

產品責任

本集團十分注重產品及服務的質量，並按照相關國家法律法規及行業標準嚴格實行產品質量管理。本集團已制定及實行產品質量管理措施，加強產品質量審查，確保為客戶提供優良產品。

為加強質量監控以及穩定和提升產品質量，本集團嚴格遵守《選廠考核辦法》，當中載列以下質量目標：

- 保證磁鐵礦精粉鐵品位>64.5%；
- 保證磁鐵礦高純鐵精粉鐵品位>71.5%；
- -200目粒度磁鐵礦精粉顆粒不少於50%。

為穩定及改善產品質量，本集團已制訂質量管理程序，詳列專責經理及僱員的責任。本集團已進一步加強所有生產單位在質量監控及風險降低方面的管理。各生產單位應於每年3月31日前建立年度「企業質量檔案」，載列質量管理、質量審查及實驗室人員的基本條件，並將該檔案送交生產營運部門存檔以作紀錄。此外，質量管理部門根據GB/T 10322.1-2014《鐵礦石取樣和製樣方法》並按照其他相關產品種類、規格及技術條件進行取樣檢測。另外，各生產單位的質量審查人員必須按照審查程序所列的審查項目、批次、週期、抽樣方法及時間進行審查或測試。有關審查及測試須於指定時間內完成，而結果須按時發送至相關單位，確保產品生產及付運流暢準時。在日常審查中，倘樣本測試結果不及格，則會即時知會相關生產單位。

本集團嚴格遵守《產品質量異議處理管理辦法》，當中明確基於外觀質量差異、不及格化學成份及本身特性作出的價格調整機制。曼卡拉集團實施《質量管理制度》並達到ISO9001質量管理體系的要求。

Since the Group is in the upper stream of the entire supply chain and provides products to reputable trading companies instead of end users, no issue has arisen as to advertising, labelling or customer privacy during sales, nor health or safety matters during consumption.

ENVIRONMENT

The Group actively responds to the strategic deployment of national ecological civilization construction, promotes the concept of green sustainable development, and strictly abides by applicable laws and regulations such as the *Environmental Protection Law of the People's Republic of China*. The Group has also formulated internal policies such as the *Professional Management Measures for Safety and Environmental Protection* and the *Rules for Evaluating Safety and Environmental Protection*, to optimise water resources and to reduce waste emissions, conserving resources and energy. Concurrently, the Group continues to implement mining reclamation, protect and restore the ecological environment, and practice green development. Mancala Group follows its *Environmental and Sustainability Policy* consistent with the requirements of ISO14001 Environmental Management Systems.

Water Resource

The Group attaches great importance to the management of water resources as a large volume of water is required for ore processing. The Group is also in full compliance with the water drawing permit issued by the local governments in the PRC and the *Water Law of the People's Republic of China* and has put great efforts into improving water efficiency.

As all mines and plants of the Group are located in mountainous areas, most of its water resource comes from mountain river streams and the associated water, rather than drawing from the local rivers/lakes or the public water supply systems. For this reason, there was no issue in sourcing water during the Group's operation. In addition, as the Mancala Group only provides specialist mining services, the freshwater consumption in its mining area does not fall within the scope of disclosure of this report.

由於本集團處於整條供應鏈的上游，向信譽良好的貿易公司而非最終用戶供應產品，故進行銷售時並無出現廣告、標籤或客戶私隱方面的問題，亦無耗用產品的健康或安全問題。

環境

本集團積極回應國家生態文明建設的戰略部署，提倡綠色可持續發展概念，嚴格遵守《中華人民共和國環境保護法》等適用法律法規。本集團亦已制訂《安全環保專業管理辦法》及《安全環保細則》等內部政策，優化水資源，減少廢棄物排放，節約資源及能源。同時，本集團繼續進行礦區土地復墾，保護及恢復生態環境，落實綠色發展。曼卡拉集團遵循其《環境與可持續發展政策》並符合ISO14001環境管理體系要求。

水資源

本集團需要大量用水進行礦石加工，因而極其重視水資源管理。此外，本集團全面遵行中國地方政府發出的取水許可及《中華人民共和國水法》，大力改善用水效益。

本集團所有礦場及廠房均位於山區，水資源大部分來自山中溪流及伴生水，並無從當地河流／湖泊或公共供水系統取水。因此，本集團業務在求取適用水源上並無任何問題。此外，由於曼卡拉集團僅提供專業開採服務，故其所服務礦區的淡水耗量不屬於本報告的披露範圍。

The Group is committed itself to reducing water usage and applies strict management measures to reduce water consumption during the production and operation processes. The Group conducts regular inspections to prevent water loss and leakage and has built reservoirs to reuse the water discharged from the tailing pond by recharging it to the processing plants.

本集團致力減少用水，實行嚴格管理措施，減少生產及營運過程中的耗水量。本集團定期查驗以防止用水流失及滲漏，並建有水庫重用尾礦庫排出的廢水，將其回流至洗選廠。

Freshwater Consumption (Including Continuing Operations and Discontinued Operations) ⁽¹⁾ (tons)

淡水耗量 (包括持續經營業務及已終止經營業務) ⁽¹⁾ (噸)

		2019	2018
		2019年	2018年
Stream	溪流	484,422.00	371,214.11
Associated water	伴生水	23,000.00	25,000.00
Total	合計	<u>507,422.00</u>⁽²⁾	<u>396,214.11</u>
Freshwater consumption per production value of RMB10,000	每人民幣萬元產值的淡水耗量	5.49	3.47

Note:

- (1) The statistical scope of this table includes the Discontinued Operations before the Disposal Group ceased to be subsidiaries of the Company since 30 July 2019.
- (2) More water was consumed in 2019 than in 2018 due mainly to upgrading the processing plants for iron products.

附註：

- (1) 上表的統計範圍包括自2019年7月30日起出售集團不再為本公司的子公司前的已終止經營業務。
- (2) 2019年耗水量較2018年增加主要源於升級鐵產品的洗選廠。

Freshwater Consumption (Continuing Operations Only) ⁽¹⁾ (tons)

淡水耗量 (只包括持續經營業務) ⁽¹⁾ (噸)

		2019 2019年	2018 2018年
Stream	溪流	56,355.00	72,622.00
Associated water	伴生水	23,000.00	25,000.00
Total	合計	<u>79,355.00</u>	<u>97,622.00</u>
Freshwater consumption per production value of RMB10,000	每人民幣萬元產值的淡水耗量	1.28	1.58

Note:

(1) The statistical scope of this table does not include the Discontinued Operations.

Most of the wastewater generated in the production process is recycled to the processing plant, and a small part is directly discharged after reaching the standard.

Resource Utilisation

In order to actively respond to global climate change and reduce GHG emissions, and in compliance with applicable laws and regulations such as the *Energy Conservation Law of the People's Republic of China* and has developed the *Management of Power, Energy and Measurement*, the Group has optimised its energy management system, eliminated high energy-consuming equipment, used clean energy, and reduced energy consumption.

The Group consumes mostly electricity in its daily production and operation. To achieve the goal of energy-saving and emission reduction, the Group has adjusted the structure of energy use and purchased clean energy from hydropower stations. The Group mainly uses gasoline for its business vehicles and diesel fuel for its mining machinery and equipment. In addition, as the Mancala Group only provides specialist mining services, the energy consumption in its mining area does not fall within the scope of disclosure of this report.

附註：

(1) 上表的統計範圍不包括已終止經營業務。

生產過程中產生的廢水大部分回收至洗選廠再利用，小部分達標後直接排放。

資源使用

為應對全球氣候變化及減少溫室氣體排放，本集團遵守《中華人民共和國節約能源法》等相關適用法律法規，並已制訂《動力、能源、計量管理辦法》。據此，本集團已優化其能源管理系統，取締高能耗設備，使用潔淨能源，減少能耗。

本集團所耗電力大部分用於日常生產及營運。為達到節能減排目標，本集團已調整能源使用架構，從水力發電站購入清潔能源。本集團主要因業務用車而使用汽油，而其採礦機械及設備則使用柴油。此外，由於曼卡拉集團僅提供專業採礦服務，故所服務礦區的能耗不屬於本報告的披露範圍。

To ensure comprehensive control of energy usage, the Group maintains a timely record of its energy consumption using ledgers. In order to further improve the energy management system and carry out best energy conservation practices, the Group encourages all employees to make reasonable suggestions through a reward system.

In order to create more value with limited resources, the Group actively improves its production technology. In 2019, Aba Mining revamped ball milling and improved sieving and magnetic separation processes, which has effectively increased its ore production and reduced waste of resources. Due to the nature of the mining industry, the operations of the Group do not involve the consumption of product packaging material.

為確保全面控制能源的使用情況，本集團按加油卡的數據及時記錄其能耗。為進一步改善能源管理系統及落實最佳節能慣例，本集團鼓勵全體僱員透過獎勵制度提供合理建議。

為了以有限的資源創造更大的價值，本集團積極提升其生產技術。於2019年，阿壩礦業改造其球磨機，並改進篩分及磁選工序，有效提高其礦石產量，減少資源浪費。基於礦業的性質，本集團營運並無使用產品包裝材料。

Energy Consumption (Including Continuing Operations and Discontinued Operations) ⁽¹⁾

能耗（包括持續經營業務及已終止經營業務）⁽¹⁾

		2019 2019年	2018 2018年
Gasoline (kL) 汽油 (千升)		60.73	79.75
Diesel (kL) 柴油 (千升)		886.14	1,206.52
Electricity (MWh) 電力 (兆瓦時)	Electricity purchased from external grids 向外部電網購電	105,785.00	196,625.00 ⁽⁴⁾
	Clean energy purchased 所購入清潔能源	8,177.30	7,196.00
Energy consumption per production value of RMB10,000 (kgce) ⁽²⁾⁽³⁾ 每人民幣萬元產值的能耗 (千克標準煤) ⁽²⁾⁽³⁾		153.61	225.51

Notes:

- (1) The statistical scope of this table includes the Discontinued Operations before the Disposal Group ceased to be subsidiaries of the Company since 30 July 2019.
- (2) The comprehensive energy consumption is calculated based on the conversion factors in the *General Principles of Comprehensive Energy Calculation GB-T25892008*.
- (3) Energy consumption per production value of RMB10,000 (kgce) does not include purchased clean energy.
- (4) The data of electricity consumption in 2018 has been adjusted due to the reorganisation of the statistical scope.

附註：

- (1) 上表的統計範圍包括自2019年7月30日起出售集團不再為本公司的子公司前的已終止經營業務。
- (2) 綜合能耗乃按《綜合能耗計算通則GB-T25892008》內的轉換因子計算。
- (3) 每人民幣萬元產值的能耗(千克標準煤)不包括所購入清潔能源。
- (4) 由於統計範圍重整，故已調整2018年的耗電數據。

Energy Consumption (Continuing Operations Only) ⁽¹⁾

能耗 (只包括持續經營業務) ⁽¹⁾

		2019 2019年	2018 2018年
Gasoline (kL) 汽油 (千升)		22.66	24.27
Diesel (kL) 柴油 (千升)		123.06	87.40
Electricity (MWh) 電力 (兆瓦時)	Electricity purchased from external grids 向外部電網購電	35.00	25.00 ⁽⁴⁾
	Clean energy purchased 所購入清潔能源	8,177.30	7,196.00
Energy consumption per production value of RMB10,000 (kgce) ⁽²⁾⁽³⁾ 每人民幣萬元產值的能耗 (千克標準煤) ⁽²⁾⁽³⁾		2.99	2.32

Notes:

- (1) The statistical scope of this table does not include the Discontinued Operations; the statistical method remains the same.
- (2) The comprehensive energy consumption is calculated based on the conversion factors in the *General Principles of Comprehensive Energy Calculation GB-T25892008*.
- (3) Energy consumption per production value of RMB10,000 (kgce) does not include purchased clean energy.
- (4) The data of electricity consumption in 2018 has been adjusted due to the reorganisation of the statistical scope.

Emission Management

To adhere to the goals of energy saving, emission reduction, environmental protection, efficiency improvement and to promote the construction of a sustainable enterprise, the Group conducts standardised emissions and disposals management in accordance with relevant laws and regulations, including but not limited to the *Environmental Protection Law of the People's Republic of China*. In addition, as the Mancala Group only provides specialist mining services, the emissions in its mining area do not fall within the scope of disclosure of this report. No environmental pollution incident was recorded during the year ended 31 December 2019.

• Solid Waste

The two major types of solid wastes generated during the production and operation are waste rocks and tailing slurries. The Group strictly complies with the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution Caused by Solid Waste regarding waste management and insists on a scientific and effective treatment of solid waste during the adopting of production and operation processes.

附註:

- (1) 上表的統計範圍並不包括已終止經營業務，而統計方法則維持不變。
- (2) 綜合能耗乃按《綜合能耗計算通則 GB-T25892008》內的轉換因子計算。
- (3) 每人民幣萬元產值的能耗 (千克標準煤) 不包括所購入清潔能源。
- (4) 由於統計範圍重整，故已調整2018年的耗電數據。

排放管理

為堅守節能減排、環保、提升效益的目標，以及推進可持續企業建設工作，本集團按照相關法律法規 (包括但不限於《中華人民共和國環境保護法》) 統一管理排放物及廢物處置。另外，由於曼卡拉集團只提供專業開採服務，故其開採範圍內的排放並不納入本報告的披露範圍內。截至2019年12月31日止年度內並無錄得任何環境污染事故。

• 固廢

生產及營運過程中產生的兩大類固廢為廢石及尾礦泥漿。本集團在廢物管理上嚴格遵守《中華人民共和國固體廢物污染環境防治法》，並堅持於採納生產及營運過程中以科學化及有效方式處理固廢。

The Group improves its waste management in all aspects and places great emphasis on maximising the recycling and reuse of resources, disposing waste responsibly, and reducing the environmental impact caused by waste disposal. The Group stacks solid wastes in the tailing pond for contractors to handle them on a regular basis. In 2019, Aba Mining processed about 54,660 tons of tailings and recovered about 3,805 tons of iron concentrates. This approach was brought economic benefits to the Group as well as reduced the harmful impact on the environment effectively.

本集團全方位加強廢物管理，強調盡量循環再造及重用資源，負責任地處理廢棄物，減低廢物處理對環境的影響。本集團將固體廢棄物堆放於尾渣中轉場，由承包商定期處理。於2019年，阿壩礦業處理約54,660噸尾礦及回收約3,805噸鐵精礦。此舉為本集團帶來經濟利益並有效減輕對環境的危害。

Disposed Waste (Including the Continuing Operations and Discontinued Operations) ⁽¹⁾ (thousand tons)
廢物處置量 (包括持續經營業務及已終止經營業務) ⁽¹⁾ (千噸)

		2019 2019年	2018 2018年
Waste rocks	廢石		
Stack	堆放	4,753.29	4,020.33
Outsourcing	委外	0.00	25.82
Recycle	循環再造	49.51	0.00
Total	合計	<u>4,802.80</u>	<u>4,046.15</u>
Waste rocks disposed per production value of RMB10,000 (tons)	每人民幣萬元產值的廢石處置量 (噸)	52.00	35.43
Tailing slurries	尾礦泥漿		
Stack	堆放	2,057.63	4,110.00
Outsourcing	委外	358.14	340.73
Total	合計	<u>2,415.77</u>⁽²⁾	<u>4,450.73</u>
Tailing slurries disposed per production value of RMB10,000 (tons)	每人民幣萬元產值的尾礦泥漿處置量 (噸)	26.16	38.97

Notes:

- (1) The statistical scope of this table includes the Disposal Group before ceasing as subsidiaries of the Company on 30 July 2019.
- (2) The decrease in total tailing slurries from 2018 to 2019 is due to the addition of several new production lines by the Disposal Group which increased the extraction rate of titanium concentrates.

附註：

- (1) 本表的統計範圍包括出售集團（於2019年7月30日不再為本公司子公司之前）。
- (2) 2019年的尾礦泥漿總計較2018年減少乃由於出售集團新增多條生產線，增加鈦精礦的提取率。

Disposed Waste (Continuing Operations Only) ⁽¹⁾ (thousand tons)

廢物處置量 (只包括持續經營業務) ⁽¹⁾ (千噸)

		2019 2019年	2018 2018年
Waste rocks	廢石		
Stack	堆放	0.00	114.91
Outsourcing	委外	0.00	25.82
Recycle	循環再造	49.51	0.00
Total	合計	<u>49.51⁽²⁾</u>	<u>140.72</u>
Waste rocks disposed per production value of RMB10,000 (tons)	每人民幣萬元產值的廢石處置量 (噸)	0.80	2.27
Tailing slurries	尾礦泥漿		
Stack	堆放	0.00	0.00
Outsourcing	委外	358.14	340.73
Total	合計	<u>358.14</u>	<u>340.73</u>
Tailing slurries disposed per production value of RMB10,000 (tons)	每人民幣萬元產值的尾礦泥漿處置量 (噸)	5.78	5.50

Notes:

- (1) The statistical scope of this table does not include the Discontinued Operations.
- (2) The decrease of total waste rocks from 2018 to 2019 is due to the change in production process of Aba Mining in 2019 which recycled the remaining waste rock.

附註：

- (1) 本表的統計範圍不包括已終止經營業務。
- (2) 2019年的廢石總計較2018年減少乃由於阿壩礦業的生產工序於2019年有變，循環再造剩餘廢石。

• **Hazardous Waste**

The hazardous wastes of the Group are mainly lubricating oils and waste liquid from the tail water online monitoring system. The Group has developed a *Hazardous Waste Management System* in accordance with relevant national standards, including the *Standards for Pollution Control on Hazardous Waste Storage* (GB18597-2001) and the *Management Measures for the Transfer of Hazardous Waste*. The Group has engaged qualified disposal specialists to dispose of hazardous waste properly. In 2019, the Group generated 0.15 ton* of waste oil and 0.45 ton* of online monitoring waste liquid.

• **Air Pollution**

The air pollution emitted by the Group includes the dust generated from the ore crushing process and air pollutants from vehicles. The Group has adopted several emission reduction measures in accordance with the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution* to ensure compliance with applicable emissions standards. Other air pollutants generated from mobile sources are listed in the table below.

• **有害廢棄物**

本集團的有害廢棄物主要為潤滑油和尾水線上監測系統的廢液。本集團已按照相關國家標準，包括《危險廢物貯存污染控制標準》(GB18597-2001)及《危險廢物轉移聯單管理辦法》，制訂《危險廢物管理制度》。本集團委聘專業合資格處理企業妥善處理有害廢棄物。於2019年，本集團產生0.15噸*廢油和0.45噸*線上監測廢液。

• **空氣污染**

本集團排放的空氣污染包括粉碎礦石過程產生的粉塵及汽車排放的空氣污染物。本集團已按照《中華人民共和國大氣污染防治法》採取多項減排措施，確保符合適用排放標準。其他來自流動源的空氣污染物列於下表。

**Air Pollutants from Road Transportation
(Including Continuing Operations and Discontinued Operations) ⁽¹⁾⁽²⁾ (kilograms)
道路運輸空氣污染物 (包括持續經營業務及已終止經營業務) ⁽¹⁾⁽²⁾ (千克)**

Air Pollutant	空氣污染物	2019 2019年	2018 2018年
Sulphur oxides	硫氧化物	15.16	20.60
Nitrogen oxides	氮氧化物	21.57	21.70 ⁽³⁾
Particulate matters	顆粒物	1.59	1.60 ⁽³⁾

Notes:

- (1) The statistical scope of this table includes the Disposal Group before ceasing as subsidiaries of the Company on 30 July 2019.
- (2) The air pollutants generated by the combustion of gasoline and diesel are converted according to the *How to prepare an ESG Report – Appendix 2: Reporting Guidance on Environmental KPIs* by HKEX.
- (3) The data of nitrogen oxides and particulate matters in 2018 has been adjusted due to the recalculation.
- * The statistical scope of this number includes the Disposal Group before ceasing as subsidiaries of the Company on 30 July 2019.

附註：

- (1) 本表的統計範圍包括出售集團（於2019年7月30日不再為本公司子公司之前）。
- (2) 因燃燒汽油及柴油而產生空氣污染物的轉化標準乃參考聯交所發布的《如何準備環境、社會及管治報告？附錄二：環境關鍵績效指標匯報指引》。
- (3) 由於重新計算，故已調整2018年的氮氧化物及顆粒物數據。
- * 此數字的統計範圍包括出售集團（於2019年7月30日不再為本公司子公司之前）。

Air Pollutants from Road Transportation (Continuing Operations Only) ⁽¹⁾⁽²⁾ (kilograms)
道路運輸空氣污染物 (只包括持續經營業務) ⁽¹⁾⁽²⁾ (千克)

Air Pollutant	空氣污染物	2019 2019年	2018 2018年
Sulphur oxides	硫氧化物	2.31	1.76
Nitrogen oxides	氮氧化物	0.22	0.23
Particulate matters	顆粒物	0.02	0.02

Notes:

- (1) The statistical scope of this table does not include the Discontinued Operations.
- (2) The air pollutants generated by the combustion of gasoline and diesel are converted according to the *How to prepare an ESG Report – Appendix 2: Reporting Guidance on Environmental KPIs* by HKEX.

附註：

- (1) 本表的統計範圍不包括已終止經營業務。
- (2) 因燃燒汽油及柴油而產生空氣污染物的轉化標準乃參考聯交所發布的《如何準備環境、社會及管治報告？附錄二：環境關鍵績效指標匯報指引》。

• **GHG Emissions**

The main sources of greenhouse gas (“GHG”) emissions in the Group’s production processes are indirect energy emissions and direct emissions from official vehicles and equipment. There are no direct emissions from boilers or other coal-fired or gas-fired equipment of the Group. The Group strictly abides by the *Energy Conservation Law of the People’s Republic of China* and the *13th Five-Year Work Plan for Greenhouse Gas Emission Control* and has implemented a series of measures to achieve the goal of continuously reducing GHG emissions.

The Group constantly lowers its emissions by reducing business travels, encouraging telephone conferences and promoting a paperless office as far as possible. In addition, the Group purchases clean energy to replace traditional energy resources. In 2019, Aba Mining has realised 100% clean energy utilisation by purchasing electricity generated from a local hydro-power plant, and has purchased 8,177,300.00 kWh of clean energy resources to reduce carbon emissions by 1,004,990.17 tons of carbon dioxide equivalent.

• **溫室氣體排放**

本集團生產過程中的主要溫室氣體排放源為間接能源排放及公務車輛與設備的直接排放，並無來自本集團鍋爐或其他燃煤或燃氣設備的直接排放。本集團嚴格遵守《中華人民共和國節約能源法》及《「十三五」控制溫室氣體排放工作方案》，並已實施一系列措施，務求實現持續減少溫室氣體排放的目標。

本集團一直透過盡可能減少差旅，鼓勵使用電話會議及提倡無紙化辦公室，藉以減少排放。此外，本集團購買清潔能源以取代傳統能源。於2019年，阿壩礦業已藉向地方水力發電站購電，實現全面使用清潔能源，並已購買8,177,300.00千瓦時清潔能源，以減少1,004,990.17噸二氧化碳當量的碳排放。

GHG Emissions (Including Continuing Operations and Discontinued Operations) ⁽¹⁾⁽²⁾
(tons of carbon dioxide equivalent)

溫室氣體排放量 (包括持續經營業務及已終止經營業務) ⁽¹⁾⁽²⁾ (噸二氧化碳當量)

		2019	2018
		2019年	2018年
Direct emissions 直接排放	Gasoline and diesel 汽油及柴油	2,461.14	3,344.47
Indirect emissions 間接排放	Electricity purchased 所購入電力	95,354.60	177,237.78
Total	合計	<u>97,815.74</u>	<u>180,582.24</u>
GHG emissions per production value of RMB10,000 每人民幣萬元產值的溫室氣體排放量		1.06	1.58

Notes:

- (1) The statistical scope of this table includes the Disposal Group before ceasing as subsidiaries of the Company on 30 July 2019.
- (2) The GHG emissions are calculated based on common fuel emission factors in the *Guidelines for Accounting and Reporting of Greenhouse Gas Emissions in Mining Enterprises* by National Development and Reform Commission and the average carbon dioxide emission factors of China's power grids in the *Reporting Guidance on Environmental KPIs* by HKEX.

附註:

- (1) 本表的統計範圍包括出售集團(於2019年7月30日不再為本公司子公司之前)。
- (2) 該溫室氣體排放量乃按國家發展和改革委員會制定的《*礦山企業溫室氣體排放核算方法與報告指南*》的常見燃料排放因子及聯交所發佈的《*環境關鍵績效指標匯報指引*》的中國電網平均二氧化碳排放因子計算。

GHG Emissions (Continuing Operations Only) ⁽¹⁾⁽²⁾ (tons of carbon dioxide equivalent)

溫室氣體排放量 (只包括持續經營業務) ⁽¹⁾⁽²⁾ (噸二氧化碳當量)

		2019	2018
		2019年	2018年
Direct emissions 直接排放	Gasoline and diesel 汽油及柴油	373.15	283.05
Indirect emissions 間接排放	Electricity purchased 所購入電力	31.55	22.54
Total	合計	404.70	305.59
GHG emissions per production value of RMB10,000 每人民幣萬元產值的溫室氣體排放量		0.007	0.005

Notes:

- (1) The statistical scope of this table does not include the Discontinued Operations.
- (2) The GHG emissions are calculated based on common fuel emission factors in the *Guidelines for Accounting and Reporting of Greenhouse Gas Emissions in Mining Enterprises* by National Development and Reform Commission and the average carbon dioxide emission factors of China's power grids in the *Reporting Guidance on Environmental KPIs* by HKEX.

附註:

- (1) 本表的統計範圍不包括已終止經營業務。
- (2) 該溫室氣體排放量乃按國家發展和改革委員會制定的《礦山企業溫室氣體排放核算方法與報告指南》的常見燃料排放因子及聯交所發佈的《環境關鍵績效指標匯報指引》的中國電網平均二氧化碳排放因子計算。

• **Wastewater**

The main wastewater of the mine is beneficiation wastewater, tailings wastewater, concentrate filtration wastewater, tunnel gushing water, equipment cooling water and domestic sewage. The main pollutants in the wastewater are chemical oxygen demand ("COD"), ammonia nitrogen, and suspended matter. The Group complies with the *Law of the People's Republic of China on the Prevention and Control of Water Pollution* and actively cooperates with the local environmental supervision department in the PRC. The Group monitors the wastewater drainage standards in real time and publishes the information on the bulletin board at the mining area every quarter. In 2019, no incidents of excessive discharge occurred, and no water pollution incident was recorded.

• **廢水**

礦場的主要廢水為選礦廢水、尾礦廢水、精礦過濾廢水、礦洞湧水、設備冷卻水及家居污水。廢水的主要污染物為化學需氧量、氨氮和懸浮物。本集團遵守《中華人民共和國水污染防治法》，與中國地方環境部門通力合作。本集團實時監察廢水總排放口排水標準，每季於開採區域的佈告版公告消息。於2019年，並無發生過度排放事故，亦無錄得水污染事故。

Wastewater and Water Pollutants ⁽¹⁾ (tons)
廢水及水污染物⁽¹⁾ (噸)

		2019	2018
		2019年	2018年
Wastewater	廢水	10,000.00⁽²⁾	20,000.00
Wastewater discharged per production value of RMB10,000	每人民幣萬元產值的廢水排放量	0.11	0.18
COD	化學需氧量	0.35	0.32
Ammonia nitrogen	氨氮	0.04	0.05

Notes:

- (1) The wastewater of the Group was contributed by Aba Mining only, which is part of the Continuing Operations. As such, no separate tables are presented for illustrating wastewater and water pollutants discharged by (i) Continuing Operations and Discontinued Operations and (ii) Continuing Operations only, respectively.
- (2) The decrease of discharged wastewater from 2018 to 2019 is due to a cistern built by Aba Mining to collect wastewater for recycling and reuse purposes.

附註：

- (1) 本集團的廢水僅源自屬持續經營業務一部分的阿壩礦業。因此，並無分別呈列由(i)持續經營業務及已終止經營業務以及(ii)僅持續經營業務排放的廢水及水污染物的獨立列表。
- (2) 2019年排放的廢水較2018年減少乃由於阿壩礦業已興建一個蓄水池，收集廢水作循環再造及重用。

Ecological Protection

As some of the Group's operational areas are in the open air, the original vegetation will be destroyed during the mining process. The tailing, waste rocks and other yards will also occupy part of the ecological field. The Group strictly adheres to the *Water and Soil Conservation Law of the People's Republic of China* and *Regulations on the Implementation of the Water and Soil Conservation Law of the People's Republic of China*, and carries out vegetation and reclamation and covers all the constituent companies' locations for preventing and countervailing the impacts on the ecological environment caused by the Group's production and operation related activities.

In 2019, Aba Mining followed the *Mine Geological Environment Protection and Land Reclamation Plan* to survey the geological environment and land resources of mines, assess and predict the pollution status of the water and soil environment of mine, and determine the areas for environmental treatment and land reclamation. On this basis, Aba Mining has implemented mine geological environment treatment and land reclamation projects, repaired water and soil environmental pollution, monitored and managed the reclamation. The Group has been making progress to restore surface vegetation conditions and groundwater levels in mining areas and improve ecological and environmental conditions.

By the end of 2019, the vegetation area of mines reached 182,876 square metres through planting trees and paving grass and the reclamation area of waste mines reached 69,003 square metres. In total, the Group invested RMB218,040 in greening the mining area** in 2019.

EMPLOYER RESPONSIBILITY

In addition to market and technology capabilities, the quality of employees will also contribute to the competitiveness of a company. Upholding the people-oriented principle, the Group follows the sustainable strategy of human resources management. Through taking up employee's responsibility, the Group aims to promote sustainable development of both individual employees and the Group.

** The statistical scope of these numbers includes the Discontinued Operations before the Disposal Group ceased to be subsidiaries of the Company since 30 July 2019.

生態保護

由於本集團部分生產區為露天作業，故開採過程中會破壞原本的植被，同時尾礦廢石等堆場亦會佔用部分生態資源。本集團嚴格遵守《中華人民共和國水土保持法》及《中華人民共和國水土保持法實施條例》，並在旗下所有子公司的場址種植植被及進行復原工作，以防治及抵銷本集團生產及經營相關活動對生態環境的影響。

於2019年，阿壩礦業已遵循《礦山地質環境保護與土地復墾方案》測量礦場的生態環境及土地資源，評估及預測礦場水土環境的污染情況，以及勾劃出環境治理及土地復原的區域。以此為基礎，阿壩礦業已實施礦場地質環境治理及土地復原項目，修復水土環境污染，監察及管理復原工作。本集團已逐步恢復開採範圍內的地表植被狀況及地下水水位，並改善生態及環境狀況。

截至2019年底，藉種植樹木及鋪設草地，礦場的植被面積達182,876平方米；廢礦的復原面積達69,003平方米。於2019年，本集團總共投資人民幣218,040元於開採地區的綠化工作**。

僱主責任

除營銷及技術能力外，僱員質素亦有助提升企業競爭力。秉承以人為本的原則，本集團遵循人力資源管理的可持續發展戰略。本集團藉着承擔僱員責任，務求推動僱員個人與本集團的共同可持續發展。

** 該等數字的統計範圍包括自2019年7月30日起出售集團不再為本公司子公司前的已終止經營業務。

Employee Recruitment

The Group operates in full compliance with the *Labour Law of the People's Republic of China*, the *Labour Contract Law of the People's Republic of China* and other applicable national laws and regulations, including signing an employment contract with each employee and making timely and full social insurance contributions for employees. To standardise the employment environment and protect the basic rights and interests of employees, the Group has formulated the *Human Resources Management Measures* and the *Working Time Management Measures*. These measures strictly prohibit discrimination on grounds of gender, race, religion, age, etc. The Group does not allow child labour or forced labour in any form. If a minor worker is identified in employment, the Group will arrange for special employees to bring the minor home to their lawful guardians. The Mancala Group develops the *Equal Opportunity, Harassment & Discrimination Policy* and is committed to creating a diverse workforce and ensuring that all workplaces are free from discrimination and harassment. In 2019, no violations of laws and regulations concerning underage labour and forced labour occurred.

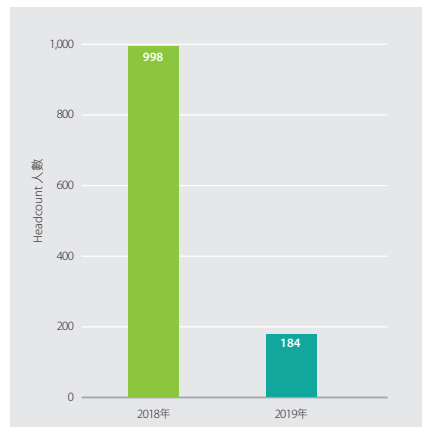
As at 31 December 2019, the Group had a total headcount of 184 employees with labour contracts. The employee's turnover in 2019 was 5.4%.

僱員招聘

本集團的營運全面遵守《中華人民共和國勞動法》、《中華人民共和國勞動合同法》及其他適用國家法律法規，包括與所有僱員簽訂僱傭合約以及準時為僱員繳納全面社會保險供款。為統一僱傭環境標準及保障僱員的基本權利及權益，本集團已制定《員工管理辦法》及《勞動時間管理辦法》。該等措施嚴禁性別、種族、宗教、年齡等歧視。本集團不容許以任何形式僱用童工或強制勞工。如發現任何未成年勞工受聘，本集團將安排指定僱員將未成年人士送返家中交予合法監護人。曼卡拉集團制定《平等機會、騷擾和歧視政策》，致力於建立一支多元化的員工隊伍，並確保所有工作場所都不存在歧視和騷擾。2019年，本集團未有在童工及強制勞工方面違反法律及法規。

於2019年12月31日，本集團共有184名已經訂立勞動合同的僱員。於2019年的僱員流失率為5.4%。

Total workforce ⁽¹⁾ (headcount)
人員總數 ⁽¹⁾ (名)



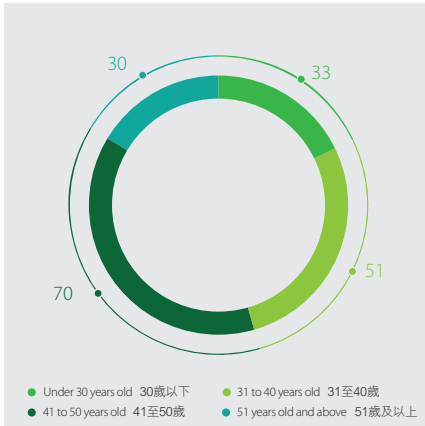
Note:

(1) Subsequent to the completion of Disposal on 30 July 2019, the Disposal Group and its subsidiaries ceased to be subsidiaries of the Company and hence the significant decrease in total workforce from 2018 to 2019.

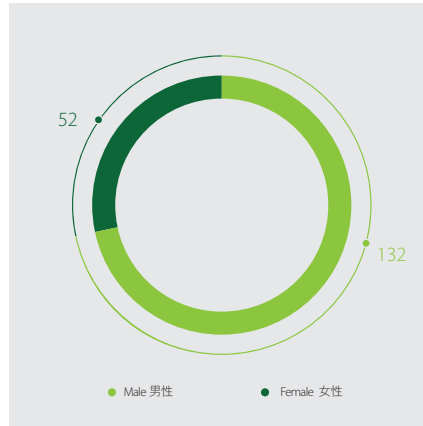
附註：

(1) 於2019年7月30日出售事項完成後，出售集團不再為本公司的子公司，故2019年的人員總數較2018年大幅減少。

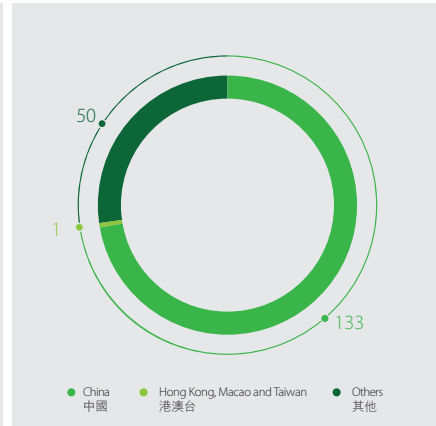
Total Workforce by Age Group (headcount)
按年齡組別劃分的人員總數 (名)



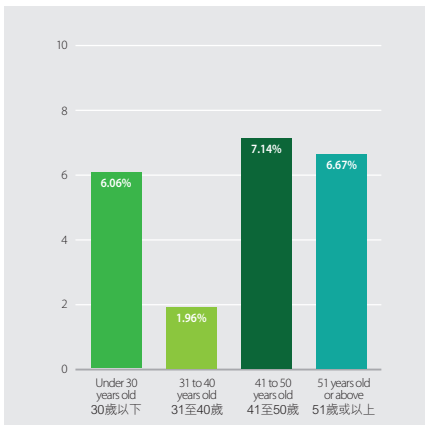
Total Workforce by Gender (headcount)
按性別劃分的人員總數 (名)



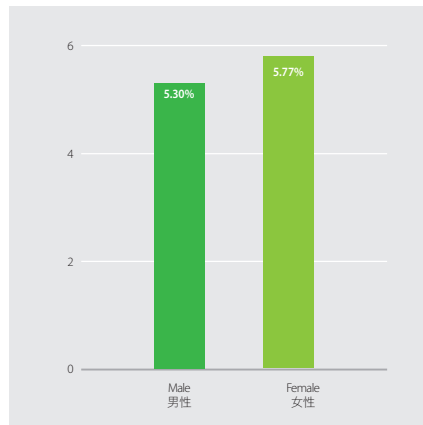
Total Workforce by Region (headcount)
按地區劃分的人員總數 (名)



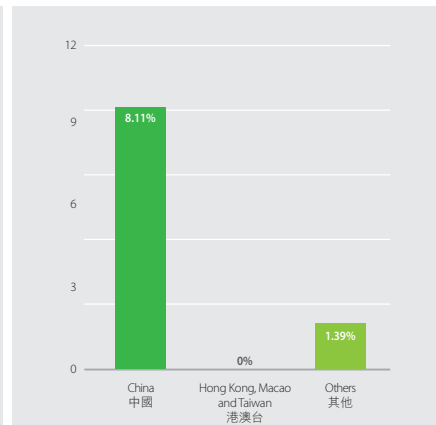
The Employee Turnover by Age Group (%)
按年齡組別劃分的僱員流失率 (%)



The Employee Turnover by Gender (%)
按性別劃分的僱員流失率 (%)



The Employee Turnover by Region (%)
按地區劃分的僱員流失率 (%)



Individual Development

The Group fully recognises the importance of talent and committed to offering a long-term scheme for talent development. To help each employee improve their competence continually, the Group has (i) formulated and implemented the *Human Resources Management Measures*; (ii) set up a career advancement system; (iii) evaluate and enhanced the composition of the working team; and (iv) established a system to nurture, select and manage talents based on the responsibilities and requirements for a particular position.

- **Promotion Path**

The Group provides equal career opportunities and transparent promotion channels for staff at different levels and encourages employees to realise their career goals. For example, Aba Mining formulated the *Rewards and Punishments Measures for Employees of Aba Mining Co.* to motivate employees and *Aba Mining Administrative Measures on Talents Selection and Training*, which defines a clear set of roles, responsibilities and accountabilities for all employees. Moreover, the Group has set out clear selection criteria and guidance to help employees to better understand the promotion mechanism and continuously improve their professional skills.

- **Training**

The Group attaches great importance to the improvement and promotion of the core skills of employees. In response to job requirements and staff demands, the Group values opinions and suggestions from its employees, follows the *Administrative Measures for Training*, and develops a variety of training schemes. Through internal and external career training such as practical field training and technical workshops, the staff are provided with the necessary knowledge and practical skills, thereby satisfying their needs for on-the-job development.

Employees at different positions have different training needs. The Group organised different training lessons and customises training programmes to cater for the needs of employees at all levels through various channels such as on-site training, distance and online training, self-study with the courseware, secondments and visits.

個人發展

本集團深知人才彌足珍貴，致力為優秀員工提供長遠發展計劃。為協助每名僱員不斷提升實力，本集團已(i)制訂及實施《員工管理辦法》；(ii)建立事業晉升制度；(iii)評估及加強工作團隊的成員組成；及(iv)建立按照特定崗位的責任及要求培育、篩選及管理人才的制度。

- **晉升路途**

本集團為各級員工提供公平的事業機會和透明的晉升渠道，並鼓勵僱員實踐事業目標。例如，阿壩礦業亦為激勵員工制訂《阿壩礦業有限公司員工獎懲管理辦法》及《阿壩礦業後備人才選拔培養管理辦法》，為全體僱員界定一套清晰的角色、責任及問責。此外，本集團列明甄選標準和指引，幫助僱員深入瞭解晉升機制，不斷提升專業技能。

- **培訓**

本集團非常注重改善及提升僱員的核心技能。為滿足職位需要及員工需要，本集團重視僱員意見及建議，遵循《培訓管理辦法》，打造多元的培訓計劃。透過在職實習培訓及技能工作坊等內外職業培訓，僱員獲得必要的知識和實用技能，從而滿足在職發展所需。

不同崗位僱員各有培訓需要。本集團因應各級僱員的需要，組織不同的培訓課程，利用實地培訓、遠程及線上培訓、使用課程軟件自學、借調及考察等不同渠道，為僱員量身設定培訓計劃。

- For middle and senior management, better and more transparent communication facilitates information sharing and cooperation. To facilitate exchanges of business experience among middle and senior management, foster strengths and circumvent weaknesses, and solve possible operational issues, the Group arranges various forms of training regularly. The training not only promotes communication among middle and senior management but also improves management's capabilities.
- For workers at the production line, safety and professional skills matter the most. The Group conducts effective training on safety, technique, technological process, and corporate culture. To ensure active engagement in the long-term, the Group was adopted an inspection system to record each training and requires monthly evaluation.
- For new employees, the Group organises induction training, which enables the new employees to understand the corporate culture, the general situation and development of the Group.

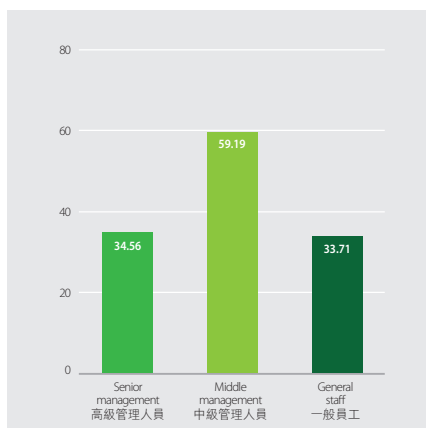
In 2019, the Group implemented the annual training plan and organised more lessons and training for employees. During 2019, the Group organised 4 induction training sessions for new employees, 22 external training sessions and multiple internal training sessions. The annual training expenditure increased by 27.6% from the previous year, reaching RMB112,477.

- 中高級管理層：提升更加透明的溝通有助於資訊同步及營運協作。為促進中高級管理人員交流營商經驗，取長補短，兼解決可能經營問題，本集團會定期安排不同形式的培訓，不單促進中高級管理層之間的溝通，同時增強管理能力。
- 生產線工人：安全及專業技能至關重要。本集團提供關於安全、技術、科技工序以及企業文化的有效培訓。為確保長期積極參與，本集團設有調查制度，記錄每個培訓，並規定每月檢討。
- 新入職僱員：本集團安排入職培訓，幫助履新僱員了解本集團的企業文化、整體情況及發展。

於2019年，本集團實行年度培訓計劃，為僱員提供更多課堂及培訓。於2019年，本集團已為履新僱員安排4次入職培訓課程，並曾舉辦22次外部培訓及多次內部培訓課程。年度培訓開支較上一年度增加27.6%，達人民幣112,477元。

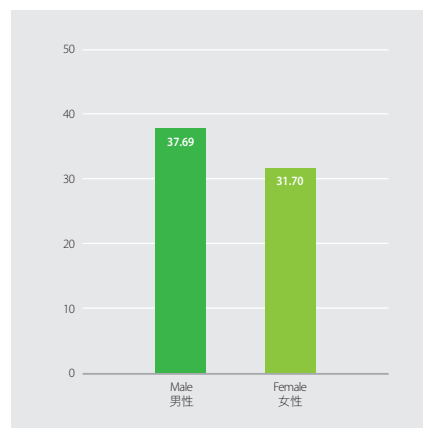
Average Training Hours Completed per Employee by Position (hours)

按職位劃分的每名僱員平均已完成培訓時數 (小時)



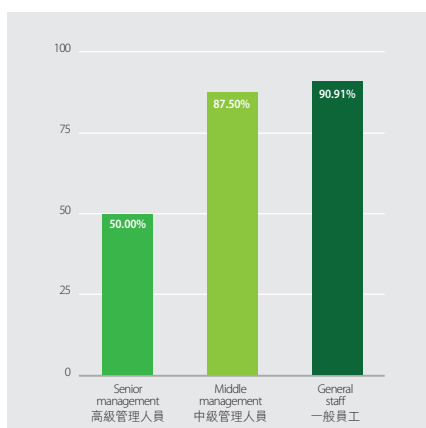
Average Training Hours Completed per Employee by Gender (hours)

按性別劃分的每名僱員平均已完成培訓時數 (小時)



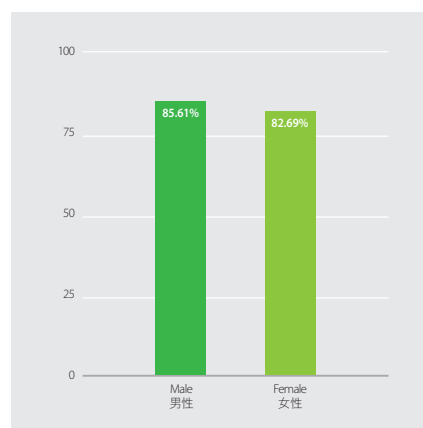
Percentage of Employee Trained by Position (%)

按職位劃分的僱員培訓百分比 (%)



Percentage of Employee Trained by Gender (%)

按性別劃分的僱員培訓百分比 (%)



Occupational Health and Safety

As a mining and processing company, the Group attaches great importance to its management of safe production and protection of the safety and health of employees. In order to maintain a safe working environment, the Group strictly follows the rules in the *Production Safety Law of the People's Republic of China* and the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*. Moreover, the Group enhances occupational health and safety management by complying with the *Occupational Health and Safety Management Systems (GB/T28001-2011)*, formulating the *Manual for Safety Supervision System* and implementing the *Management Measures for Occupational Health*.

Aba Mining has established a solid safety management system, including *Aba Mining Safe Production Management Measures*, *Aba Mining Environmental Protection Management Measures*, *Aba Mining Maoling Iron Mine Safety Standardization Safety Production Responsibility System* and *Aba Mining Maoling Iron Mine Safety Standardization Labor Protection Articles Management System*.

In 2019, the Group continued to improve the safety management systems and updated the *Anti - "three violations" management system*, which highlights the consequences of illegal operations, illegal command, violation of labour discipline during production and work. By implementing the *Emergency Rescue Plan*, the Group effectively conducted 26 times of safety inspection and rectified 72 potential risks. The Group organised 12 safety and environmental protection training sessions to prevent misbehaviour and ensure smooth and safe production. As a result, employees within the Group have attended safety training with an average of 36.64 safety training hours per person.

In 2019, the Group recorded zero fatalities in its operations and lost 99 days due to work injuries. The Group commits itself to leverage all available resources to assist injured employees and their families as much as it could. In total, the Group invested approximately RMB9.2 million in safe production management in 2019 and provided occupational disease inspections for 98 employees with no diagnosed occupational disease.

職業健康與安全

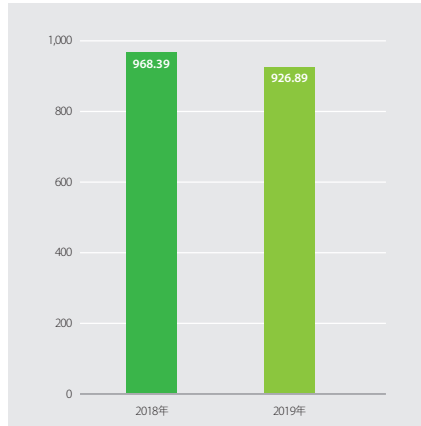
作為一間採礦選礦公司，本集團高度重視安全生產管理，保障僱員安全與健康。為維持安全的工作環境，本集團嚴格遵守《中華人民共和國安全生產法》及《中華人民共和國職業病防治法》的規則。此外，本集團制訂《安全監察制度》及實施《職業健康管理辦法》，遵守《職業健康安全管理体系》(GB/T28001-2011)，提升職業健康與安全管理。

阿壩礦業已建立一套穩健的安全管理制度，包括《阿壩礦業安全生產管理辦法》、《阿壩礦業環境保護管理辦法》、《阿壩礦業毛嶺鐵礦安全標準化安全生產責任制》及《阿壩礦業毛嶺鐵礦安全標準化勞動防護用品管理制度》。

於2019年，本集團不斷改進安全管理制度，並更新《反「三違」管理制度》，強調於生產及工作過程中的不法經營、不法指令及違反勞動紀律的後果。通過實施《應急救援預案》，本集團已有效進行26次安全檢測，糾正72項潛在風險。本集團已組織12次安全及環境保護培訓課程，防止行為不當並確保生產暢順安全。就此，本集團僱員已出席安全培訓，人均安全培訓時數為36.64小時。

於2019年，本集團的業務運作錄得零死亡個案，因工傷損失99天。本集團承諾盡可能利用一切可用資源援助受傷僱員及其家屬。總體而言，本集團於2019年已投資約人民幣9.2百萬元於安全生產管理，為98名僱員進行職業病檢查，並無確診任何職業病。

Investment in Safe Production Management (RMB10,000)
生產安全管理投資 (人民幣萬元)



In Mancala Group, a set of integrated occupational health and safety and training system has been adopted to manage the diverse range of activities in which the Company participates. The system conforms to the recommendations of the AS/NZS 4801 *Occupational Health and Safety Management System*.

曼卡拉集團已採納一套綜合職業健康與安全及培訓制度，管理本公司從事的不同業務範疇。該制度符合AS/NZS 4801職業健康安全管理體系的建議。

Safety Management System of Mancala Group
曼卡拉集團的安全管理制度

Commitment & Leadership 承擔及領導	Risk Management 風險管理	Documentation & Documental Control 存檔及文件管理	Legislative Compliance 法例合規	Organisation & Responsibilities 組織及責任	Training & Competency 培訓及資格
01 Policies 政策	01 Operational Risk Assessments 營運風險評估	01 Document Control Register 文件管理冊	01 Federal Legislation 聯邦法例	01 Organisational Chart 組織圖	01 Training Management Plan 培訓管理計劃
02 Mancala Core Values 曼卡拉核心價值	02 Job Safety Analysis 職業安全分析	02 Health & Hygiene 健康及衛生	02 State Legislation 州法例	02 Position Description 職位描述	02 Training Competency & Skills Matrix 培訓資格及技能架構
03 Mancala Safety Management Plan 曼卡拉安全管理計劃	03 ManSafe Checklists ManSafe清單	03 Energy Isolation & Tagging 能源區分及標籤	03 Australian Standards 澳洲標準		03 Mancala Inductions 曼卡拉迎新
04 Mancala Cardinal Rules 曼卡拉基本規則	04 Hazard Reports 危害報告	04 Working at Heights 高空工作	04 Codes of Practice 常規守則		04 Visitor Induction 訪客迎新
05 Key Performance Indicators 關鍵績效指標		05 Confined Space 密閉空間	05 Permits and Licensing 許可及執照		05 Employee-OHS- Files 僱員職安健檔案
06 OHS Roles and Responsibilities 職安健角色及責任		06 Electrical Safety 電力安全	06 Safe Work Australia 澳洲安全工作		06 Toolbox Topics & Safety Talks 工具箱議題及安全講座
07 OHS Annual Report 職安健年報		07 Cranes & Lifting 起重機及吊機	07 SDS's 安全資料表		07 MVM Training MVM培訓
08 OHS Staff and Resources 職安健人員及資源		08 Pressurised Systems 壓力系統	08 MDG Guidelines 千禧發展目標指引		08 Monthly Safety Themes 每月安全主題
09 OHS Strategy-Objectives & Targets 職安健策略宗旨及目標		09 Mobile Equipment 移動設備	09 Worksafe Compliance & Visits 工作安全合規及視察		09 RII Units RII單位
10 EOM Management Meetings 企業經營模型管理會議		10 Ground Stability 地面穩固性			10 General Training 一般培訓
		11 Explosive and Magazine Plans 炸藥及火藥庫規劃			11 USI Register USI登記冊
		12 Remote Control Equipment 遙控設備			12 TasTAFE Contract TasTAFE合約
		13 Guidelines 指引			
		14 SWMS & Work Instructions 安全工作方法聲明及工作指示			
		15 Compliance Registers 合規登記冊			
		16 Management Plans 管理計劃			
		17 Medical Management 醫療管理			
		18 OHS-Previous Standards 職安健一過往標準			
		19 Share Point Template 分享點範本			
		20 Tender Info 招標資料			

Communication & Consultation 溝通及諮詢	Incident & Injury Management 事故及傷亡管理	Emergency Management 緊急管理	Monitoring & Review 監察及檢討	Contractor Selection & Management 承包商甄選及管理	Change Management 修改管理
01 Safety Alerts 安全警示 02 Safety Notifications 安全提示 03 Maintenance Bulletins 維修簡報 04 Safety Meetings 安全會議 05 Newsletters 新聞簡報 06 External Safety Alerts 外部安全警示 07 Mancala Business Services Weekly Update 開曼曼卡拉商業服務 每週更新 08 General Presentations 一般簡報 09 Health & Wellness Initiatives 身心健康倡議	01 Incident Templates 事故範本 02 Incidents & Events 事故及事件	01 Crisis Management Plan 危機管理計劃 02 Emergency Management Plan 緊急管理計劃 03 Evacuation Plans 疏散計劃 04 Evacuation Drills 疏散演習 05 First Aid Facilities 急救設施 06 Trigger Action Response Plans 觸發行動回應計劃 (TARP) 07 Emergency Equipment 緊急設施 08 Employee Assistance Programmes 僱員援助計劃	01 Safety Improvement Audits 安全改進審核 02 Task Observations 工作觀察 03 Workshop Inspections 車間檢查 04 Underground Inspections 地底檢查 05 Internal OHS System Audits 內部職安健系統審核 06 External OHS System Audits 外部職安健系統審核	01 Contractor Work Permits 承包商工作許可 02 Contractor Category Table 承包商分類表 03 Post Award Project Specific Requirements 中標後項目具體要求 04 Project Prestart Compliance Checklist 項目開展前合規清單 05 Sub-Contractor Tender Questionnaire 分包商招標問卷 06 Contractor Inspection Checklist 承包商檢查清單 07 Contractor Meeting Minutes 承包商會議紀錄 08 Services Contracts 服務合約	01 Template 範本 02 Design Risk Assessment 設計風險評估

Caring for Employee

The Group is in full compliance with the *Labour Law of the People's Republic of China and Regulations for Employees' Paid Annual Leaves*. To create a positive working environment and ensure that all employees are respected and motivated, the Group has established the *Administrative Measures on Compensation and Benefit* which provides employees with competitive remuneration and benefits that match their performance and the internal remuneration structure of the Group. To secure employees' right of annual leave, the Group also issued the *Administrative Measures on Employee Leave*. As legally required, the Group offers a remuneration package that includes social insurance, pension insurance, and maternity leaves to employees. In 2019, the Group provided employees with full social insurance coverage in China.

The Group values employees' opinions. To improve relevant management systems and measures, the Group regularly organises meetings with employee representatives to collect suggestions from employees.

The Group encourages its employees to achieve work-life balance through hosting a variety of activities. In 2019, the Group held art performances, theme education youth fellowship activities and celebrations during festivals, including Spring Festival celebration, International Women's Day activities and activities during the Labour Day holiday, etc.

關愛僱員

本集團全面遵守《中華人民共和國勞動法》及《職工帶薪年休假條例》。為建立正面的工作環境及確保一視同仁，本集團已制定《薪酬管理辦法》，為僱員提供切合其表現及本集團內部薪酬架構的具競爭力薪酬及福利。為保障僱員享用房假權利，本集團已頒佈《員工休假管理辦法》。本集團依法向僱員提供包含社會保險、退休金保險及產假的薪酬待遇。於2019年，本集團為在中國僱員提供全面社會保險保障。

本集團重視僱員意見。為改進相關管理制度及措施，本集團定期組織僱員代表大會，收集僱員建議。

本集團鼓勵僱員追求作息平衡，並舉辦各種活動。於2019年，本集團曾舉辦藝術表演，青年人主題教育活動及節慶活動，包括春節慶典、國際婦女日活動以及五一勞動節活動等。

COMMUNITY

The Group is committed to making positive contributions to poverty alleviation and always aware of the community needs. Most of the Group's mines are located in impoverished areas in China where minorities reside. The Group not only respects minorities' cultural values but also initiates communication with them to understand their needs and take targeted measures to help local residents to end poverty. Also, the Group has actively supported economic and cultural development by providing job opportunities, bringing more residents into business and encouraging employees to participate in volunteering activities.

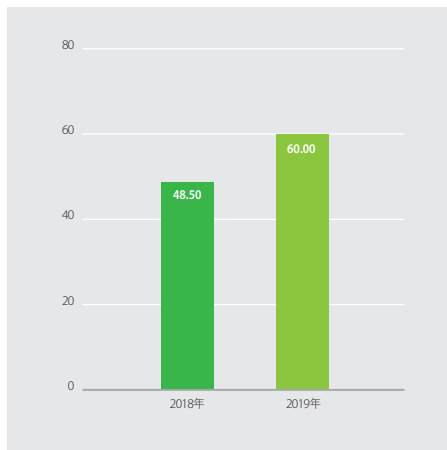
In 2019, the Group outsourced sporadic engineering projects*** to the Maoling Village Committee and Xinqiao Village Committee to help the development of community and foster relationship among surrounding villages and enterprises. Moreover, the Group attended the opening ceremony of Aba Autonomous Prefecture Sports Meeting as the financial supporter. During the sports meeting, the Group donated approximately RMB30,000 to support the local economy. By the end of 2019, the Group has invested approximately RMB600,000 and 360 hours on community development.

社區

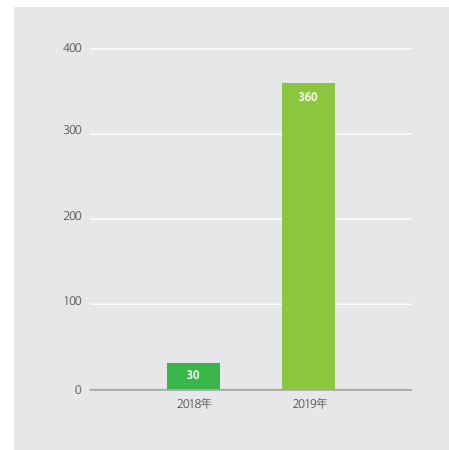
本集團致力於扶貧工作，一直關注社區需要。本集團的大部分礦場位於中國少數族裔居住的赤貧地區。本集團不單尊重少數族裔的文化價值，更會與彼等溝通，了解彼等的需要，採取針對措施幫助本地居民擺脫貧窮。另外，本集團積極支持經濟及文化發展，提供就業機會，吸納更多居民，以及鼓勵僱員參與志願活動。

於2019年，本集團將非定期的工程項目***外予毛嶺村委會及新橋村委會，推動社區發展，促進與週邊村莊與企業的關係。此外，本集團曾以贊助機構身份出席阿壩州運會開幕典禮。於阿壩州運會期間，本集團已捐贈約人民幣30,000元進一步支持地方經濟。截至2019年底，本集團已投資約人民幣600,000元及360小時於社區發展。

**Amount of Charitable Donation
(RMB 10,000)**
慈善捐款金額 (人民幣萬元)



**Charity Investment Hours⁽¹⁾
(hours)**
慈善投資時數⁽¹⁾ (小時)



Note:

(1) In 2019, Aba Mining undertook sporadic projects to help surrounding villages to carry out restoration and construction after mudslides.

*** Mine Sporadic projects mainly include excavator, loader, truck rental, temporary labour, construction and maintenance of sporadic infrastructure projects, etc.

附註：

(1) 於2019年，阿壩礦業進行非定期項目，協助發生泥石流之週邊村落進行復修及建設。

*** 礦場的非定期的工程項目主要包括挖掘機、搬土機、卡車租賃、臨時勞工、非定期基建項目建設及保養等。

GLOSSARY

詞彙

“2019 Annual Report” 「2019年年報」	指	the annual report of the Company for the financial year ended 31 December 2019 本公司截至2019年12月31日止財政年度的年報
“Akuang Trading” 「阿礦貿易」	指	Huili County Akuang Trading Co., Ltd.*, a limited liability company established in the PRC on 13 June 2012 and an indirect wholly-owned subsidiary of the Company 會理縣阿礦貿易有限公司，一間於2012年6月13日在中國成立的有限責任公司，為本公司的間接全資子公司
“Aba Mining” 「阿壩礦業」	指	Aba Mining Co., Ltd.*, a limited liability company established in the PRC on 27 February 2004 and an indirect wholly-owned subsidiary of the Company 阿壩礦業有限公司，一間於2004年2月27日在中國成立的有限責任公司，為本公司的間接全資子公司
“Baicao Mine” 「白草鐵礦」	指	the vanadium-bearing titano-magnetite mine located in Huili County, Sichuan and operated by Huili Caitong, with a mining area of 1.88 sq.km. 位於四川會理縣的鈮鈦磁鐵礦，由會理財通經營，採礦面積為1.88平方公里
“Baicao Processing Plant” 「白草洗選廠」	指	the ore processing plant located near the Baicao Mine and operated by Huili Caitong 位於白草鐵礦附近的礦石洗選廠，由會理財通經營
“Board” 「董事會」	指	the board of directors of the Company 本公司的董事會
“China” or “PRC” 「中國」	指	the People’s Republic of China excluding, for the purpose of this report, Hong Kong, the Macau Special Administrative Region of the PRC and Taiwan 中華人民共和國，就本報告而言，不包括香港、中國澳門特別行政區及台灣
“China VTM Mining”, “Company”, “we”, “us” or “our” 「中國鐵鈦」、「本公司」或「我們」	指	China Vanadium Titano-Magnetite Mining Company Limited, an exempted company incorporated with limited liability in the Cayman Islands on 28 April 2008 中國鈮鈦磁鐵礦業有限公司，一間於2008年4月28日在開曼群島註冊成立的獲豁免有限公司
“Cizhuqing Mine” 「茨竹箐鐵礦」	指	the vanadium-bearing titano-magnetite mine located in Huili County, Sichuan and operated by Huili Caitong, with a mining area of 1.279 sq.km. 位於四川會理縣的鈮鈦磁鐵礦，由會理財通經營，採礦面積為1.279平方公里
“Continuing Operations” 「持續經營業務」	指	operations of the Group excluding the Disposal Group 本集團（不包括出售集團）的業務

“Discontinued Operations” 「已終止經營業務」	指	operations of the Disposal Group 出售集團的業務
“Disposal” 「出售事項」	指	the sale transaction of the Disposal Group from Sichuan Lingyu to Chengyu Vanadium Titano Technology Ltd.* which was entered into on 29 January 2019 and completed on 30 July 2019 於2019年1月29日訂立並於2019年7月30日完成四川凌御向成渝鈦鈹科技有限公司出售出售集團的交易
“Disposal Group” 「出售集團」	指	Huili Caitong and its subsidiaries, namely Xiushuihe Mining and Panzhihua Yixingda 會理財通及其子公司秀水河礦業及攀枝花易興達
“GHG emissions” 「溫室氣體排放」	指	a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in the earth’s atmosphere are water vapor, carbon dioxide, methane, nitrous oxide, and ozone 大氣層中吸收並散發紅外線輻射的氣體，此吸收及散發過程乃溫室效應的根本原因。地球大氣層中的主要溫室氣體為水蒸氣、二氧化碳、甲烷、氧化亞氮及臭氧
“Group” 「本集團」	指	the Company and its subsidiaries 本公司及其子公司
“Haibaodang Mine” 「海保函鐵礦」	指	the vanadium-bearing titano-magnetite mine located in Renhe District, Panzhihua City, Sichuan, with an exploration area of 26.2 sq.km. 位於四川攀枝花市仁和區的鈦鈹磁鐵礦，勘查面積為26.2平方公里
“Hailong Processing Plant” 「海龍洗選廠」	指	the ore processing plant located near the Cizhuqing Mine and operated by Huili Caitong 位於茨竹箐鐵礦附近的礦石洗選廠，由會理財通經營
“Heigutian Processing Plant” 「黑谷田洗選廠」	指	the ore processing plant located near the Yangqueqing Mine and owned by Huili Caitong 位於陽雀箐鐵礦附近的礦石洗選廠，由會理財通擁有
“Hong Kong” 「香港」	指	the Hong Kong Special Administrative Region of the PRC 中國香港特別行政區
“Hong Kong Stock Exchange” 「香港聯交所」	指	The Stock Exchange of Hong Kong Limited 香港聯合交易所有限公司
“Huili Caitong” 「會理財通」	指	Huili County Caitong Iron and Titanium Co., Ltd.*, established in the PRC on 7 July 1998 and has been a foreign equity joint venture in the PRC since 29 December 2010, an indirect wholly-owned subsidiary of the Company 會理縣財通鐵鈦有限責任公司，於1998年7月7日在中國成立，並自2010年12月29日起成為中國的外商合資經營企業，為本公司的間接全資子公司

“Inactive Mines” 「不活躍鐵礦」	指	Cizhuqing Mine, Yangqueqing Mine and Haibaodang Mine 茨竹箐鐵礦、陽雀箐鐵礦及海保函鐵礦
“iron” 「鐵」	指	a silvery-white, lustrous, malleable, ductile, magnetic or magnetisable, metallic element occurring abundantly in combined forms, notably in hematite, limonite, magnetite, and taconite, and alloyed for use in a wide range of important structural materials 一種銀白色的、有光澤、有韌性、可延展、有磁性或可被磁化的金屬元素，以化合物形式大量存在，主要有赤鐵礦、褐鐵礦、磁鐵礦及角岩，在許多種重要結構材料中用作合金的一種
“iron ore” 「鐵礦石」	指	compounds of iron and oxygen (iron oxides) mixed with impurities (gangue); it is a mineral which when heated in the presence of a reductant will yield metallic iron 混合雜質（脈石）的鐵與氧混合物（氧化鐵）；是一種與還原劑一起加熱時會成為金屬鐵的礦物
“Iron Pelletising Plant” 「球團礦廠」	指	the plant that produces iron pellets and is located in Huili County, Sichuan, which is approximately 5.5 km. from the Xiushuihe Mine and operated by Huili Caitong 位於四川會理縣生產球團礦的工廠，由會理財通經營，距離秀水河鐵礦約5.5公里
“kL” 「千升」	指	kiloliter(s), a metric unit measure of volume 容量量度公制單位千公升
“kgce” 「千克標準煤」	指	kilogram of coal equivalent, a unit measure of energy intensity 千克標準煤，能量強度量度單位
“Low Fe Mines” 「低鐵品位礦場」	指	Baicao Mine, Baicao Processing Plant, Xiushuihe Mine (including expansion), Xiushuihe Processing Plant, Hailong Processing Plant, Heigutian Processing Plant and Iron Pelletising Plant 白草鐵礦、白草洗選廠、秀水河鐵礦（包括擴展地區）、秀水河洗選廠、海龍洗選廠、黑谷田洗選廠及球團礦廠
“Mancala Asia” 「香港曼卡拉」	指	Mancala Asia Ltd, a limited liability company incorporated in Hong Kong on 26 March 2013 and a subsidiary of the Company, in which the Company indirectly owns 81% equity interest Mancala Asia Ltd，一間於2013年3月26日在香港註冊成立的有限公司，為本公司的子公司，由本公司間接擁有81%股本權益
“Mancala Group” 「曼卡拉集團」	指	Mancala Holdings and its subsidiaries, the principal activity of which is to render specialised mining services 開曼曼卡拉及其子公司，主要業務為提供專業開採服務
“Mancala Holdings” 「開曼曼卡拉」	指	Mancala Holdings Limited, the legal and beneficial owner of the entire issued share capital of MHPL Mancala Holdings Limited，曼卡拉控股全部已發行股本的法律上兼實益擁有人

“Mancala Mining”		Mancala Mining Pty Ltd, a limited liability company incorporated in Australia on 9 June 1992 and a subsidiary of the Company, in which the Company indirectly owns 81% equity interest
「曼卡拉礦業」	指	Mancala Mining Pty Ltd，一間於1992年6月9日在澳洲註冊成立的有限公司，為本公司的子公司，由本公司間接擁有81%股本權益
“Mancala Pty”		Mancala Pty Ltd, a limited liability company incorporated in Australia on 15 March 1989 and a subsidiary of the Company, in which the Company indirectly owns 81% equity interest
「曼卡拉」	指	Mancala Pty Ltd，一間於1989年3月15日在澳洲註冊成立的有限公司，為本公司的子公司，由本公司間接擁有81%股本權益
“Mancala Services”		Mancala Mine Services Pty Ltd, a limited liability company incorporated in Australia on 21 August 2003 and a subsidiary of the Company, in which the Company indirectly owns 81% equity interest
「曼卡拉礦業服務」	指	Mancala Mine Services Pty Ltd，一間於2003年8月21日在澳洲註冊成立的有限公司，為本公司的子公司，由本公司間接擁有81%股本權益
“Macao”		the Macao Special Administrative Region of the PRC
「澳門」	指	中國澳門特別行政區
“Maoling Extended Exploration Area”		formerly an independent exploration region with an area of 2.83 sq.km. covered under the extended exploration permit of the Maoling Mine (covering 1.9 sq.km. of the mining area of the Maoling Mine), has been consolidated with the Yanglongshan Mine since September 2012 to form the Maoling-Yanglongshan Mine
「毛嶺延伸勘探區域」	指	原為毛嶺鐵礦延伸勘探許可證所覆蓋面積為2.83平方公里（覆蓋1.9平方公里的毛嶺鐵礦採礦面積）的獨立勘探區域，自2012年9月起與羊龍山鐵礦合併成為毛嶺—羊龍山鐵礦
“Maoling Mine”		an ordinary magnetite mine located in Wenchuan County, Sichuan, with a mining area of 1.9 sq.km.
「毛嶺鐵礦」	指	一個位於四川汶川縣的普通磁鐵礦，採礦面積為1.9平方公里
“Maoling Processing Plant”		the ore processing plant located near the Maoling-Yanglongshan Mine and operating by Aba Mining
「毛嶺洗選廠」	指	位於毛嶺—羊龍山鐵礦附近的礦石洗選廠，由阿壩礦業經營

“Maoling-Yanglongshan Mine”		an exploration region with a total area of 11.6 sq.km. covered under the exploration permit of the Maoling-Yanglongshan Mine (the mining area covered is owned by the Maoling Mine), formed from the combination of the Maoling Extended Exploration Area and the Yanglongshan Mine since September 2012 and operated by Aba Mining
「毛嶺－羊龍山鐵礦」	指	由毛嶺－羊龍山鐵礦勘查許可證所覆蓋總面積為11.6平方公里的勘查區域，由毛嶺延伸勘查區域與羊龍山鐵礦自2012年9月起合併而成，所覆蓋的採礦範圍由毛嶺鐵礦擁有，並由阿壩礦業經營
“MCL Vietnam”		MCL Vietnam Industries Company Limited, a limited liability company incorporated in Vietnam on 14 May 2013 and a subsidiary of the Company, in which the Company indirectly owns 39.69% equity interest
「越南曼卡拉」	指	MCL Vietnam Industries Company Limited，一間於2013年5月14日在越南註冊成立的有限公司，為本公司的子公司，由本公司間接擁有39.69%股本權益
“MHPL”		Mancala Holdings Pty Ltd, a limited liability company incorporated in Australia on 8 March 1990 and a subsidiary of the Company, in which the Company indirectly owns 81% equity interest
「曼卡拉控股」	指	Mancala Holdings Pty Ltd，一間於1990年3月8日在澳洲註冊成立的有限公司，為本公司的子公司，由本公司間接擁有81%股本權益
“MWh”		megawatt hour(s), a unit of energy
「兆瓦時」	指	能量單位兆瓦時
“Panzhuhua Yixingda”		Panzhuhua Yixingda Industrial Trading Co., Ltd.*, a limited liability company established in the PRC on 9 July 2009 and an indirect wholly-owned subsidiary of the Company till 30 July 2019
「攀枝花易興達」	指	攀枝花易興達工貿有限責任公司，一間於2009年7月9日在中國成立的有限責任公司，直至2019年7月30日為止為本公司的間接全資子公司
“RMB”		The lawful currency of the PRC
「人民幣」	指	中國法定貨幣
“Shigou Gypsum Mine”		shigou gypsum mine located at Hanyuan County, Ya’an City, Sichuan, with a mining area of 0.1228 sq.km.
「石溝石膏礦」	指	位於四川雅安市漢源縣的石溝石膏礦，採礦面積為0.1228平方公里
“Sichuan”		the Sichuan province of the PRC
「四川」	指	中國四川省
“Sichuan Haoyuan”		Sichuan Haoyuan New Materials Co., Ltd.*, a limited liability company established in the PRC on 18 July 2011 and a subsidiary of the Company, in which the Company indirectly owns 51% equity interest
「四川浩遠」	指	四川省浩遠新材料有限公司，一間於2011年7月18日在中國成立的有限責任公司，為本公司的子公司，由本公司間接擁有51%股本權益

<p>“Sichuan Lingyu”</p> <p>「四川凌御」</p>	<p>指</p>	<p>Sichuan Lingyu Investment Co., Ltd.*, a limited liability company established in the PRC on 9 June 2010 and an indirect wholly-owned subsidiary of the Company</p> <p>四川省凌御投資有限公司，一間於2010年6月9日在中國成立的有限責任公司，為本公司的間接全資子公司</p>
<p>“Sichuan Xinglian”</p> <p>「四川興聯」</p>	<p>指</p>	<p>Sichuan Xinglian Mining and Technology Construction Co., Ltd.*, a limited liability company established in the PRC on 23 June 2011 and an indirect wholly-owned subsidiary of the Company</p> <p>四川省興聯礦產技術工程有限公司，一間於2011年6月23日在中國成立的有限責任公司，為本公司的間接全資子公司</p>
<p>“Spectrum Resources”</p> <p>「Spectrum Resources」</p>	<p>指</p>	<p>Spectrum Resources Australia Pty Ltd, a limited liability company incorporated in Australia on 19 February 1987 and a subsidiary of the Company, in which the Company indirectly owns 81% equity interest</p> <p>Spectrum Resources Australia Pty Ltd，一間於1987年2月19日在澳洲註冊成立的有限公司，為本公司的子公司，由本公司間接擁有81%股本權益</p>
<p>“sq.km.”</p> <p>「平方公里」</p>	<p>指</p>	<p>square kilometres</p> <p>平方公里</p>
<p>“Subject Area”</p> <p>「主要範疇」</p>	<p>指</p>	<p>the Environmental, Social, and Governance (ESG) Reporting Guide of the Stock Exchange divides ESG issues into two subjects, namely A Environment and B Society, and set different disclosure level requirements – “Comply or explain” Provisions and “Recommended Disclosures”</p> <p>聯交所環境、社會及管治(ESG)報告指引將ESG劃分為兩個主要範疇：A「環境」及B「社會」，以及制訂不同披露級別規定—「不遵守就解釋」條文及「建議披露」</p>
<p>“TFe”</p> <p>「TFe」</p>	<p>指</p>	<p>the symbol for denoting total iron</p> <p>表示全鐵的符號</p>
<p>“Xinjin Mining”</p> <p>「鑫金礦業」</p>	<p>指</p>	<p>Hanyuan County Xinjin Mining Co., Ltd.*, a limited liability company established in the PRC on 29 September 2010 and a subsidiary of the Company, in which the Company indirectly owns 51% equity interest</p> <p>漢源縣鑫金礦業有限公司，一間於2010年9月29日在中國成立的有限責任公司，為本公司的子公司，由本公司間接擁有51%股本權益</p>
<p>“Xiushuihe Mine”</p> <p>「秀水河鐵礦」</p>	<p>指</p>	<p>the vanadium-bearing titano-magnetite mine located in Huili County, Sichuan province and operated by Xiushuihe Mining, with a mining area of 0.52 sq.km.</p> <p>位於四川省會理縣的鈦鈹磁鐵礦，由秀水河礦業經營，採礦面積為0.52平方公里</p>
<p>“Xiushuihe Mining”</p> <p>「秀水河礦業」</p>	<p>指</p>	<p>Huili County Xiushuihe Mining Co., Ltd.*, a limited liability company established in the PRC on 26 June 2007, an indirect subsidiary of the Company that owned 95.0% equity interest through Huili Caitong till 30 July 2019</p> <p>會理縣秀水河礦業有限公司，一間於2007年6月26日在中國成立的有限責任公司，直至2019年7月30日為止為本公司透過會理財通擁有95.0%股本權益的間接子公司</p>

“Xiushuihe Processing Plant”		the ore processing plant located at the Xiushuihe Mine and operated by Xiushuihe Mining
「秀水河洗選廠」	指	位於秀水河鐵礦的礦石洗選廠，由秀水河礦業經營
“Yanglongshan Mine”		an ordinary magnetite mine located in Wenchuan County, Sichuan, formerly an independent exploration region with an area of 8.79 sq.km. Covered under the exploration permit of the Yanglongshan Mine, and has been consolidated as the Maoling-Yanglongshan Mine with the original Maoling Extended Exploration Area since September 2012
「羊龍山鐵礦」	指	一個位於四川汶川縣的普通磁鐵礦，原為由羊龍山鐵礦勘查許可證所覆蓋面積為8.79平方公里的獨立勘查區域，自2012年9月起與原來的毛嶺延伸勘查區域合併為毛嶺—羊龍山鐵礦
“Yangqueqing Mine”		the vanadium-bearing titano-magnetite mine located in Huili County, Sichuan, and operated by Huili Caitong, with a mining area of 0.25 sq.km.
「陽雀箐鐵礦」	指	位於四川會理縣的鈦鈦磁鐵礦，由會理財通經營，採礦面積為0.25平方公里

* For identification purpose only

* 僅供識別

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FEEDBACK FORM

讀者反饋表

Dear reader:

親愛的讀者：

Thank you for reading the *ESG Report of China VTM Mining for year 2019*. We sincerely welcome your feedback regarding this ESG Report and our sustainability performance. Please fill out this feedback form and email to ir@chinavtmmining.com.

感謝閣下閱讀中國鐵鈦2019年度ESG報告。我們現誠邀閣下發表對本ESG報告及我們可持續表現的意見，敬請填妥本反饋表並發送電郵至ir@chinavtmmining.com。

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閣下屬於以下哪個權益人組別?
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 - Readability (i.e., intelligible expression, beautiful design, attractive content, and easy-to-find required information)
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 3 (good) (良好) 2 (general) (一般) 1 (poor) (差劣)

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In addition to the content that has been disclosed, what kind of information do you wish to read?

除已披露的內容外，閣下想閱覽哪類資料?

29 June 2020
2020年6月29日



CHINA VANADIUM
TITANO-MAGNETITE MINING
COMPANY LIMITED
中國鈮鈦磁鐵礦業有限公司

www.chinavtmmining.com