

地址 Address: 香港灣仔港灣道 18 號中環廣場 32

樓 3202 室

Room 3202, 32/F Central Plaza, 18 Harbour Road,

Wanchai, Hong Kong

電話 Tel: (852) 2877-1398 傳真 Fax: (852) 2827-9398

電郵 Email: info@tianneng.com.hk

網址 Website: http://www.tianneng.com.hk



(於開曼群島註冊成立之有限公司) 股份代號:00819 (Incorporated in the Cayman Islands with Limited Liability) Stock Code:00819



關於本報告 About the Report

匯報範圍

本報告涵蓋天能動力國際有限公司(「本公司」)及其附屬公司(統稱「集團」、「本集團」或「天能」)於2023年1月1日至2023年12月31日的環境、社會及管治表現,部分內容根據需要追溯至以前年份。

匯報原則

本報告為本集團自 2014 年以來編制的第十份環境、 社會及 管治報告,報告編制遵循以下原則:

重要性: 本集團注重與持份者的定期溝通,確定了內外部利益相關方關注的與公司相關的實質性議題, 並將其作為本報告的重要內容。同時, 本報告重點匯報了可能對投資人及其他相關方產生重要影響的環境、社會及治理方面的事項。

量化性: 本報告盡可能以量化的形式披露關鍵績效指標。報告所使用數據來自年報、正式檔及統計報告。數據以 2023 年為主, 部分包括以前年度數據。本報告中所涉及貨幣金額以人民幣作為計量幣種,特別說明的除外。

平衡: 本報告公正、客觀地闡述本集團在 ESG 的管理表現。

一**致性**: 本報告使用一致的披露統計方法, 使環境、社會及管治資料與往年及日後可作有意義的比較。

Scope of Reporting

This report covers the environmental, social, and governance performance of Tianneng Power International Limited (the "Company") and its subsidiaries (collectively, the "Group" or "Tianneng") from January 1st, 2023 to December 31st, 2023, with some parts backdated to prior years where necessary.

Reporting Principles

This is the 10th Environmental, Social and Governance Report prepared by the Group since 2014 and has been prepared in accordance with the following principles:

Materiality: The Group focuses on regular communication with stakeholders and identifies material topics of concern to internal and external stakeholders that are relevant to the Company and make them an important part of this report. At the same time, this report highlights environmental, social and governance matters that may have a significant impact on investors and other interested parties.

Quantitative: To the extent possible, key performance indicators are disclosed in quantitative form in the report. The data used in the report comes from annual reports, official files and statistical reports. The data is mainly for the year 2023 and partly includes data from previous years. Monetary amounts in this report are measured in RMB unless otherwise stated.

Balance: This report provides a fair and objective account of the Group's management performance in ESG.

Consistency: The report uses a consistent statistical method of disclosure that allows for meaningful comparisons of environmental, social, and governance information with previous and future years.

參考標準

本報告的編制參考以下標準:

香港聯交所發佈的 《香港聯合交易所有限公司證券上市規則》附錄 C2 《環境、 社會及管治報告指引》(「《ESG 報告指引》」)及全球報告倡議組織《可持續發展報告標準》(「《GRI 準則》」)。

對應聯合國發佈的 17 個可持續發展目標。

遵守《ESG 報告指引》中的「強制披露規定」和「不遵守就解釋」條文。

報告保證

本集團董事會及全體董事保證本報告內容不存在任何虛假記載、誤導性陳述或者重大遺漏,並對內容的真實性、準確性和完整性承擔個別及連帶責任。

報告形式

本報告以中文繁體和英文兩種語言發佈, 以電子版形式提供。

Reference Standard

The report has been prepared with reference to the following standards:

Appendix C2-Environmental, Social and Governance Reporting Guide (ESG Reporting Guidelines) to the Rules Governing the Listing of Securities on the Stock Exchange and Global Reporting Initiative Sustainability Reporting Standards ("GRI Standards").

Corresponding 17 Sustainable Development Goals issued by the United Nations.

Compliance with the Mandatory Disclosure Requirements and "Comply or explain" Provisions of the ESG Reporting Guidelines.

Guarantee of the Report

The board of directors and all directors of the Group guarantee that there are no false records, misleading statements or major omissions in the content of this Report, and assume individual and joint responsibility for the authenticity, accuracy and completeness of the content.

Form of the Report

The Report is divided into two languages of Chinese Traditional and English and is provided in electronic format.









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節能降耗 Energy Saving and Consumption Reduction

新型儲能 New Energy Storage

清潔能源推廣 Clean Energy Promotion

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ESG全年亮點績效

ESG Performance Highlights for the Year

量化績效明細表 Quantitative Performance Detail Table

ESG 認可	環境保護
ESG Recognition	Environmental Protection
連續 2 年 獲得 MSCI ESG 評級 AA 級	ISO14001 環境管理體系認證
MSCI ESG rating of AA for 2 consecutive years	ISO14001 Environmental Management System Certification
合規運營 Compliance Operation	全年售出動力電池可減少 22,665.24 萬噸二氧化碳排放,相當於種植松樹 6.21 億棵 Motive batteries sold in a year can reduce 226.65 million tons of carbon dioxide emissions, equivalent to planting 621 million pine trees
員工 100% 簽署個人廉潔承諾書	鉛蓄電池產品中各組分回收率超過 99%
100% of our employees signed a personal integrity pledge	Recycling rate of lead-acid batteries exceeds 99%
廉潔教育培訓 125 場次 , 10,000 餘人次 參與	鋰離子電池產品回收率超過 88%
Over 10,000 participants attended 125 training sessions on integrity education	Recycling rate of lithium-ion batteries exceeds 88%
通過 ISO 27001 信息安全管理體系認證	5家國家工業產品綠色設計示範企業
Passed ISO 27001 Information Security Management System Certification	5 National Green Design Demonstration Enterprises for Industrial Products
未發生用戶隱私數據洩露事件	10 家國家綠色工廠
No incidents of user privacy data leakage	10 National Green Factories
供貨商行為準則簽訂覆蓋率 100%	10 家 國家綠色供應鏈管理示範企業
100% coverage of signing of Code of Conduct for suppliers	10 National Green Supply Chain Management Demonstration Enterprises
價值貢獻	獲 22 項 國家綠色產品等國字型大小榮譽
Value Contribution	Won 22 national green products and other national honors
2023 年在全國各地納稅合計 43.2 億元	參與制定國家、行業等各類標準 210 餘項
Paid a total of 4.32 billion in taxes across the country in 2023	Participated in the formulation of more than 210 national and industry standards
9 次獲得湖州市「金象」企業、「納稅大戶」兩項榮譽 Won the honor of "Golden Elephant" enterprise and "Big Taxpayer" for 9 times in Huzhou City	現有及規劃光伏項目每年可產生 2.39 億度緑電 Existing and planned photovoltaic projects will generate 239 million kWh of green electricity annually

卓越質量	員工管理
Superior Quality	Employee Management
ISO9001 質量管理認證 ISO9001 Quality Management System Certification	國家級引才計劃 14 人 ,合作 院士 9 人 Introduced 14 persons under the "National Talent Attraction Program" and cooperated with 9 academicians
獲得 CNAS 國家認證	組織培訓考核人員 13,298 人次
Obtained CNAS National Accreditation	Organized training and assessment for 13,298 personnel
IATF16949 汽車行業質量管理體系認證 IATF16949 Automotive Quality Management System Certification	各類員工人均受訓時長超 60 個小時 The average training hours per capita of all kinds of employees exceeded 60hour
累計客戶服務 96,347 次	全年招聘應屆生 1,020 名
Cumulative customer service 96,347 times for the year	Recruited 1,020 fresh graduates throughout the year
100% 客戶回饋響應率	職業安全
100% customer feedback response rate	Occupational Safety
科創發展	ISO45001 職業健康安全管理體系認證
Innovation and Development	ISO 45001 Occupational Health and Safety Management System certification
累計擁有授權專利 4,971 項	未發現職業病或疑似職業病
Accumulated 4,971 authorized patents	No occupational diseases or suspected occupational diseases detected
3 家子公司通過國家認定企業技術中心評價 3 subsidiaries have passed the evaluation of national enterprise technology center	未發生生產相關重傷或死亡事件 No production-related serious injuries or fatalities
2 家博士後工作站	投資者權益
2 post-doctoral workstations	Investors' Equity
1家 子公司獲國家級科技型中小企業認證 1 subsidiary was certified as a state-level technology-based SME	截至 2023 年底,累計分紅 15 次 ,累計現金 分紅 41.94 億港幣 Accumulated cash dividends of HK\$4,194 million through 15 dividends at the end of 2023

獎項 Awards



第七屆中國卓越 IR 最佳 ESG 獎 The 7th China Excellence IR Best ESG Award



22023年度湖州市「金象」企業 "Golden Elephant" Enterprise of Huzhou City in 2023



入圍香港可持續發展和科技創新獎 Shortlisted for the Hong Kong Awards for Sustainable Development and Technological Innovation



全國輕工業企業社會責任優秀案例 Excellent Cases of Corporate Social Responsibility in National Light Industry

2023 財聯社致遠獎·環境友好先鋒企業獎 2023 CLS Zhiyuan Award - Environmentally Friendly (E) Pioneer Enterprise Award

董事長榮獲「2022年度金牛卓越企業家獎」

Chairman of the Board honored with "2022 Golden Bull Entrepreneurial Excellence Award"

踐行雙碳目標 2022 年度最佳創新項目獎

Best Innovative Project of the Year Award for Practicing the Dual Carbon Goal 2022

中國鈉電優質企業

China Sodium-ion Batteries Quality Enterprises

入選《2023年度碳效領跑者案例》 Selected as the 2023 Carbon Efficiency Leader Case

入選《企業綠色低碳發展優秀實踐案例》

Selected as Excellent Practice Cases of Enterprise Green and Low Carbon Development

2023-2023年貴州省促進新型工業化發展先進企業

Advanced Enterprises for Promoting the Development of New Industrialization in Guizhou Province, 2023-2023

企業榜單 Enterprise List

全球新能源 500 強企業	位列 21
Top 500 Global New Energy Enterprises	Ranked 21 st
中國電子信息企業	位列 <mark>8</mark>
China Electronic Information Enterprises	Ranked 8 th
中國企業 500 強	位列 137
Top 500 Chinese Enterprises	Ranked 137 th
長三角企業百強	位列 <mark>28</mark>
Top 100 Enterprises in Yangtze River Delta	Ranked 28 th
民營製造業企業	位列 22
Private Manufacturing Enterprises	Ranked 22 nd
中國新經濟企業 500 強	位列 <mark>258</mark>
Top 500 New Economy Enterprises in China	Ranked 258 th
中國戰略新興產業領軍企業 100 強 Top 100 Leading Enterprises in China's Strategic Emerging Industries	位列
中國輕工業科技企業百強	位列 <mark>6</mark>
Top 100 Technology Enterprises in China's Light Industry	Ranked 6 th
中國能源企業(集團)500 強	位列 26
Top 500 Chinese Energy Enterprises (Groups)	Ranked 26 th







企業概況

本集團創始於一九八六年,是中華人民共和國(「中國」)新能源電池行業的領軍企業,也是中國輕型電動車電池的龍頭企業。天能於二零零七年在香港聯合交易所有限公司(「聯交所」)主機板上市(證券代碼00819.HK)。經過三十多年的發展,現已成為以電動輕型車動力電池、儲能電池、可循環產業為主,集新能源汽車動力電池、汽車起動啟停電池、電動特種工業車輛動力電池等多品類電池的研發、生產、銷售,以及綠色智能製造、智慧物流平臺等為一體的新能源集團。

2023 環境、社會及管治報告

Company Profile

Founded in 1986, the Group is a leading Company in the new energy battery industry in the People's Republic of China (the "PRC") and a leading light electric vehicle battery Company in the PRC. Tianneng was listed on the Main Board of the Stock Exchange of Hong Kong Limited (the "Stock Exchange") in 2007 (stock code 00819.HK). After more than 30 years of development, it has now become a new energy Group focusing on light electric vehicle motive batteries, energy storage batteries and recycling businesses, as well as the research and development (R&D), production and sales of a wide range of batteries, including new energy vehicle motive batteries, automotive batteries and motive batteries for electric special industrial vehicles, as well as green and intelligent manufacturing and intelligent logistics platforms.



ESG 目標管理

專題一: 公司治理 Theme I: Corporate Governance

本集團發源於浙江省湖州市, 忠實踐行「綠水青山就是金山銀山」重要理念, 在國家生態文明建設總體規劃的指導下, 我們全方位、全流程、立體化地構建了綠色發展戰略, 即「舉綠色生態旗, 打智能製造牌, 走循環發展路」。這一戰略不僅夯實了企業高品質發展的基礎, 還取得了顯著的經濟效益、社會效益和環境效益, 逐步成長為新能源行業的標杆企業。

面對未來,本集團將繼續宣揚生態文明思想,致力於提升企業高品質可持續發展的能力。我們將重點推進新能源產業的轉型升級,全力培育動力電池和儲能系統兩大產業生態圈,構建具有天能特色的「鉛、鋰」全生命週期閉環綠色產業體系,深入踐行綠色發展理念,以驅動企業實現高品質可持續發展。實現由產品製造向提供系統解決方案的轉型,加快形成新質生產力,為「雙碳」戰略貢獻更多清潔能源系統解決方案,為國家生態文明建設做出更多貢獻。

ESG Objective Management

Originated from Huzhou City, Zhejiang Province, the Group faithfully practices the important concept of "Lucid Waters and Lush Mountains are Invaluable Assets". Under the guidance of the national master plan for ecological civilization development, we have constructed a green development strategy in an all-round, all-process, three-dimensional way, i.e., "Uphold the Banner of Green Ecology, Hold an Ace of Intelligent Manufacturing in Hand, and Take the Road of Cyclic Development". This strategy has not only strengthened the foundation of high-quality development of the enterprise, but also made the Group achieve significant economic, social and environmental benefits, and gradually grow into a benchmark enterprise in the new energy industry.

In the face of the future, the Group will continue to promote the idea of ecological civilization and devote itself to enhancing the ability of the enterprise to achieve high-quality sustainable development. We will focus on the restructuring and upgrading of the new energy industry, cultivate two industrial ecosystems for motive batteries and energy storage systems (ESS), build a closed-loop green industrial system with the characteristics of Tianneng's "Lead & Lithium" lifecycle, and implement the concept of green development in order to drive the enterprise to achieve high-quality and sustainable development. We will realize the transformation from product manufacturing to providing system solutions, accelerate the formation of new productivity, contribute more clean energy system solutions to the "Dual Carbon" strategy, and make more contributions to national ecological civilization.



公司治理

Corporate Governance

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:



■ 治理架構 Governance Structure

本集團一直秉持著「遵守法律治理企業、 堅守誠信經營」的原則, 並嚴格按照香港聯合交易所的 《證券上市規則》 行事。我們通過規章制度、內部管理、風險防控以及及時、全面、公開的信息披露,建立了健全的企業治理平臺。

本集團的重大決策由董事會負責。董事會由八名成員組成, 其中三人為獨立非執行董事。董事們忠實勤勉地履行職責, 其主要職能包括審核和批准企業戰略、審查內部控制制度和 運營合規制度等。我們定期召開董事會會議,以便所有董事 能夠在會上對管理層和其他事項發表意見。

董事會下設審核委員會、提名委員會和薪酬委員會三個專門委員會。審核委員會的主要職責是審閱本集團的財務報告程序和內部控制系統,並就委任、續聘以及辭任本公司獨立外聘核數師及相關薪酬方面向董事會提供建議。提名委員會負責選拔合格的董事會成員,並在需要時就董事的委任或續聘等相關問題提供建議。薪酬委員會則主要負責就本公司與董事及高級管理人員的薪酬政策向董事會提供建議。

為進一步深化變革,提高組織運行效率,建立規範有序的機構設置,規範組織管理規則,推動本集團組織架構的持續完善,保障各項業務的有效推動。我們結合集團實際,特制定《組織機構設置管理辦法(試行)》,組織機構設置按照承接戰略原則、專業發展原則、效率優先原則、統一管理原則進行。

The Group has always adhered to the principle of "Abiding by the Law in Corporate Governance and Adhering to the Principle of Operating in Good Faith" and acted in strict compliance with the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong. We have established a sound corporate governance platform through rules and regulations, internal management, risk prevention and control as well as timely, comprehensive and public disclosure of information.

The Board of Directors is responsible for major decisions of the Group. The Board consists of eight members, three of whom are independent non-executive directors. The directors perform their duties faithfully and diligently and their main functions include reviewing and approving corporate strategies, reviewing internal control systems and operational compliance systems. We hold regular meetings of the Board so that all directors can express their views on management and other matters at the meetings.

The Board consists of three specialized committees, namely the Audit Committee, the Nomination Committee and the Remuneration Committee. The primary duties of the Audit Committee are to review the Group's financial reporting process and internal control system, and to make recommendations to the Board on the appointment, reappointment and resignation of the Company's independent external auditor and related remuneration. The Nomination Committee is responsible for selecting qualified Board members and making recommendations on issues relating to the appointment or re-appointment of Directors as and when required. The Remuneration Committee is primarily responsible for making recommendations to the Board on the Company's policy on remuneration of Directors and senior management.

Combined with the actual situation of the Group, we hereby formulate the *Management Measures for Organization Setting (Trial)* in order to further deepen the change, improve the efficiency of organizational operation, establish a standardized and orderly organizational setup, regulate the rules of organizational management, promote the continuous improvement of our Group's organizational structure, and guarantee the effective promotion of various businesses. The organization setting is carried out in accordance with the principles of undertaking strategy, professional development, priority of efficiency and unified management.

為保障公司的法律合規,本集團聘請專業法律從業者作為長期法律顧問,並設立了內控法務中心和審計監察中心,即時監督、審核經營決策、經營過程和內部規章制度。為了維護股東的合法知情權,本集團制定了嚴格的信息披露制度和措施,包括定期報告和臨時報告,每年兩次披露定期報告,包括中期報告和年度報告。

In order to safeguard the legal compliance of the Company, the Group has engaged professional legal practitioners as long-term legal advisers and established an Internal Control and Legal Affairs Center and an Audit Supervision Center for real-time supervision and review of operational decisions, business processes and internal rules and regulations. In order to safeguard shareholders' legitimate right to know, the Group has established a strict information disclosure system and measures, including regular and interim reports, and discloses regular reports, including interim and annual reports, twice a year.

■ ESG管治體系 ESG Governance System

本集團自 2014 年以來一直堅持並致力於持續披露環境 (Environmental)、社會(Social)、治理 (Governance)三方面的 ESG(環境、社會和治理)報 告。這一長期承諾的實踐反映了我們對可持續經營和社會責 任的堅定信念。

本集團在履行法律法規要求的 ESG 報告義務基礎上, 力求 在報告中體現公司對於環境可持續性、社會責任和有效治理 的深刻理解和實際行動。不僅關注公司的經濟績效, 更注重 與環境、員工、社會和股東等利益相關方的關係。我們將繼 續秉持這一承諾,持續改善、學習和成長,為可持續發展目標作出更大的貢獻。

為深化對 ESG 領域的管理和持續改進業務可持續性, 2023 年, 本集團設立 ESG 管治工作小組。工作小組負責識別公司的 ESG 風險和機遇、制定 ESG 目標及工作計劃,與股東、員工、客戶、供應商和其他利益相關方保持密切聯繫,瞭解他們的關切, 並將其納入 ESG 決策過程中, 並向董事會進行匯報。致力於確保公司的業務運營符合最高的 ESG 標準,推動公司成為可持續發展的行業領導者。

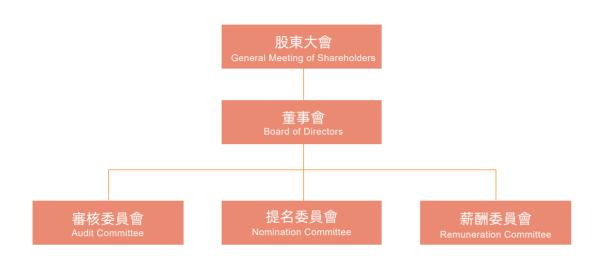
The Group has maintained and committed to continuous disclosure of ESG (Environmental, Social and Governance) reports on Environmental, Social and Governance since 2014. The practice of this long-term commitment reflects our strong belief in sustainable management and social responsibility.

On the basis of fulfilling the ESG reporting obligations required by laws and regulations, the Group seeks to reflect in its reports the Company's deep understanding of and practical actions on environmental sustainability, social responsibility and effective governance. We focus not only on the Company's economic performance, but also on its relationship with stakeholders such as the environment, employees, society and shareholders. We will continue to uphold this commitment to continuous improvement, learning and growth, and to make greater contributions to the Sustainable Development Goals.

In order to deepen the management of ESG areas and continuously improve business sustainability, in 2023, the Group established the ESG Governance Working Group. The Working Group is responsible for identifying the Company's ESG risks and opportunities, formulating ESG objectives and work plans, maintaining close contact with shareholders, employees, customers, suppliers and other stakeholders to understand their concerns and incorporate them into the ESG decision-making process, and reporting to the Board. We are committed to ensuring that the Company's business operations meet the highest ESG standards and to promoting the Company as a sustainable industry leader.



Organizational Structure



全年三會召開情況 Meetings held throughout the year

會議名稱	召開次數
Name of the Meeting	Number of Meetings
董事會	5次
Board Meeting	5 times
股東大會	3次
General Shareholders' Meeting	3 times

風險管理 Risk Management

專題一: 公司治理 Theme I: Corporate Governance

本集團高度重視內部控制及風險管理。根據《中華人民共和 國公司法》,國家審計署、省、市發佈的《關於內部審計工 作的規定》, 中國內部審計協會發佈的 《內部審計基本準 則》和《內部審計具體準則》等法律和規範性檔,結合本集 團實際情況, 我們制定了《全面風險管理制度》, 確保公司 經營管理活動健康進行,增強企業競爭力,提高投資回報, 促進企業持續、健康、穩定發展, 規避和減少風險可能造成 的損失。集團各地的子公司、 業務部門均嚴格遵循相關規 定,將風險管理納入日常運營,制定全面的風險清單,並實 施相應的應對措施,以保護公司和利益相關方的利益。

本集團設立了董事長直接領導的獨立審計機構--審計監察 中心, 制定了《審計制度》和《監察管理制度》, 明確了 審計程序和作業流程。審計監察中心獨立開展集團內部的 經營管理審計、 專項審計等工作, 不受任何其他部門的干 預和限制。

本集團建立健全風險管理組織體系, 建立風險管理三道防 線,以實現許可權分明、有效制衡、分級管理的全面風險管 理組織體系:

01 第一道防線

集團事業部 / 各部門及下屬單位作為風險責任部門。負責具 體風險的管理, 接受公司風險管理職能部門的組織、協調, 報集團風險管理職能部門備案。

02 第二道防線

集團風險管理職能部門和風險管理委員會。內控法務中心內 控部為風險管理的主要職能部門, 風險管理委員會由事業部 / 各部門及下屬單位負責人組成。

The Group attaches great importance to internal control and risk management. In accordance with the Company Law of the People's Republic of China. the Provisions on Internal Audit Work issued by the State Audit Bureau, provinces and municipalities, the Basic Standards for Internal Audit and the Specific Standards for Internal Audit issued by the China Internal Audit Association, and other laws and regulatory documents, and taking into account the actual situation of the Group, we have formulated a Comprehensive Risk Management System to ensure the healthy conduct of our operation and management activities, enhance the competitiveness of the Company, improve the return on investment, promote the sustained, healthy and stable development of the Company, and avoid and minimize the losses that may be caused by risks. Subsidiaries and business units across the Group strictly follow the relevant regulations, incorporate risk management into their daily operations, formulate comprehensive risk checklists and implement corresponding countermeasures to protect the interests of the Company and stakeholders.

The Group has established the Audit Supervision Center, an independent auditing organization under the direct leadership of the Chairman of the Board of Directors, and formulated the *Audit System* and the *Supervision* Management System, which clearly define the audit procedures and workflows. The Audit Supervision Center independently carries out internal operation and management audits and special audits of the Group without any intervention or restriction from any other departments.

The Group has established a sound risk management organization system and three lines of defense for risk management in order to realize a comprehensive risk management organization system with clear authority, effective checks and balances and hierarchical management:

01 First Line of Defense

The Business Divisions/Departments and subordinate units of the Group act as risk responsible departments. It is responsible for the management of specific risks, accepts the organization and coordination of the Company's risk management function, and reports to the Group's risk management function for the record.

02 Second Line of Defense

It is the Risk Management Functional Department and the Risk Management Committee. The Internal Control Department of the Internal Control and Legal Affairs Center is the main risk management functional department, and the Risk Management Committee consists of the heads of business divisions/departments and subordinate units.





03 第三道防線

集團內部審計部門和審計監察委員會。審計部門負責研究提出全面風險管理監督評價體系,並至少每年一次按照有關規定開展風險管理工作及工作效果進行監督評價,出具監督評價審計報告。審計監察委員會負責對全面風險管理監督評價體系的審核並對監督評價報告提出改進建議。

報告期內,本集團持續開展風險管理工作,每年出具全面風險管理年度報告。我們設立內控管理部門,建立制定了成熟健全的《內部控制管理制度》及《內部控制評價管理制度》。定期開展內部風險的識別、分析與評估工作,制定相應的風險管控策略,開展針對風險管理及內部控制系統有效性的分析與評價。2023年發佈了《內控管理手冊》,協助本集團加強內部控制體系建設,識別影響集團運營相關信息的可靠性、準確性、合法性的主要風險以及應對這些風險的關鍵控制活動。

本集團全面風險管理職能部門負責公司全面風險管理培訓,通過舉辦培訓班、座談會、研討會,編制風險期刊等方式普及全面風險管理知識,交流風險管理工作經驗。同時,內控管理部門還負責組織風險管理與內部控制的相關培訓,將內部控制貫穿決策、執行和監督全過程,覆蓋集團及下屬單位的各種業務和事項。此外,本集團建立具有風險意識的文化,促進公司風險管理水準、員工風險管理素質的提升,保障公司風險管理目標的實現,通過多種形式廣泛、深入、持久地宣傳道德誠信意識、合規經營意識和風險意識。

本集團還聘請德勤·關黃陳方會計師行為本集團提供會計報表審計、 凈資產驗證等相關審計服務。外部審計結果由事務所 人員直接向董事會匯報, 既加強了企業內部風險管控, 又有 效避免違法違規現象的發生。

03 Third Line of Defense

It is the Group's Internal Audit Department and the Audit and Supervision Committee. The Audit Department is responsible for studying and proposing a comprehensive risk management supervision and evaluation system, conducting supervision and evaluation of the risk management work and its effect at least once a year in accordance with the relevant regulations, and issuing a supervision and evaluation audit report. The Audit and Supervision Committee is responsible for reviewing the comprehensive risk management supervision and evaluation system and proposing improvements to the supervision and evaluation report.

During the reporting period, the Group has continued to carry out risk management work and issued annual reports on comprehensive risk management. We set up an internal control management department and established and formulated a mature and sound *Internal Control Management System* and *Internal Control Evaluation Management System*. We regularly carry out the identification, analysis and assessment of internal risks, formulate corresponding risk control strategies, and carry out analysis and evaluation of risk management and the effectiveness of the internal control system. In 2023, we have issued the *Internal Control Management Manual* to assist the Group in strengthening the construction of the internal control system, identifying the major risks affecting the reliability, accuracy and legality of the information relating to the Group's operations, as well as the key control activities to address these risks control activities.

The Group's Comprehensive Risk Management Functional Department is responsible for the training on comprehensive risk management of the Company, popularizing the knowledge of comprehensive risk management and exchanging the experience of risk management through the organization of training courses, symposiums and seminars and the compilation of risk journals. Meanwhile, the Internal Control Management Department is also responsible for organizing training related to risk management and internal control, and carrying out internal control throughout the entire process of decision-making, execution and supervision, covering a wide range of businesses and matters of the Group and its subsidiaries. In addition, the Group establishes a risk-conscious culture to promote the level of risk management of the Company and the quality of risk management of its employees, and to safeguard the realization of the Company's risk management objectives, and widely, deeply and persistently publicizes the awareness of ethics and integrity, compliance and risk awareness through various forms

The Group has also engaged Deloitte Touche Tohmatsu to provide the Group with audit services in relation to the audit of accounting statements and verification of net assets. The results of external audits are reported directly to the Board of Directors by the firm's personnel, which not only strengthens the internal risk control of the enterprise, but also effectively avoids the violations of laws and regulations.

本集團風險識別及評估管理流程如下:

The Group's risk identification and assessment management process is described below:

風險管理初始資訊的收集

Collection of initial information on risk management



風險評估 Risk Assessment

風險管理職能部門對收集的風險管理初始資訊和各項業務管理及其重要業務流程進行風險評估 The risk management functional department conducts a risk assessment of the collected initial risk management information, various business management, and their important business processes



風險管理策略 Risk management strategy

根據不同業務特點確定風險偏好和風險承受度, 並據此確定風險的預警線及相應採取的對策

Determine risk preferences and tolerance based on different business characteristics, and based on this, determine risk warning lines and corresponding countermeasures



風險管理解決方案 Risk management Solution

根據風險管理策略,針對各類風險或每一項重大風險制定風險管理解決方案

Develop risk management solutions for various risks or each major risk based on risk management strategies



風險管理的監督與改進

Risk management Supervision and improvement



風險管理的考核 Risk management Assessment

對風險管理的效果和效率進行持續的考核評價

Continuous assessment and evaluation of the effectiveness and efficiency of risk management



持份者溝通 Stakeholder Communication

利益相關者的參與對本集團的可持續發展至關重要。為更好 地瞭解和評估公司面臨的重大 ESG 相關議題,本集團與各利 益相關方建立合作並保持密切聯繫,通過組織會議、調查、 研討等活動,全方位打通溝通渠道,定期對話,瞭解利益相 關者的期望, 並迅速作出回應, 履行相應責任。2023年, 我們通過多種方式延續常態化的持份者溝通機制, 收集到他 們關注的重大議題,並作出針對性地回應。

Stakeholder participation is crucial to the sustainable development of the Group. In order to better understand and assess the significant ESG-related issues facing the Company, the Group establishes cooperation and maintains close contact with various stakeholders, opens communication channels in all aspects by organizing meetings, surveys, seminars and other activities, engages in regular dialogues, understands the expectations of stakeholders, and responds swiftly to fulfill the corresponding responsibilities. In 2023, we have renewed the regular stakeholder communication mechanism in a variety of ways and collected information on major issues of concern and responded in a targeted manner.

利益相關方 Stakeholder	溝通形式 Forms of Communication	關注重大議題 Focus on Major Issues
投資者 Investor	股東大會、公司公告、郵件、電話、 線上路演、線下座談、公司網站 General meetings of shareholders, Company announcements, emails, phone calls, on-line presentations, off-line seminars, Company website	公司治理 Corporate Governance 合規合法運營 Compliance and Legal Operation 公司經營表現及財務狀況 Operating Performance and Financial Condition
員工 Employees	勞動合同、內部刊物、培訓 Labor contracts, internal publications, training	職業健康與安全 Occupational Health and Safety 員工平等雇傭 Equal Employment Employee 員工培訓與發展 Training and Development
客戶 Customers	客服熱線、公司網站、經銷商大會 Customer Service Hotline, Company Website, Dealer Conference	產品品質與安全 Product Quality and Safety 客戶及消費者權益保障 Customer and Consumer Protection 技術研發與創新 Technology Development and Innovation
政府與監管機構 Government and Regulators	政策指引、信息披露、實地考察與監督 Policy guidelines, information disclosure, field visits and monitoring	商業道德與反貪腐 Business Ethics and Anti-Corruption 風控與內控 Risk Management and Internal 合規合法運營 Control Compliance and Legal Operation
供應商 Suppliers	合同協議、業務合作、供應鏈體系審查 Contractual agreements, business partnerships, supply chain system reviews	供應鏈可持續管理 Sustainable Supply Chain Management 商業道德與反貪腐 Business Ethics and Anti-Corruption
公眾與社區 The public and the community	共同富裕推進大會、鄉賢大會 Conference for Promoting Common Prosperity, County Sages Conference	社區公益參與 Community Involvement 鄉村振興 Village Revitalization 環保理念宣貫 Environmental Protection

重要性評估 Importance Assessment

2023年,本集團通過廣泛的內外部研究,識別與我們業務相 關的潛在 ESG 議題,進行了全面的重大議題評估。這包括查 閱行業報告、 監管要求以及與股東和利益相關方的定期對 話。通過這個過程, 我們確定了一系列可能對公司業務產生 顯著影響的議題。為了更全面地瞭解我們公司內部和外部利 益相關方對這些議題的看法,我們設計了一份包含定性和定 量問題的問卷。該問卷分發給內部員工、供應商、客戶和其 他關鍵利益相關方。問卷中的問題涉及到環境、 社會和治理 方面的多個主題, 如碳排放、勞工權益、公司治理結構等。

In 2023, the Group conducted a comprehensive material issues assessment through extensive internal and external research to identify potential ESG issues relevant to our business. This included reviewing industry reports, regulatory requirements and regular dialog with shareholders and stakeholders. Through this process, we have identified a range of issues that could have a significant impact on our business. In order to gain a more comprehensive understanding of how these issues are perceived by our internal and external stakeholders, we have designed a questionnaire containing both qualitative and quantitative questions. The questionnaire has been distributed to internal employees, suppliers, customers and other key stakeholders. The questions in the questionnaire cover a wide range of ESG topics, such as carbon emissions, labor rights, and corporate governance structures.

專題三: 社會責任 Theme III: Social Responsibility

收集到的問卷資料和利益相關者反饋被用於制定定量和定性 的分析報告。我們利用各類資料分析工具和方法, 包括趨勢 分析、關聯性分析等,以深入瞭解議題的重要性、風險和機 遇。最後,我們將所有的信息進行匯總,並在 ESG 報告中對 評估結果進行透明化呈現。

The questionnaire information and stakeholder feedback collected was used to develop quantitative and qualitative analysis. We have utilized various types of data analysis tools and methods, including trend analysis, correlation analysis, etc., to gain insights into the significance, risks and opportunities of the issues. Finally, we have summarized all the information and present the assessment results transparently in the ESG report.

本集團通過本次內外部利益相關者重要性議題評估,共識別出 15項「非常重要」議題, 其中包括 4 項經營類議題、 7 項社 會類議題和 4 項環境類議題。各議題的重要性等級及排序如下 表所示:

The Group has identified a total of 15 "very important" topics, including 4 governance topics, 7 social topics, and 4 environment topics through this assessment of the importance of topics to internal and external stakeholders. The importance level and ranking of each topic is shown in the table below:







重要性 Importance		議題 Issues	範 疇 Scope
非常重要 Very Important	公司治理合規合法運營商業道德與反貪腐風控與內控	Corporate Governance Compliance and Legal Operation Business Ethics and Anti-Corruption Risk control and internal control	經營類 Governance topics
	 員工培訓與發展 職業健康與安全 產品品質與安全 技術研發與創新 智慧製造與數字化 客戶及消費者權益保障 供應鏈可持續管理 	Staff Training and Development Occupational Health and Safety Product Quality and Safety Technology R&D and Innovation Intelligent Manufacturing and Digitization Customer and Consumer Protection Sustainable Supply Chain Management	社會類 Social topics
	綠色產品研發三廢治理資源節約與可再生能源利用危險化學品管理	Green Product R&D Waste Management Resource Conservation and Renewable Energy Utilization Hazardous Chemicals Management	環境類 Environment topics
相對重要 Relatively Important	知識產權保護信息安全與隱私保護ESG 治理	Intellectual Property Protection Information Security and Privacy Protection ESG Governance	經營類 Governance topics
	員工平等雇傭員工敬業度與滿意度員工關愛與激勵產學研合作	Equal Employment of Employees Employee Respect and Satisfaction Employee Care and Motivation Industry-academia-research cooperation	社會類 Social topics
	環境管理體系搭建應對氣候變化清潔技術機遇減少溫室氣體排放環保理念宣貫	Environmental management system construction Responding to Climate Change Clean Technology Opportunities Reducing Greenhouse Gas Emissions Environmental Protection Concepts	環境類 Environment topics
相對不重要 Relatively Unimportant	• 黨建引領	Party Building Leadership	經營類 Governance topics
	高學歷/專業人才雇傭員工溝通與民主管理反歧視、反強迫勞動和騷擾虐待社區公益參與鄉村振興	Employment of highly educated/professionals Employee communication and democratic management Anti-discrimination, forced labor and harassment and abuse Community participation Village revitalization	社會類 Social topics

各類 ESG 議題的重要性矩陣圖分別如下所示:

The importance matrix charts for each of the various ESG topics are shown below:



ESG 報告中的重大議題評估過程是一個持續改進和學習的過程,通過這一過程,我們期望能夠更好地滿足利益相關方的期望, 確保公司可持續發展。

The process of assessing the material topics in the ESG report is a process of continuous improvement and learning, through which we expect to be able to better meet the expectations of our stakeholders and ensure the sustainable development of the Company.



專題一: 公司治理

Theme I: Corporate Governance



業道德

反壟斷 A

廉潔反貪污 Clean and Anti-Corrupt

知識產權 Intellectual Property Rights

信息安全與隱私保護 Information Security and Privacy Protection

Business Ethics

自創新 Innovation for Char

數智化建設 Digital Intelligence

雇傭及勞工 Employment and Labo

人才儲備 Talent P

員工培訓 Staff Trainin

員工發展 Employee Developmen

員工滿意度 Employee Satisfaction

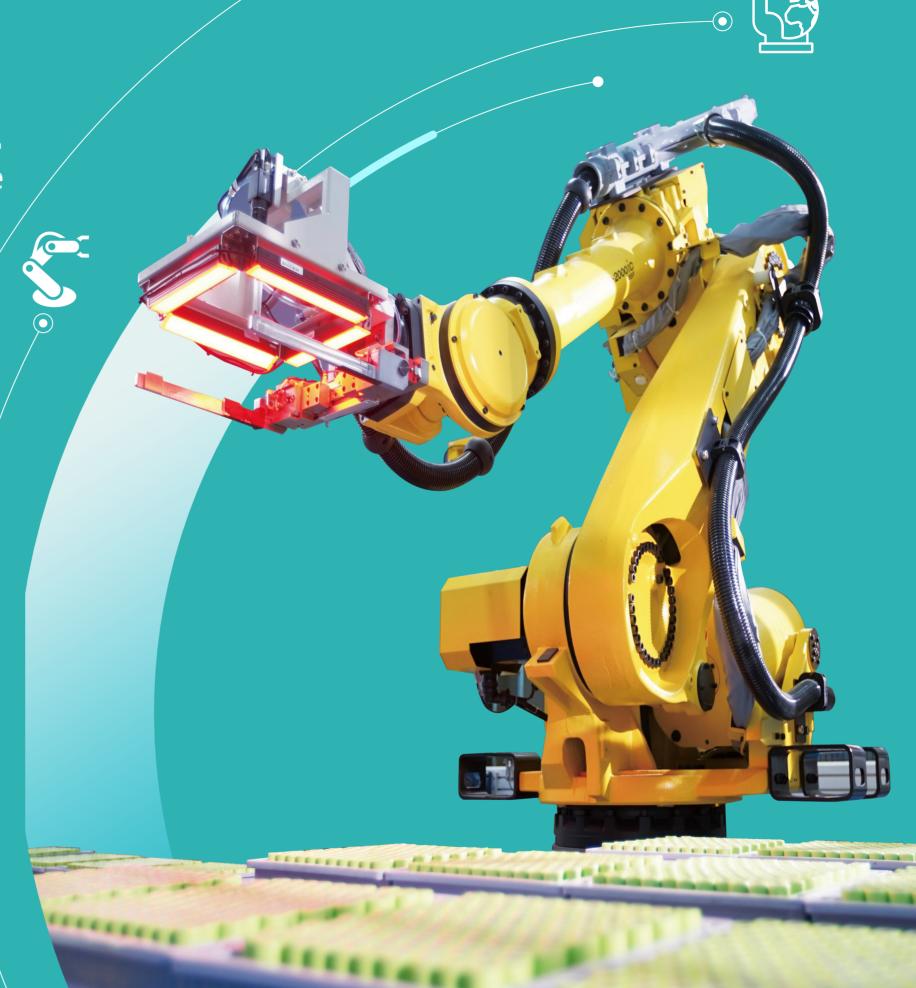
安全 Occu

投資者權益 Investor Right

号戶權益 Client Rights and Benefits

產品責任Product Liability客戶服務Customer Service

供應鏈管理 Supply Chain Management



商業道德 Business Ethics

■ 反壟斷 Anti-Trust

依法合規經營是本集團發展壯大、行穩致遠的保障,為切實加 強反壟斷合規管理, 防範反壟斷合規風險, 本集團根據《中華 人民共和國反壟斷法》、《經營者反壟斷合規指南》、《浙江 省企業競爭合規指引》等法律、合規指導檔,制定《反壟斷合 規管理制度》。以預防和降低反壟斷合規風險為目的, 開展包 括制度制定、風險識別、風險應對、考核評價、合規培訓等管 理活動。

Compliance with laws and regulations is the guarantee for the Group's development and growth and steady progress. In order to effectively strengthen antitrust compliance management and prevent antitrust compliance risks, the Group has formulated the Antitrust Compliance Management System in accordance with the Anti-Trust Law of the People's Republic of China, Antitrust Compliance Guidelines for Business Operators, Competition Compliance Guidelines for Enterprises in Zhejiang Province, and other laws and compliance guidance files. With the purpose of preventing and reducing antitrust compliance risks, the Group carries out management activities including system formulation, risk identification, risk response, assessment and evaluation, and compliance training.



天能反壟斷座談會 The Group's antitrust symposium

■ 廉潔反貪污 Clean and Anti-Corruption

專題二: 環境 Theme II: Environment

本集團堅決遵守全球範圍內關於反貪和賄賂的法律法規, 制 定了嚴格的反貪污政策,並通過培訓、巡查等方式預防和管 理可能發生的利益衝突和賄賂事件。這一政策體系旨在確保 在所有業務操作中都保持高度透明度、 廉潔自律和道德操

2023年, 本集團審計監察中心制發《天能控股集團直管幹部 效能問責管理辦法》、《天能控股集體效能監察管理辦 法》, 暢通各方協同, 推進主動履職、 高效履職、 公正履 職。開展巡視巡查,輸出監督檢查報告7份,全年處理違規 違紀案件 105 起, 刑事案件 14 起, 其中特大案件 3 起, 出具 審計評價報告 12 份, 重大經營問題審計快報和摘要報告 13 份,效能監察報告12份。

通過總結以往的反貪污工作經驗,本集團不斷加強相關培 訓,聯合天能培訓中心、職能部門、直屬單位,開展主體黨 日活動、觀看廉潔警示片、專題培訓等活動。本年,我們利 用多形式多媒介開展廉潔教育培訓 125 場次, 參與人數 10,000 餘人, 引入公安機關現場執法, 製作警示教育專題 片。此外, 定期召開廉潔自律專題會議, 全員簽署個人廉潔 承諾書, 將廉潔自律納入考核否決項, 以確保每位員工都理 解並遵守反貪污政策。

同時, 本集團積極公佈舉報渠道, 包括電話、郵箱、微信公 眾號等多種途徑, 以便員工及其他利益相關方可以匿名或實 名舉報貪污行為。本集團開通 「廉潔舉報平臺」, 歡迎大家 對各類違紀違法問題進行檢舉控告並監督。對於那些勇於揭 發損害公司利益的行為的人員, 本集團將予以鼓勵和保護; 對於腐敗舞弊行為, 本集團採取堅決打擊態度。違規違紀時 間發生後, 集團審計監察中心對相關人員進行問責, 全面梳 理流程制度體系, 堅決斬斷貪腐之手。有效的內部監控和審 計手段, 使得我們能夠對各類違規違紀行為早發現、 早預 防、 早處置, 以維護企業和股東的合法權益。我們不斷通過 這些方式, 有效推進清廉天能的建設, 保障廣大員工與合作 夥伴行使監督權力, 增強監督實效, 為集團高品質可持續健 康發展保駕護航。

The Group is firmly committed to complying with anti-corruption and bribery laws and regulations globally, and has put in place stringent anti-corruption policies, as well as preventing and managing possible conflicts of interest and bribery incidents through training, inspections, etc. This system of policies aims to ensure a high degree of transparency, integrity and ethical conduct in all business operations.

In 2023, the Audit Supervision Center of the Group has formulated and issued the Measures for the Administration of Efficiency and Accountability of Directly Managed Cadres of Tianneng Holding Group and the Measures for the Administration of Collective Efficiency Supervision of Tianneng Holding Group, to smooth the synergy among all parties and to promote the proactive, efficient and fair performance of duties. It has carried out inspections, output 7 supervision and inspection reports, handled 105 cases of violation of rules and regulations and 14 criminal cases, including 3 major cases, issued 12 audit evaluation reports, 13 audit snapshots and summary reports on major operational issues, and 12 performance monitoring

By summarizing the past experience in anti-corruption work, the Group has continuously strengthened the relevant training by joining hands with the Tianneng Training Center, functional departments and direct subsidiaries to carry out activities such as main party day activities, watching cleanliness warning films and thematic training. During the year, we have utilized multiple forms and media to carry out 125 training sessions on integrity education, with more than 10,000 participants, introduced on-site law enforcement by public security organs, and produced special films on warning and education. In addition, we have held regular meetings on the topic of integrity and self-discipline, and all employees signed a personal commitment to integrity and included integrity and self-discipline as a veto item in the assessment, in order to ensure that every employee understands and complies with the anti-corruption policy.

At the same time, the Group actively publicizes reporting channels, including telephone, mailboxes, WeChat public numbers and other channels, so that employees and other stakeholders can report corruption anonymously or in real names. The Group has opened the "Integrity Reporting Platform" to welcome people to report and supervise all kinds of violations of discipline and law. The Group encourages and protects those who are brave enough to expose behaviors that are detrimental to the interests of the Company, while the Group takes a firm stance against corrupt and fraudulent behaviors. After the occurrence of irregularities and disciplinary actions, the Group's Audit and Supervision Center will hold the relevant personnel accountable, comprehensively sort out the process and system, and resolutely cut off the hands of corruption. Effective internal control and auditing methods enable us to detect, prevent and deal with all kinds of disciplinary violations at an early stage, so as to safeguard the legitimate rights and interests of the Company and its shareholders. Through these means, we continue to effectively promote the building of a clean Tianneng, safeguard the exercise of supervisory power by employees and partners, and enhance the effectiveness of supervision, so as to escort the Group's high-quality, sustainable and healthy development.









2023 環境、社會及管治報告





風險管理專場培訓 Specialized training on risk management

案例 Case

案件查處

Case Investigation

本集團不斷加大各類違規違法案件查處力度,實行常態化的領導班子及重點工程專項巡視巡查。本年,我們巡視巡查中發 現湖州市鋰離子電池產綫二期項目涉嫌存有假冒施工材料的綫索。經調查,發現項目現場大量污水管、塗料、乳膠漆為假 冒偽劣產品。為教育廣大員工,維護集團合法權益,本集團根據相關規定對相關失職人員作出了相應處罰,對提供假冒僞 劣產品單位的相關責任人, 已移送司法機關依法處理。

The Group has continuously stepped up its efforts in investigating and handling various cases of non-compliance with laws and regulations, and has implemented regular inspections of the leadership team and key projects. This year, our inspections found that the second phase of the lithium-ion battery production line project in Huzhou City was suspected to have cables of counterfeit construction materials. After investigation, it was found that a large number of sewage pipes, paints and emulsion paints on the project site were counterfeit and shoddy products. In order to educate the staff and safeguard the legitimate rights and interests of the Group, the Group has imposed corresponding penalties on the relevant personnel for dereliction of duty in accordance with relevant regulations, and the relevant responsible persons of the units that supplied counterfeit and substandard products have been referred to the judicial authorities for legal action.

■ 知識產權 Intellectual Property Rights

在創新和知識產權方面,本集團設有項目與知識產權管理部 專門負責政策研究、項目申報及知識產權管理工作, 堅持不 斷提高知識產權資產的數量和品質, 通過合理的標準制定和 專利佈局, 建立起強大的競爭壁壘, 從而提升企業的核心競 爭力。

In terms of innovation and intellectual property rights, the Group has a Project and Intellectual Property Management Department, which is specifically responsible for policy research, project application and intellectual property management. The Group insists on continuously improving the quantity and quality of its intellectual property assets, and on establishing strong competitive barriers through rational standard-setting and patent layouts, thereby enhancing the core competitiveness of the enterprise.

本集團致力於建設全面的資源庫。我們維護國家、省、市、 縣各級的科技、發展改革、工業、質監、商務等各條線資 源,並與高校、研究所、檢測機構、行業協會等保持良好的 關係。著眼于未來, 通過根據政策支援方向和公司發展戰 略,謀劃新型儲能、動力電池、工業互聯網、現代服務業等 項目,以推動企業的創新和發展。

Our Group is committed to building a comprehensive resource base. We maintain resources in all lines such as science and technology, development and reform, industry, quality supervision and commerce at the national, provincial, municipal and county levels, as well as good relationships with universities, research institutes, testing organizations and industry associations. Focusing on the future, we plan projects such as new energy storage, motive battery, industrial internet, modern service industry and so on by planning according to the direction of policy support and the Company's development strategy, in order to promote the innovation and development of the enterprise.

報告期內, 我們的努力取得了顯著成果, 也充分展現了我們 在創新方面的卓越表現。通過這些努力, 我們將不斷鞏固和 提升在創新和知識產權領域的領先地位, 為公司的可持續發 展和產業升級作出更大的貢獻。

During the reporting period, our efforts have yielded remarkable results and fully demonstrated our excellence in innovation. Through these efforts, we will continue to consolidate and enhance our leading position in the field of innovation and intellectual property rights, and make greater contributions to the sustainable development and industrial upgrading of the Company.

通過國家認定企業技術中心評價	3 家子公司
Passed the evaluation of Nationally Recognized Enterprise Technology Center	3 subsidiaries
國家級科技型中小企業認證	1 家子公司
National Science and Technology-based Small and Medium-sized Enterprises (SMEs) Certification	1 subsidiary
浙江省科技領軍企業認證	2 家子公司
Zhejiang Province Science and Technology Leading Enterprise Certification	2 subsidiaries
浙江先進未來技術創新成果	2 項
Zhejiang Advanced Future Technology Innovation Achievements	2 items
獲評浙江省高新技術企業研究開發中心	1 家子公司
Recognized as the Zhejiang Province High-tech Enterprise Research and Development Center	1 subsidiary
獲評浙江省科技型中小企業	3 家子公司
Recognized as the Science and Technology-Based Small and Medium-Sized Enterprise in Zhejiang Province	3 subsidiaries
獲評省級創新型中小企業	6 家子公司
Recognized as the provincial Innovative Small and Medium-Sized Enterprise	^{6 subsidiaries}

2023 年, 本集團獲得第一屆浙江省知識產權商標獎一等獎。這是浙江省首次以省政府名義設立的全門類知識產權獎項, 全省僅 7 家獲獎企業, 本集團是湖州市唯一獲此殊榮的企業。

2023 環境、社會及管治報告

In 2023, the Group was awarded the First Class Award of the First Zhejiang Intellectual Property Rights Trademark Award. This is the first time that a full range of intellectual property awards were established in the name of the provincial government in Zhejiang Province, and there were only 7 enterprises won the award. The Group was the only enterprise in Huzhou City that won this honor.

截至 2023 年,本集團的專利情況如下所示:

The Group's patents as of 2023 are shown below:

428

件 items

本年已經授權專利428件 Patents granted this year 104

件 items

其中:發明專利104件

Where 104 patents for inventions

4,971

項 item

累計擁有授權專利4,971項 Accumulated 4,971 licensed patents 792

Į it

其中: 發明專利792項

Where 792 patents for inventions



天能精工科技數字工廠 Tianneng Precision Technology digital factory



天能精工科技生產車間 Tianneng Precision Technology production workshop



國家級高新技術企業認證

National High-Tech Enterprise Certification

天能精工科技有限公司通過國家級科技型中小企業認證。這是繼天暢供應鏈管理有限公司之後, 天能旗下的又一家孵化的子公司入選國家級科技型中小企業, 獲得國家級高新技術企業、中國製造業數字化燈塔獎、浙江省創新型中小企業、浙江省科技型中小企業等多項榮譽 羅號

Tianneng Precision Technology Ltd.(天能精工科技有限公司) passed the certification of National Science and Technology-Based Small and Medium-Sized Enterprises (SMEs). This is another incubated subsidiary of Tianneng selected as a National Science and Technology-Based SME after TianChang Supply Chain Management Ltd.(天 暢 供 應 鍵 管 理 有 限 公 司) and has been awarded with a number of honors such as National High-tech Enterprise, China Manufacturing Digitalization Lighthouse Award, Zhejiang Innovative SME, Zhejiang Technology-based SME, and so on.

博士後工作站掛牌

Post-Doctoral Workstation Establishment

本年,集團天能新能源(湖州)有限公司「浙江省博士 後工作站」正式掛牌。至此, 天能已經擁有兩家博士後 工作站,其中一家是國家級博士後工作站。 This year, the "Zhejiang Postdoctoral Workstation" of Tianneng New Energy (Huzhou) Ltd. (天能新能源(湖州) 有限公司)of the Group was officially established. So far, Tianneng has two postdoctoral workstations, one of which is a national postdoctoral workstation.

獎項 Awards

2023 年 11 月, 2023 上市公司高品質發展論壇暨第 25 屆上市公司金牛獎頒獎典禮在江蘇省南通市舉行, 論壇 發佈了備受關注的年度金牛獎項。本集團董事局主席張 天任先生榮獲 「2022 年度金牛卓越企業家獎」; 子公司天能股份榮獲「2022 年度金牛科創獎」。

In November 2023, the 2023 Forum on High-Quality Development of Listed Companies and the 25th Golden Bull Award Ceremony for Listed Companies were held in Nantong City, Jiangsu Province, where the Forum released the much-anticipated annual Golden Bull Awards. Mr. Zhang Tianren, Chairman of the Board of Directors of the Group, was awarded the "2022 Golden Bull Award for Entrepreneurial Excellence", while subsidiary Tianneng Battery Co., Ltd. has been honored with the "2022 Golden Bull Award for Science and Innovation".



■ 信息安全與隱私保護 Information Security and Privacy Protection

2023年,本集團全面導入 ISO27001 信息安全體系認證,這 一重要的舉措標誌著我們在信息安全領域取得了顯著的進 展。我們的信息安全體系遵循 27001 標準建立了包括解密管 理制度、信息系統運行管理制度、網絡安全管理制度等在內 的全面信息安全制度, 按照相關要求進行設計和實施, 全面 覆蓋了網絡安全、數據保護和個人隱私保護。為了加強網絡 安全, 我們進一步強化了網絡防護和提升了邊界安全措施, 以有效抵禦各類網絡威脅。

為了進一步提升員工的信息安全意識, 各職能部門也會定期 組織信息安全培訓, 我們建立了專業的信息安全團隊, 定期 向全體員工宣貫最新的信息安全制度, 以確保他們瞭解公司 的信息安全制度和最佳實踐。2023年度,我們就成功開展了 十幾場培訓活動。

In 2023, the Group fully introduced the ISO27001 information Security System Certification, an important initiative that signifies our significant progress in the field of information security. Our information security system follows the 27001 standard to establish a comprehensive information security system including a decryption management system, an information system operation management system, a network security management system, etc. It is designed and implemented in accordance with the relevant requirements, and comprehensively covers cyber security, data protection and personal privacy protection. In order to enhance network security, we have further strengthened network protection and upgraded border security measures to effectively defend against various types of network threats.

In order to further enhance the information security awareness of our employees, each functional department also organizes information security training on a regular basis. The Company has established a professional information security team that regularly disseminates the latest information security system to all employees to ensure that they are aware of the Company's information security system and best practices. In fiscal year 2023, we have successfully conducted more than a dozen training activities.

Will * 萬泰認證 信息安全管理体系认证证书 天能电池集团股份有限公司 注册地址: 浙江省长兴县煤山镇工业园区 审核地址: 浙江省潮州市长兴县包桥路18号行政楼1/3/4楼, 研发楼3/5楼 经一社会信用代码·913305007490121183 建立的管理体系,按照以下标准详审合格,特发此证。 GB/T 22080-2016/ISO/IEC 27001:2013 认证范围 向内部客户提供信息系统建设、运行、维护所涉及的信息安全管理 适用性声明 (SoA) 版本: V1.0 第一次监审 第二次监审 第三次监审 例及以近日阿莽一次至年李校在区外在水河水区中发生为19 今後後外,当任人,国南北西省中极的河间隔海超过15个月。 专业经外,当任人,国南北西省中极的河间隔海超过15个月。 我且但从少祖后斯提安监督中隔,始中被台湾在北北片方面地有地。与大监督中核合组后,可1两在木匠往上加勒合格标签。 及《亚西通安克科尔马·西温斯塔姆》(亚亚米的、米巴斯南风方拉西河南湖海西湖),但亚书大政市失败。

信息安全管理體系認證證書 Information security management system certification

在數據安全方面, 我們採取了切實可行的措施, 包括實施分 類分級的安全管控、 數據加密措施以及對數據進行流程審 批。為了應對潛在的風險,我們在後臺建立了監控系統,能 夠及時發現和應對數據解密異常情況。這些措施形成了我們 信息安全的堅實防線, 所有文字形式都被巧妙地加密, 有效 維護了商業秘密的安全管理。

在信息安全事故方面,本集團採用了閉環處理的模式,同時 建立了相關處理制度進行指導。值得驕傲的是, 本年度我們 未經歷過嚴重的信息安全事故, 雖然我們發現了一些漏洞, 但幸運的是沒有演變成實際事故。

此外,我們積極回應國家的信息安全要求,定期即時監控大 型會議,確保所有保密要求得到充分滿足。在商業秘密管理 方面,我們引入了內部軟件監控,進一步提升了我們的商業 機密安全水準,定期邀請協力廠商機構進行信息安全攻防演 練。這些舉措共同構築了一個全面而可靠的信息安全保護體 系, 確保了公司信息資源的安全穩定運營。此外, 在每個系 統上線之前, 我們都會進行嚴格的信息安全測試, 以確保系 統的穩定性和安全性。這一系列的措施共同構建了公司堅實 的信息安全防線。

In terms of data security, we have taken practical measures, including the implementation of categorized and graded security controls, data encryption measures and process approval of data. To cope with potential risks, we have set up a monitoring system in the background, which is capable of detecting and responding to data decryption anomalies in a timely manner. These measures form a solid line of defense for our information security, and all textual forms are skillfully encrypted to effectively maintain the safe management of trade secrets.

With regard to information security incidents, the Group has adopted a closed-loop handling model and has also established a relevant handling system for guidance. We are proud of the fact that we did not experience any serious information security incidents during the year. Although we identified some vulnerabilities, they fortunately did not turn into actual

In addition, we have actively responded to national information security requirements and regularly monitored large conferences in real time to ensure that all confidentiality requirements are fully met. In terms of trade secret management, we have introduced internal software monitoring to further enhance our trade secret security level, regularly invited third-party organizations to conduct information security attack and defense drills. Together, these initiatives have constructed a comprehensive and reliable information security protection system to ensure the safe and stable operation of the Company's information resources. In addition, before launching each system, we conduct rigorous information security tests to ensure the stability and security of the system. Together, this series of measures builds a solid information security defense for the Company.



信息安全意識培訓 Information security awareness training



專題三: 社會責任 Theme III: Social Responsibility

變**革創新**Innovation for Change

本章內容所涉及的可持續發展目標: The sustainable development goals covered in this chapter:





本集團在穩定基本盤的基礎上,鼓勵新方向、新賽道、新模式、新機制,發佈《變革創新項目管理辦法》,激發全員的積極性與創造性,推動變革創新功能工作落地,落實變革創新項目管理。樹立「抓科技就是抓競爭力、 抓科技就是抓未來」的意識, 加快建設研發創新組織。在新能源電池板塊,天能整合技術、生產、市場等方面的優勢,著力解決關鍵核心技術「卡脖子」問題, 引進海內外尖端人才, 組建研發團隊和實驗、檢測基地,促進科研成果轉化,為全球消費者提供更多綠色智慧能源系統解決方案。

2023年,本集團成立集團科技創新委員會,統籌集團技術創新頂層設計、系統推進、全面覆蓋,將技術創新活動升格為集團戰略。集集團之力,加大投入、統籌規劃、強化協調、形成合力,以最少投入、最佳方向、最優組合、最高效率持續開展技術創新活動,讓集團科創屬性持續強化。同時,陸續修訂完善並發佈《研發項目管理辦法》、《重大研發項目管理辦法》、《技術研發系統項目管理與激勵制度》、《研發預算標準》、《技術研發成果抽樣檢測規定》等制度,強化項目來源管理,預決算管理、關鍵節點管理,重抓項目立項關與驗收關,逐步建立健全科技管理制度,強化制度保障。

本集團高度重視科技研發, 組建了由美國、 日本、 韓國等國際頂尖專家組成的創新團隊, 研究產業涉及新能源電池、 新能源材料、 智能製造、 綠色循環等多個領域。 建成以國家級企業技術中心、 國家級博士後科研工作站、 全國示範院士專家工作站、 省重點企業研究院為主體的科創平臺和研發體系。

The Group, on the basis of stabilizing the basic situation, encourages new directions, new tracks, new modes and new mechanisms, publishes the *Measures for the Management of Change and Innovation Projects*, stimulates the enthusiasm and creativity of the entire staff, promotes the change and innovation function, and implements the change and innovation project management. We have established the awareness that "Grasping Science and Technology Means Grasping Competitiveness and Grasping Science and Technology Means Grasping the Future", and accelerated the construction of R&D and innovation organizations. In the new energy battery segment, Tianneng integrates the advantages in technology, production and market, focuses on solving the "Bottleneck" problem of core technologies, introduces cutting-edge personnel from home and abroad, sets up R&D teams and experimental and testing bases, promotes the transformation of scientific research results, and provides more green and intelligent energy system solutions for global consumers

In 2023, the Group has established the Group Science and Technology Innovation Committee to coordinate the top-level design, systematic promotion and comprehensive coverage of the Group's technological innovation, elevate technological innovation activities to a Group strategy. pool the Group's strengths, increase inputs, coordinate planning, strengthen coordination and form synergies, and continuously carry out technological innovation activities with the least inputs, the best direction, the optimal combinations and the highest efficiencies, so as to allow continued strengthening of the Group's science and technology innovation. At the same time, the Group has revised, improved and released the Measures for Management of R&D Projects. Measures for Management of Major R&D Projects. Measures for Management of Rewards for Technological Innovation Achievements, Management and Incentive System for Technology R&D System Projects, Standards for R&D Budgets, Provisions for Sampling and Testing of Technology R&D Achievements, etc., to strengthen the management of project sources, the management of budgets, the management of key nodes, and to emphasize on the project establishment and acceptance, and to gradually establish a sound science and technology management system.

The Group attaches great importance to scientific and technological R&D, and has set up an innovation team composed of international top experts from the United States, Japan, Korea, etc. The research industry involves new energy batteries, new energy materials, intelligent manufacturing, green recycling and many other fields. It has built a science and innovation platform and R&D system mainly consisting of National Enterprise Technology Center, National Postdoctoral Research Station, National Model Academician Expert Workstation, and Provincial Key Enterprise Research Institute.

2023年度科研創新舉例

Examples of Research Innovations in 2023

鉛蓄電池板塊 Lead-acid Battery Sector

通過技術創新和重視產品研發,產品核心性能明顯改善,小密電池能量密度和電池循環壽命明顯提升,從而降低了退貨率。 自主研發出高性能鉛炭電池, 攻克了傳統電池比能量低、 循環壽命短的技術瓶頸。 研發的高功率長壽命鉛蓄電池, 採用鉛基稀土合金板柵, 增強了板柵耐腐蝕性和抗蠕變性, 具有循環壽命長、 比能量高、 大電流充放電性能好等特點。 開發出核電站等級電池和純膠體電池, 為開發高端用戶奠定技術基礎。

Through technological innovation and emphasis on product R&D, we have significantly improved the core performance of the products, and the energy density of small dense batteries and the cycle life of batteries, thus reducing the return rate. We have developed high-performance lead-carbon batteries, overcoming the technical bottleneck of low specific energy and short cycle life of traditional batteries. We have developed high-power long-life lead-acid batteries with lead-based rare-earth alloy plate grids, which have enhanced the corrosion resistance and creep resistance of the grids, featuring long cycle life, high specific energy, and good high-current charging and discharging performance. We have developed nuclear power station grade batteries and pure colloidal batteries, laying the technical foundation for the development of high-end users.

循環板塊 Recycling Sector

鉛回收在回收率等方面取得有效的提升。 鋰回收方面, 掌握了廢舊動力鋰電池梯級利用及綠色回收再利用技術, 目前處於由中試向規模化 10 萬噸量產拓展階段, 同時積極開展新的回收技術研發。

We have achieved effective improvement in recycling rate and other aspects of lead-acid batteries recycling. For lithium-ion batteries recycling, we have mastered the technology of graded utilization and green recycling of waste power lithium batteries, and are now in the stage of expanding from pilot to large-scale 100,000-ton mass production, while actively carrying out R&D of new recycling technology.

氫能板塊 Hydrogen Energy Sector

搭載自主研發金屬板電堆的大功率氫燃料電池發動機成功上榜湖州市首台(套)產品。 搭載氫燃料電池系統的公交大巴已經投入示範運行。 自主研發的百千瓦級發動機系統已完成, 並順利通過協力廠商測試認證。 另外, 100kW 電堆產品通過功能測試, 各項指標達到行業領先水準。

The high-power hydrogen fueled cell engine equipped with self-developed metal plate stack was successfully listed as the first set of products in Huzhou City. The buses equipped with hydrogen fueled cell system have been put into demonstration operation. The self-developed 100-kilowatt class engine systems have been completed and successfully passed the third-party testing and certification. In addition, the 100kW electric reactor product passed the function test, and all the indicators reached the leading level in the industry.

鈉電板塊 Sodium-ion Battery Sector

產業化落地全面推進。 發佈了天能新一代鈉離子電池 「天鈉 1 號」, 系列產品正在兩輪整車企業測試中。 適用于儲能的 75Ah 方形鈉電池和 200Ah 大方形鈉電池也正在研發中。

We have fully promoted industrialization and released the new generation of sodium-ion battery "Tianneng Sodium 1(天鈉 1號)", and the series of products are being tested by two rounds of vehicle enterprises. Meanwhile, the Group is also developing 75Ah square sodium-ion battery and 200Ah large square sodium-ion battery for ESS.







自主研發類固態電池 Self-developed solid-state batteries

2023 年, 由天能自主研發的 511Wh/kg 的類固態電池 順利通過國家檢測中心認證, 這標誌著天能在具有全球 前瞻性、引領性的鋰電池產品研發上取得重大技術突破, 位於行業領先水準。

In 2023, the 511Wh/kg solid-state-like battery independently developed by Tianneng successfully passed the certification of the National Testing Center, which marks a major technological breakthrough of Tianneng in the R&D of lithium battery products with global foresight and leadership and a leading position in the industry.



本集團研發實驗室 The Group's R&D Laboratory

獎項 Awards

浙江省經濟和信息化廳公佈 2023 年浙江省先進 (未來) 技術創新成果名單, 天能鋰電液冷儲能系統和大功率氫 燃料電池系統項目入選。

The Economy and Information Technology Department of Zhejiang announced the list of advanced (future) technological innovation achievements of Zhejiang Province in 2023, and the projects of Tianneng Li-ion liquid-cooled ESS and high-power hydrogen fueled cell system have been selected.



榮獲中國鈉電優質企業 Awarded China sodium power quality enterprise

數智化建設 Digital Intelligence

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:









報告期內, 本集團數智化戰略確立了更為清晰的願景、 使 命和目標, 旨在打造高效、安全、綠色、創新、友好的 數智天能, 將數智化融入企業各個層面。 集團使命則以變 革驅動為核心, 通過數智化的力量實現企業的戰略變革和創 新。 我們的目標是在運營中追求高效,不斷提升用戶體驗, 使數智化在公司的發展中發揮最大潛力。

為了實現這一願景、 使命和目標, 本集團從十大領域開展 了全方位的數智化建設工作。 這包括研發、 營銷、 製造、 採購、供應鏈、產品、人力、財務、辦公以及風控等領域。 我們發佈 《數字化建設水準評價管理辦法》 《數字化項目 管理辦法》, 採取必要措施賦能、 管控各事業部數字化項 目, 並與集團數字化戰略規劃實現 PDCA 閉環。 通過數智 化的手段, 我們致力於提高研發的效率, 優化營銷策略, 提升製造流程的智能化水準, 優化採購流程, 實現供應鏈 的可追溯性, 提高產品創新能力, 優化人力資源管理, 提 升財務運作效率, 實現辦公自動化, 同時提高風險管理水 準。 這些建設將有效推動公司整體運營的高效性, 並為用 戶提供更為優質的體驗。

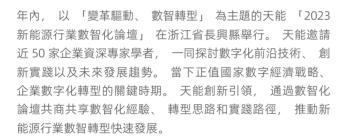
During the reporting period, the Group has established a clearer vision, mission and objectives for Digital Intelligence Strategy, aiming to build a highly efficient, safe, green, innovative and friendly Digital Intelligence Tianneng and to integrate Digital Intelligence into all levels of the enterprise. The Group's mission, on the other hand, is centered on change-driven, realizing strategic change and innovation of the enterprise through the power of Digital Intelligence. Our goal is to pursue high efficiency in our operations, to continuously improve user experience, and to maximize the potential of Digital Intelligence in our Company's development.

In order to realize this vision, mission and goal, the Group has carried out all-round digital intelligence work in ten major areas. These include the areas of R&D, marketing, manufacturing, procurement, supply chain, products, human resources, finance, office and risk control. We have issued the Management Measures for Evaluation of Digital Construction Level and Digital Project Management Measures to take necessary measures to empower and control the digital projects of each business division and to achieve a PDCA closed-loop cycle with the Group's digital strategic planning. Through digital intelligence, we are committed to improving the efficiency of R&D, optimizing marketing strategies, enhancing the level of intelligence in manufacturing processes, optimizing the procurement process, achieving traceability in the supply chain, improving product innovation capabilities, optimizing human resources management, enhancing the efficiency of financial operations, achieving office automation, and improving risk management. These constructions will effectively promote the efficiency of the Company's overall operations and provide users with a better experience.

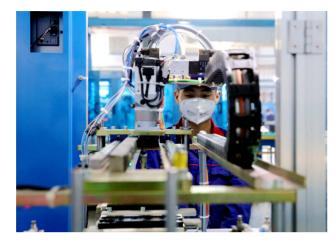


我們將數智化視為推動企業創新和可持續發展的強大引擎, 致力於將數智化向各個業務環節滲透, 快速推進各領域的覆 蓋, 以滿足不斷變化的市場需求和用戶期望。 通過數智化 的引領, 多家子公司獲評綠色園區、 綠色工廠等中華人民 共和國工業和信息化部 (工信部) 綠色製造體系示範、智 能製造試點示範榮譽。 我們相信公司將更好地適應未來經營 環境的挑戰, 並為持續增長和領先地位奠定堅實基礎。

We regard Digital Intelligence as a powerful engine to promote corporate innovation and sustainable development, and are committed to penetrating Digital Intelligence into all business segments and rapidly advancing the coverage of various fields to meet the ever-changing market demands and user expectations. Through the leadership of Digital Intelligence, a number of subsidiaries have been awarded honors of Ministry of Industry and Information Technology (MIIT)'s Green Manufacturing System Demonstration and Intelligent Manufacturing Pilot Demonstration such as Green Parks and Green Factories. We believe the Company will be better adapted to the challenges of the future business environment and lay a solid foundation for sustained growth and leadership.



During the year, the Group held the "2023 New Energy Industry Digital Intelligence Forum" in Changxing County, Zhejiang Province under the theme of "Change Driven and Digital Intelligence Transformation". We have invited nearly 50 senior experts and scholars from enterprises to discuss the cutting-edge technologies, innovative practices and future development trends of digitalization. It is a critical period for the national digital economy strategy and the digital transformation of enterprises. Tianneng is leading the way in innovation. Through the Digital Intelligence Forum, Tianneng will discuss and share digital intelligence experience, transformation ideas and practice paths, and promote the rapid development of digital intelligence transformation in the new energy industry.



本集團钾离子电池生产车间 The Group's lithium-ion battery production workshop



天能 2023 新能源行業數智化論壇 Tianneng's 2023 new energy industry digital intelligence forum



專題一: 公司治理 Theme I: Corporate Governance

智慧物流 Intelligent Logistics

本集團子公司天暢供應鏈有限公司的天暢智運平臺榮獲 「浙江省工業互聯網平臺」 獎牌。 天暢智運平臺是天能 加快數字化轉型的 「縮影」, 這項數智化成果, 創新 性地打造出物流、商流、資金流、信息流 「四流合一」 的供應鏈綜合服務平臺, 為客戶提供從原輔材料的採購 供應直至產成品的分撥配送之間的全價值鏈流通服務, 確保原料供得上、 產品出得去、 生產穩得住, 全面保 障了產業鏈穩定暢通。

Tianchang Smart Logistics Platform(天 暢 智 運 平 臺) of Tianchang Supply Chain Ltd., a subsidiary of the Group, has been awarded the medal of "Industrial Internet Platform of Zhejiang Province". The Tianchang Smart Logistics Platform is the epitome of Tianneng's accelerated digital transformation. This digital intelligence achievement innovatively creates a comprehensive supply chain service platform that integrates logistics, business flow, capital flow and information flow to provide customers with a full value chain circulation service ranging from the procurement of raw and auxiliary



天暢智運平臺「浙江省工業互聯網平臺」獎牌 Award of "Industrial Internet Platform of Zhejiang Province" of Tianchang Smart Logistics Platform(天暢智運平臺)

materials to the distribution and delivery of finished products, ensuring that raw materials can be supplied and products can be exported. It provides customers with the whole value chain circulation service from the procurement and supply of raw and auxiliary materials to the distribution and delivery of finished products, ensuring the supply of raw materials, the export of products and the stable production, and comprehensively guaranteeing the stability of the industrial chain.

Financial Sharing 財務共享

天能財務共享中心, 作為現代化集團新型財務管理模式 的關鍵組成部分, 通過集中化、 標準化、 數字化等先 進流程, 致力於實現集中處理和賬務共享, 以提供高效 決策支援,全面提升內部財務運營效率和風險管控水準。 天能財務共享中心已成功覆蓋集團四分之三的業務範圍, 包括費用、 應收、 應付、 總帳報表、 稅票、 資產成 本核算和資金結算等多個重要模組。 這一全面覆蓋旨在 實現從 「管控型財務」 向 「價值型財務」 的全面升級, 為提供全面支持集團持續高品質發展打下堅實基礎。

憑藉財務轉型模式創新和共享服務實踐能力, 在 《財資 中國》 主辦的 2023 年度中國財資獎評選中, 天能獲得 「2023年度最佳共享平臺獎」。

Tianneng Financial Sharing Center, as a key component of the modern Group's new financial management model, is committed to centralized processing and account sharing through centralized, standardized, digital and other advanced processes in order to provide efficient decision-making support and comprehensively enhance the efficiency of internal financial operations and risk management and control. Tianneng Financial Sharing Center has successfully covered three quarters of the Group's business scope, including expenses, receivables, pavables, general ledger statements, tax invoices, asset and cost accounting and fund settlement and other important modules. This comprehensive coverage aims to realize a comprehensive upgrade from "Control-Oriented Finance" to "Value-Oriented Finance", laying a solid foundation for providing comprehensive support for the Group's sustained high-quality development.

Tianneng has been awarded the "2023 Best Shared Platform Award" in the 2023 China Finance Awards organized by Finance China for its innovation in finance transformation model and ability to practice shared services.



獎項 Awards

天能電池集團股份有限公司 Tianneng Battery Group Co., Ltd.	入選工信部工業和信息化品質提升典型案例 Selected as a Typical Case of Quality Improvement of Industry and Information Technology by MIIT
天能電池 (江蘇) 公司	江蘇省智能製造示範工廠
Tianneng Battery (Jiangsu) Ltd.	Intelligent Manufacturing Demonstration Factory of Jiangsu Province
天能電池集團 (安徽) 有限公司 Tianneng Battery Group (Anhui) Ltd.	安徽省高性能鉛酸動力電池智能工廠 Intelligent Factory and the Provincial Service Manufacturing Model Enterprise of Anhui Province
天能電池集團 (馬鞍山) 新能源科技有限公司 Tianneng Battery Group (Maanshan) New Energy Technology Ltd.	安徽省高性能蓄電池裝配數字化車間 High-performance Battery assembly Digitalization Workshop of Anhui Province
天能新能源 (湖州) 有限公司	湖州市智能工廠
Tianneng New Energy (Huzhou) Ltd.	Smart Factory of Huzhou City, Zhejiang Province
安徽天暢金屬材料有限公司	再生鉛緑色化製造數字化車間
Anhui Tianchang Metal Materials Ltd.	Recycled Lead Green Manufacturing Digital Workshop

雇傭及勞工 Employment and Labor

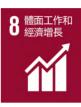
本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:

專題二: 環境 Theme II: Environment



專題一: 公司治理 Theme I: Corporate Governance







本集團嚴格執行 《勞動法》 中各項規定, 平等雇傭, 確 保 100% 合法合規用工。 所有員工入職當天必須簽訂勞動合 同,本集團按規定為其繳納五險一金。 員工依法享有婚假、 孕產假等假期。 工作時數、 加班報酬、 法定假期、 帶薪 休假及相關待遇均遵循當地勞動法律法規及雇傭合同所訂。 本集團每年組織召開職工代表大會, 討論商議涉及職工權益 的重大事項。

The Group strictly enforces the provisions of the Labor Law, hires on an equal footing, and ensures 100% legal and compliant employment. All employees must sign a labor contract on the day they join the Company, and the Group pays five insurance premiums for them according to the regulations. Employees are entitled to marriage leave, pregnancy and maternity leave and other vacations in accordance with the law. The number of working hours, overtime compensation, statutory holidays, paid vacations and related benefits are all in accordance with local labor laws and regulations and employment contracts. The Group organizes and convenes annual staff congresses to discuss and deliberate on important matters concerning the rights and interests of employees.







2023年本集團員工構成情況

Composition of the Group's Employees in 2023

指標名稱 Indicator Name	劃分類別 Category	2023 年 (人數) 2023 (Number of Persons)
員工總數 Total Number of Employees		25776
按性別	男性 Male	16416
By Gender	女性 Female	9360
按雇傭類型	全職 Full-Time Job	25776
By Type of Employment	兼職 Part-Time Job	0
	30 歲及以下 30 and under	4878
按年齡	31-40 歲 31-40 years	10124
By Age	41-50 歲 41-50 years	7682
	50 歲以上 Over 50 years old	3092
	中國內地 Mainland China	25765
按地區 By Region	港澳臺地區 Hong Kong, Macao and Taiwan areas	3
	其他地區 Other regions	8

2023年本集團員工流失情況

Employee Turnover in the Group in 2023

劃分類別 Category		離職率 Turnover Rate
性別	男性 Male	25.05%
Employee Turnover Rate by Gender	女性 Female	24.11%
按雇傭類型	全職 Full-Time Job	24.80%
By Type of Employment	兼職 Part-Time Job	0.00%
	30 歲及以下 30 and under	27.68%
年龄	31-40 歲 31-40 years	23.56%
Employee Turnover Rate by Age	41-50 歲 41-50 years	22.53%
	50 歲以上 Over 50 years old	17.14%
	中國內地 Mainland China	24.82%
區劃 Employee Turnover	港澳臺地區 Hong Kong, Macao and Taiwan areas	0.00%
Rate by Region	其他地區 Other regions	16.67%





■ 人才儲備 Talent Pool

人才是天能事業之基、發展之本,是天能的寶貴財富和重要力量。本集團建立健全了高效的人才選用機制,秉持「讓合適的人在合適的位置,讓有貢獻的人有等值的回報」的用人理念。在公司總體運營管理中,本集團注重內部人員培養和外部高端人才引入,以確保企業始終擁有高素質、高水準的員工隊伍。

2023 環境、社會及管治報告

2013年,本集團開啟了「全球引智」新航向。截至 2023年底,先後引進國家級引才計劃 14人,省級引才計劃 19人,合作院士9人,自主培育國家級科技創業領軍人才1人、國務院特殊津貼1人、浙江省「高層次人才特殊支持計劃」2人,「浙江工匠」3人,「浙江大工匠」1人,成功驗收浙江省領軍型創新團隊2個。擁有教授博士專家團隊30余人,外籍專家11人,副高以上人才100餘人,技能人才2,000餘人。

Personnel are the foundation of Tianneng's business and development, as well as the valuable wealth and important strength of Tianneng. The Group has established a sound and efficient personnel selection mechanism, upholding the employment philosophy of "Let the Right Person be in the Right Position, and Let Those Who Have Made Contributions Be Rewarded with Equal Value". In the overall operation and management of the Company, the Group emphasizes on internal personnel training and the introduction of external high-end personnel to ensure that the Company always has a high-quality and high-level workforce.

In 2013, the Group opened a new direction of "Global Personnel Attraction". At the end of 2023, the Group has introduced 14 persons through National Personnel Attraction Program, 19 persons through Provincial Personnel Attraction Program, 9 cooperative academicians, cultivated independently 1 National Scientific and Technological Entrepreneurship Leading Figure, 1 person entitled to the State Council Special Allowance, 2 persons from "High-level Talent Special Support Program" of Zhejiang Province , 3 person of "craftsmen of Zhejiang Province (浙江王匠)" , 1 person of "master craftsman of Zhejiang Province (浙江王匠)" and has successfully accepted two leading innovation teams in Zhejiang Province. There are more than 30 professors and doctors in the expert team, 11 foreign experts, more than 100 personnel with associate senior titles, and more than 2,000 skilled personnel.

■ 員工培訓 Staff Training

天能將人才戰略作為第一戰略,大規模引進培養人才,充分盤活人力資源,持續推進團隊優化、組織變革,建立幹部梯隊、戰略儲備、專業賦能、技能人才,生態夥伴等五大培養體系,系統提升組織能力。本集團圍繞「賦能內部員工,提升組織能力,打造天能人才供應鏈」的目標,依託天能培訓中心所制定的《天能集團教育培訓管理辦法》,打造出了一套完備的員工培訓管理體系。針對員工職業發展依然採取「雙軌制」晉升模式,即管理職業發展通道和專業技術發展通道兩個軌道,設置「縱向晉升發展」和「橫向發展」兩種方式。通過五級人才池建設,讓更多想幹事、能幹事、幹成事的人才被發展和提拔,實現幹部常態化內生,支撐集團的深化變革和高品質可持續發展。本年度集團組織培訓考核人員13,298人次,通過考核13,005人次,考核通過率達到98%,員工隊伍素質和組織能力得到極大提升。

Tianneng takes personnel strategy as its first strategy, introduces and cultivates personnel on a large scale, fully revitalizes its human resources. continuously promotes team optimization and organizational change, and establishes five training systems, including cadre echelon, strategic reserve, professional empowerment, skilled personnel and ecological partners, in order to systematically improve its organizational capabilities. Focusing on the goal of "Empowering Employees, Improving Organizational Capabilities, and Creating a Supply Chain of Tianneng Personnel", the Group has created a complete employee training management system based on the Management Measures for Education and Training of Tianneng Group formulated by Tianneng University. For the career development of employees, the Company still adopts a "dual-track" promotion model, i.e., two tracks, namely, the management career development channel and the professional development channel, and sets up two ways, namely, "Vertical Promotion and Development" and "Horizontal Development". Through five-level personnel pool, we have developed and promoted more personnel who are motivated, competent and can accomplish things, realizing the normalized endogenous growth of cadres, and supporting the Group's deepening change and high-quality sustainable development. During the year, the Group has organized training and assessment for 13,298 personnel. 13,005 person-time passed the assessment with the assessment pass rate reaching 98%. The quality of the staff team and organizational capacity has been greatly improved.

員工培訓時長明細表 Breakdown of Employee Training Hours

定量指標名稱 Name of Quantitative Indicator	單位 Unit	2023 年 Year 2023
男性員工人均培訓時長 Hours of training per male employee	小時 Hour	≈61.7
女性員工人均培訓時長 Hours of training per female employee	小時 Hour	≈72.1
基層員工人均培訓時長 Average training hours for junior staff	小時 Hour	≈64.4
中級管理層人均培訓時長 Training hours per capita for middle management	小時 Hour	≈78.8
高級管理層人均培訓時長 Training hours per capita for senior management	小時 Hour	≈175.4



人才培訓項目 Personnel Training Program

人才培訓,是集團「八五」戰略的關鍵項目,是為「九五」、乃至未來的高品質可持續發展奠定的良好基礎。 天能「遠航計劃・總監人才發展項目」為期三年,旨在構建全週期人才發展管理體系,為集團高品質可持續發展提供不竭動力。本年,天能控股集團舉行總監人才發展項目(一期)啟動大會暨首次課程培訓。100餘名天能中層管理骨幹參加項目啟動儀式。 Personnel training is a key project of the Group's "8th Five-Year Plan" strategy, and it is a good foundation for the "9th Five-Year Plan" and even the future high-quality sustainable development. Tianneng's "Voyage Plan - Director Personnel Development Program" is a three-year program aimed at building a full-cycle personnel development management system and providing inexhaustible drive for the Group's high-quality and sustainable development. This year, Tianneng Holding Group has held the kick-off meeting and the first course training of the Director Personnel Development Program (Phase I), and more than 100 middle-level management cadres of Tianneng participated in the kick-off ceremony of the program.



專題二: 環境 Theme II: Environment

員工培訓課程體系表 Staff Training Program Schedule

課程體系 Course System		課程類別 Course Type	課程名稱	Course Name
			如何運用甘特圖更好落實計劃	How to use the Gantt chart to better implement the plan
		辦公技能	雙思維助你成為 PPT 匯報高手	Dual-thinking helps you become a master of PPT presentations
		Office Skills	文案高手的五大工具	Five Tools for Copywriting Mastery
			金字塔原理表達技巧	Pyramid Principle Expression Technique
通用知識技能	Co	溝通表達 mmunication and Expression	職場人際溝通必備技能	Essential Interpersonal Communication Skills for the Workplace
General Knowledge & Skills			如何解決跨部門溝通與協作難題	How to solve cross-departmental communication and collaboration problems
		時間管理	時間管理的法則與技巧	Rules and techniques of time management
		Time Management	打造職場高效率——高效時間管理寶典	Building High Efficiency in the Workplace - An Efficient Time Management Handbook
		職場素養		High Performance Meeting Management
		Professionalism	商務禮儀,職場交往的加分利器	Business Etiquette, a Plus for Workplace Interactions
			總經理角色認知	General Manager Role Recognition
			全面經營管理沙盤	Total Management Sandbox
			戰略規劃與解碼	Strategic Planning and Decoding
		領航計畫・總經理人才發展項目	領導力覺醒與 IDP	Leadership Awakening and IDP
		Pilot Program - General Manager Personnel Development Program	經營者的人力管理	Manpower Management of Operators
			總經理的財務思維	Financial Thinking for General Managers
			經營風險管理	Operational Risk Management
			公共關係與危機管理	Public Relations and Crisis Management
			營銷管理模式	Marketing Management Model
			資源整合密碼	Resource Integration Password
	領導力系列		標桿企業參訪	Benchmark Company Visit
	Leadership Series		天能集團戰略規劃	Tianneng Group Strategic Planning
			文化領導力共識營	Cultural Leadership Camp
專項課程 Specialized Course			幹部廉潔教育	Integrity Education for Cadres
			打造總監領導力	Building Director Leadership
		遠航計畫·總監人才發展項目 Voyage Plan - Director Personnel Development Program	案例萃取工作坊	Case Extraction Workshop
			打造高效團隊	Building an Effective Team
			溝通輔導與協作	Communication, Counseling and Collaboration
			達至最佳績效	Achieve Optimal Performance
			激勵留人	Motivate and Retain People
			非財務的財務管理	Non-financial Financial Management

課程體系 Course System		課程類別 Course Type	課程名稱	Course Name
			管理者角色轉變與認知	Managers' Role Change and Cognition
	領導力系列 Leadership Series	啟航計畫·經理人才發展項目 Sailing Program - Manager Personnel Development Program	如何制定個人 IDP	How to Make a Personal IDP
			目標管理與計劃執行	Goal Management and Program Execution
			績效管理	Performance Management
			輔導下屬	Counseling of Subordinates
			協同合作	Collaboration
			複盤與總結	Review and Conclusion
			營銷與大客戶管理	Marketing and Key Account Management
			課程開發與設計	Course Development and Design
		校招大學生 Graduates Recruited	天能發展史與企業文化	Tianneng History and Corporate Culture
			新能源行業趨勢	New Energy Industry Trends
			天能集團戰略規劃	Tianneng Group Strategic Planning
			天能產品認知	Tianneng Product Awareness
	新員工系列 New Employee Series		校招大學生培養與發展	Cultivation and Development of University Students
			商務禮儀與職場形象	Business Etiquette and Workplace Image
			安全人人有責	Safety is Everyone's Responsibility
專項課程			員工職業紅線	Employee Career Redline
Specialized Course		社招新員工 Newly Recruited Employees	企業文化與發展史	Corporate Culture and Development History
			天能集團戰略規劃	Tianneng Group Strategic Planning
			天能產品品牌	Tianneng Products and Brands
			安全生產教育	Productive Safety Education
			廉潔從業教育	Integrity Education
			人力資源政策	Human Resources Policy
			員工績效管理	Employee Performance Management
		新入職幹部 Newly Recruited Cadres	幹部應知應會與必學制度(線上)	Knowledge and Skills Learning System for Cadres (Online)
			天能發展史與企業文化	Tianneng History and Corporate Culture
			重走紅色路線	Retracing the Red Route
			天能集團戰略規劃	Tianneng Group Strategic Planning
			天能數智化戰略	Tianneng Digital Intelligence Strategy
			組織、機制與人才發展	Organization, Mechanism and Talent Development
			企業經營風險管控	Business Risk Management
			幹部廉潔教育	Integrity Education for Cadres
		車間一線員工 Workshop Frontline Staff	員工考勤管理與行為規範	Employee Attendance Management and Behavioral Standards
				Three Levels Safety Training for Employees
			現場 5S 培訓	On-site 5S Training
				Quality Awareness Training for All Staff
			產品製造工藝	Product Manufacturing Process

■ 員工發展 Employee Development

本集團致力於為員工創造多元化、公平、公正的工作環境。 《天能集團核心人才池建設管理辦法》《天能集團人才輪 崗管理辦法》等相關制度也成功幫助公司實現了吸引和保 留所需要人才、 促使公司職位發展體系建設的科學化、 合 理化、 規範化及制度化等目標。 通過建立 《人力資源管 控規定》《招聘管理辦法》《員工績效管理制度》《員 工體檢管理制度》《勞動紀律與員工行為規範管理辦法》 《薪酬管理制度》等管理制度,強調了透明和公正的招聘 流程, 明確了公司對員工培訓、 晉升、 終止合同、 退休 等相關問題的管理規定, 確保員工在任何階段都能夠得到 公正對待, 不因宗教、 性別、 殘疾等因素而受到歧視; 同時, 明確規定了雇傭的最低年齡標準, 以杜絕童工的使 用, 並強調公司對雇傭過程的嚴格把控; 堅持以人為本, 為員工提供具備競爭力的薪酬及福利待遇; 基於集團業務 不同發展階段, 全面構建差異化薪酬激勵體系, 進一步優 化短期、 中長期激勵方案。

本集團也持續加強對員工的培訓, 提高員工對招聘慣例和 法規的認知。 通過這些措施, 我們確保公司的員工管理完 全遵循道德和法律標準, 杜絕童工和強制勞工的出現, 實 現了合規和社會責任的雙重目標。 The Group is committed to creating a diversified, fair and just working environment for its employees. Relevant systems such as the Measures for the Management of the Building of the Core Personnel Pool of Tianneng Group and the Measures for the Management of Personnel Rotation of Tianneng Group have also successfully helped the Company to achieve the objectives of attracting and retaining the required personnel, and to promote the scientific, rationalized, standardized and institutionalized development of the Company's job development system. We emphasize the transparent and fair recruitment process, and clearly define the Company's management regulations on issues related to employee training, promotion, termination of contract, retirement and so on, to ensure that the employees enjoy fair treatment at any stage regardless of religion, gender, disability, etc. Through the establishment of HR Control Regulations, Recruitment Management Measures, Employee Performance Management System, Employee Physical Examination Management System, Labor Discipline and Employee Code of Conduct Management Measures, Salary Management System and other management systems. At the same time, we have clearly stipulated the minimum age standard for employment to eliminate the use of child labor and emphasize the Company's stringent control over the employment process; adhered to the people-oriented principle and provided employees with competitive remuneration and welfare packages; and based on the different stages of the development of the Group's business, we have comprehensively built up a differentiated remuneration and incentive system, and further optimized the short-term, medium- and long-term incentive programs.

The Group has also continued to strengthen the training of our employees and raise their awareness of recruitment practices and regulations. Through these measures, we ensure that the management of our employees is in full compliance with ethical and legal standards, eliminating child labor and forced labor, and achieving the dual goals of compliance and social responsibility.

本集團為全體員工提供安全、健康的工作環境, 同時為員工提供一系列福利待遇。本集團幫助解決員工住房、交通、子女教育等基本問題, 在總部及多個生產基地建設環境良好的員工宿舍, 提供了多班次、 多線路的班車接送服務,提供食堂、購物券等補貼,並組織員工參加體育休閒活動,健全關懷幫扶機制, 建立健全困難職工檔案, 開展紅白喜事慰問、 困難職工慰問。 先後組織開展了以 「三八」 婦女節、「六一」親子、中秋聯誼、「文化引領,鑄魂聚力,向新而行」文化建設等為主題的活動,精心設置活動議程,豐富活動形式,展現工作成效,得到集團內外部一致好評。

The Group provides a safe and healthy working environment for all employees, as well as a series of welfare benefits for employees. The Group helps to solve the basic problems of employees' housing, transportation, children's education, etc., builds staff dormitories with good environment in the headquarter and several production bases, provides shuttle bus services with multiple frequencies and routes. provides subsidies for canteens and shopping vouchers, etc., and organizes employees to participate in sports and recreational activities. improves care and support mechanism, establishes and improves the files of employees in difficulties, and carries out blessings for weddings and sympathy for funerals and sympathy for employees in difficulties. We have organized and launched activities under the themes of "Women's Day", "Children' s Day", "Mid-Autumn Festival", and "Cultural Leadership, Soul Casting and Strength Gathering, Walking Towards Newness", etc. We have set up the agenda for the activities, enriched the forms of the activities, and demonstrated the effectiveness of the work, which has received unanimous favorable comments from both internal and external parties of the Group.



六一親子活動 June 1st Parent-Child Activity



天能集團籃球賽 Basketball Match of the Group







職工活動 Staff Activities

端午佳節來臨之際, 本集團各下屬單位喜迎節日, 組 織員工開展包粽子等活動。

中秋佳節, 本集團舉辦 「中秋月、 同心圓」 中秋聯 誼活動, 集團部分幹部員工、家屬代表及天能共建單 位新川村委班子成員等 400 餘人受邀參加活動。

On the occasion of the Dragon Boat Festival, the subordinate units of the Group welcomed the festival by organizing activities such as making rice dumplings for their staff.

During the Mid-Autumn Festival, the Group held the "Mid-Autumn Moon, Concerted Reunion" Mid-Autumn Fraternity, to which more than 400 people, including some of the cadres and employees of the Group, representatives of their families, and members of the Xinchuan Village Committee, a unit that Tianneng is building together, were invited to participate.



集團中秋家屬聯誼會 The Group's Mid-Autumn Festival Family Fraternity

➡ 案例 Case

總部安裝新能源車充電樁 Installation of Charging Piles for New Energy Vehicles at Headquarters

年內, 為進一步提升集團新能源企業品牌形象, 滿足 內部員工及來訪客戶新能源車充電需求, 集團在總部園 區已完成多個新能源車充電椿安裝, 即日起開始啟用。

專題二: 環境 Theme II: Environment

During the year, in order to further enhance the Group's new energy brand image and to meet the demand for new energy vehicle charging from staff and visitors, the Group has completed the installation of several new energy vehicle charging piles in its headquarters park, which will be put into operation from now on.

■ 員工滿意度 Employee Satisfaction

為不斷提升公司的工作環境和員工福祉, 本集團每年進行 員工滿意度調查, 重視員工的回饋, 以更好地瞭解員工的 需求和期望, 以便採取相應的改進措施。 滿意度調查內容 涵蓋了多個方面, 包括但不限於集團行政後勤服務滿意度 調查、總部園區管理滿意度調查、宿舍管理滿意度調查、 食堂管理滿意度調查, 通過上述調查, 本集團識別公司在 各個方面的優勢和改進空間, 並致力於持續改進, 提供一 個積極、 健康和具有發展機會的工作環境。

In order to continuously enhance the Company's working environment and the well-being of its employees, the Group conducts employee satisfaction surveys annually and emphasizes on the feedback from its employees so as to better understand the needs and expectations of its employees so as to take improvement measures accordingly. The surveys cover a wide range of areas, including but not limited to the satisfaction survey on the Group's administrative and logistic services, the management of the headquarters, the management of dormitories, and the management of canteens. Through the above surveys, the Group identifies the Company's strengths and room for improvement in various aspects, and is committed to making continuous improvements in order to provide a working environment that is positive, healthy and with development opportunities.

員工對公司辦公室後勤服務滿意度為 Employees' Satisfaction with Group Office Back Office Services

91.01%

對公司園區服務滿意度為 Satisfaction rate of the Group's

98.07%

對公司宿舍滿意度為 Satisfaction rate of staff

90.42%









職業安全 Occupational Safety

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:



本集團在過去一年中安全穩定水準得以維持, 事故率進一步下降, 取得了顯著的職業安防成果。這反映了我們對安全管理的高度重視和不斷完善的安全體系, 以確保員工、客戶和社區的整體安全。我們採取更有針對性的措施直擊一線, 成功遏制了違規現象。通過強化監管、加強培訓和建立更有效的舉報機制, 公司成功提高了違規行為的識別和處置效率, 為業務運營提供了更為可靠的保障。

本集團通過了 ISO45001 職業健康安全管理體系認證, 並在公司內部制定了《天能集團 EHS 管理體系制度》《應急管理制度》《工傷處理管理制度》等多項管理制度,旨在實現「分級管理、分線負責」的安全管理思路, 堅持全員安全生產責任制。同時,公司規範了事故應急管理工作,建立和保持了應急管理體系,預防和減少突發事件的風險,提高了應對突發事件的能力。

由於本集團智能化製造程度的顯著提升, 工傷對於我們的影響已經被成功地降低到最低程度。 自動化系統不僅提高了生產效率, 而且通過減少人工介入降低了工傷事故的風險。

The Group's safety and stability levels were maintained and the accident rate was further reduced during the year, resulting in significant occupational safety achievements. This reflects our strong focus on safety management and the continuous improvement of our safety system to ensure the overall safety of our staff, customers and the community. We have successfully curbed non-compliance by adopting more targeted measures straight to the frontline. Through strengthened supervision, enhanced training and a more effective reporting mechanism, the Company has successfully improved the efficiency of identifying and handling violations, providing more reliable protection for business operations.

The Group has passed the ISO45001 Occupational Health and Safety Management System Certification and has formulated a number of management systems within the Company, such as the *Tianneng Group EHS Management System*, *Emergency Management System* and *Management System for Handling Work Injuries*, aiming to realize the safety management idea of "Hierarchical Management and Line Responsibility" and to adhere to the system of responsibility for production safety for the entire workforce. Meanwhile, the Company has standardized the management of emergency response to accidents, established and maintained an emergency management system, prevented and reduced the risk of emergencies and improved its ability to respond to emergencies.

As a result of the significant increase in the Group's intelligent manufacturing, the impact of work injuries on us has been successfully minimized. Automated systems not only improve production efficiency, but also reduce the risk of workplace accidents by minimizing human intervention.

報告期內本集團無工傷亡故情況, 過去三年 (包括本報告年度) 的員工因工亡故事件數量及影響如下所示:

There were no work-related deaths in the Group during the reporting period and the number and impact of work-related deaths of employees of the Group in the past three years, including the current reporting year, are shown below:

	2023 年 Year 2023	2022 年 Year 2022	2021 年 Year 2021
因工亡故數量 Number of Work-Related Deaths	0	0	0
因工亡故員工比例 Ratio of Employees Who Died at Work	0	0	0

本集團進一步加強了對基地場地的規範管理。通過優化流程、提高設備維護水準和推進數字化監管,我們實現了更加有效和規範的管理,確保業務活動在法規框架內進行。本集團對設備穩定性持續保持高標準。通過採用先進的技術和高品質的製造工藝,確保設備在長時間運行中保持出色的性能。我們致力於不斷改進設備的設計和製造過程,以提高整體穩定性,降低故障率,確保生產過程的連續性和可靠性。在設施設備的運行中,我們高度關注環境友好性,努力降低排放水準。通過採用先進的環保技術和設備,我們確保排放水準符合嚴格的標準和法規。同時,我們持續關注新的環保技術,以進一步降低碳排放,為環境保護貢獻力量。

專題二: 環境 Theme II: Environment

The Group has further strengthened the standardized management of its bases. By optimizing processes, improving equipment maintenance and promoting digital supervision, we have achieved more effective and standardized management to ensure that business activities are conducted within the regulatory framework. The Group has continued to maintain high standards for equipment stability. By adopting advanced technologies and high-quality manufacturing processes, we ensure that our equipment maintains outstanding performance over long periods of operation. We are committed to continually improving the design and manufacturing processes of our equipment to increase overall stability, reduce failure rates and ensure the continuity and reliability of the production process. In the operation of our facilities and equipment, we pay high attention to environmental friendliness and strive to reduce emission levels. By adopting advanced environmental protection technologies and equipment, we ensure that emission levels comply with stringent standards and regulations. At the same time, we continue to focus on new environmental technologies to further reduce our carbon emission and contribute to environmental protection



2023 年安全生產月啟動會議 Safety Month Kick-Off Meeting in 2023





2023年, 本集團新開設的基地, 如安徽省馬鞍山市鉛蓄電 池、江蘇省沭陽縣鉛回收項目、江蘇省濱海縣基地鋰電回收 項目, 在設備、排放標準等方面都按照要求進行了改進。通 過經驗的積累,我們在現有基礎上不斷學習,確保新基地達 到最高的環保標準,為可持續發展奠定堅實基礎。

本集團進一步細化安全防範工作, 將防範措施常態化。我們 加強了對安全標準的遵守,通過定期的安全培訓和演練,確 保員工具備應對潛在風險的能力, 進一步提升了整體安全水 準。開發了一套警示教育案例庫和視頻, 旨在強化員工的安 全意識。這些案例旨在通過真實的事例展示潛在的危險,以 便員工更好地理解和防範潛在的安全風險。此外, 我們還進 行了電池著火和電解液洩漏等的相關環境演練, 以驗證我們 的緊急回應計劃的實際可行性, 並不斷改進和完善。我們定 期總結和更新培訓材料, 以確保其與最新的安全標準和最佳 實踐保持一致。

同時, 為了規範危險化學品的使用和儲存, 我們也制定了危 險化學品管理規定, 以確保員工在操作過程中的安全, 減少 潛在的風險。這些舉措旨在全面提升我們部門的環境管理水 準,確保員工和環境的安全。員工健康、平安是天能健康發 展的重要組成部分, 同時也是履行社會責任的一件大事。本 集團一直以來積極履行企業主體責任, 深入開展健康創建工 作, 職業健康管理越來越完善, 員工的職業健康越來越有保 障,職業健康防護能力顯著提升,職業健康防護設施顯著改 善, 職業健康管理檢查效果明顯。

In 2023, the Group's newly opened bases, such as the Lead-acid Battery base in Maanshan City, Anhui Province and Lead-acid batteries Recycling Project in Shuyang County, Jiangsu Province, and the Lithium-ion batteries Recycling Project in Binhai County, Jiangsu Province, have been improved in terms of equipment and emission standards in accordance with the requirements. Through the accumulation of experience, we will continue to learn on our existing bases to ensure that our new bases meet the highest environmental standards and lay a solid foundation for sustainable development.

The Group has further refined its safety precautions and normalized preventive measures. We have strengthened our compliance with safety standards and further enhanced our overall safety level through regular safety training and drills to ensure that our employees are prepared to deal with potential risks. We have developed a set of warning and educational case banks and videos with the aim of reinforcing employees' safety awareness. These cases aim to demonstrate potential dangers through real-life examples so that employees can better understand and prevent potential safety risks. In addition, we have conducted environmental drills related to battery fires and electrolyte leaks to verify the practicality of our emergency response program, and to continuously improve and refine it. We regularly summarize and update our training materials to ensure that they are in line with the latest safety standards and best practices.

We have also established regulations for the management of hazardous chemicals in order to standardize the use and storage of hazardous chemicals to ensure the safety of our employees during operations and to reduce potential risks. These initiatives aim to comprehensively improve our department's environmental management and ensure the safety of our employees and the environment. Employee health and safety is an important part of Tianneng's healthy development, as well as a major event in fulfilling our social responsibility. The Group has been actively fulfilling its corporate responsibility and carrying out in-depth health creation work. Occupational health management has become more and more perfect, the occupational health of employees has become more and more guaranteed, the occupational health protection capacity has been significantly enhanced, the occupational health protection facilities have been significantly improved, and the effect of occupational health management inspections has been significant.





職業病防治

Occupational Diseases Prevention and Control

2023年4月,全國第21個《職業病防治法》宣傳周, 天能聯合多個政府單位以「改善工作環境和條件, 保護 勞動者身心健康」為主題開展《職業病防治法》宣傳周 啟動活動。

In April 2023, the 21st National Occupational Disease Prevention and Control Law Publicity Week, the Group joined hands with a number of governmental organizations to kick off the Occupational Disease Prevention and Control Law Publicity Week with the theme of "Improving the working environment and conditions, protecting the physical and mental health of workers".



應急環境演練 Emergency environmental drills



紅十字應急救護培訓講座 Red cross emergency care training seminar



投資者權益 Investor Rights

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:



本集團高度重視投資者關係的管理, 注重投資者的知悉權和 對投資者保護教育。除規定的信息披露途徑外, 本集團還安 排專人通過投資者熱線電話、定期投資者會議、郵件往來、 來訪接待、公司網站投資者關係專欄和官方微信等豐富的渠 道與投資者保持密切交流, 加強投資者關係平臺建設, 提升 投資者關係服務的效率與品質。在此過程中, 本集團不僅分 享公司的業績和成果,同時聆聽投資者的關切和建議,確保 他們的權益得到尊重。

本集團堅定地踐行對投資者權益和社會責任的承諾。我們 傾聽中小投資者的訴求, 高度重視股東利益, 截至 2023 年底, 天能動力累計分紅 15 次, 累計現金分紅 41.94 億港 幣。通過股東大會這一集體決策和信息共享的平臺, 我們 致力於確保所有股東充分瞭解公司的戰略方向、 財務狀況 和未來規劃。通過透明度和誠信的溝通, 確保股東在企業 決策中發揮關鍵作用, 不僅追求經濟效益, 更致力於在商 業運營中創造共贏的局面。

The Group attaches great importance to the management of investor relations, focusing on investors' right to know and education on investor protection. In addition to the prescribed channels for information disclosure. the Group also arranges dedicated staff to maintain close communication with investors through a variety of channels such as investor hotlines, regular investor meetings, email exchanges, visits and receptions, the investor relations section of the Company's website and official WeChat, to strengthen the investor relations platform and to enhance the efficiency and quality of investor relations services. In the process, the Group not only shares the Company's performance and achievements, but also listens to investors' concerns and suggestions to ensure that their rights and interests are respected.

The Group is firmly committed to practicing its commitment to investors' rights and interests and social responsibility. We listen to the aspirations of small and medium-sized investors and attach great importance to the interests of shareholders. As at the end of 2023, Tianneng Power has made 15 cumulative dividends, totaling HK\$4,194 million in cash dividends. Through the general meeting of shareholders, a platform for collective decision-making and information sharing, we are committed to ensuring that all shareholders are fully informed of the Company's strategic direction, financial position and future plans. Through transparency and honest communication, we ensure that our shareholders play a key role in corporate decision-making and are committed to not only pursuing economic benefits, but also creating win-win situations in our business operations.

子公司天能股份 (688819.SH) 通過健全完善信息披 露機制、 規範運作「三會一層」、 持續優化股東結構 等舉措, 增強信息披露的有效性, 加強與投資者溝 通, 提升公司治理水準。公司董事會辦公室始終秉持 真實、完整、及時、準確的原則, 堅持給投資者一個 真實透明的上市公司, 為董事會決策提供堅實保障, 助力公司高品質發展。

專題二: 環境 Theme II: Environment

Subsidiary Tianneng Battery Co., Ltd. (688819.SH) enhances the effectiveness of information disclosure, strengthens communication with investors, and improves corporate governance by improving the information disclosure mechanism, standardizing the operation of the "Three Meetings and One Management", and continuously optimizing the shareholder structure. The Company's Board of Directors Office has always adhered to the principles of truthfulness, completeness, timeliness and accuracy, insisting on giving investors a true and transparent listed Company, providing solid protection for the Board of Directors' decision-making, and promoting the Company's high-quality development.

專題三: 社會責任 Theme III: Social Responsibility





客戶權益 Client Rights and Benefits

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:



■ 產品責任 Product Liability

2023 年,本集團持續在精細化生產管理和品質管制方面取得顯著成效,通過 ISO9001 質量管理體系認證、IATF16949 體系認證,質量檢測實驗室獲得 CNAS 國家認證,進一步夯實品質管制基礎。

為在追求產效的同時保持高效運營, 公司著力實施精細化管理策略,通過科學規劃年度目標、挖掘潛能、整合多維度計劃, 以滿足市場對產品切換時效性的要求。為更好地適應市場需求的變化, 我們靈活調整產能規劃, 以確保在季節性差異中滿足市場需求, 充分釋放產能。通過全閉環管理跟蹤, 我們成功控制了偏離度, 產品交期的計劃達成率接近 100%。

為提升產品品牌形象、減少市場客訴,公司積極建立並完善了《品質管制制度》。我們明確了品質管制培訓、解析、過程、客訴、商檢、不良品管控與紅線指標等方面,規範了品質管制流程,強化了品質執法。定期進行市場走訪,並將問題清單及時回饋給生產車間進行整改,並通過跟蹤閉環確保問題的有效解決。同時,我們開展了品質「夯基礎、保過程、造精品、黏用戶」活動,以提升天能電池產品的競爭力和品牌形象,打造了「天能精優產品」。

In 2023, the Group continued to achieve significant results in terms of refined production management and quality control, and passed the ISO9001 quality management system certification, IATF16949 system certification, and the quality testing laboratory was awarded CNAS national certification, which further strengthened the foundation of quality control.

In order to maintain efficient operations while pursuing production efficiency, the Company focuses on implementing a refined management strategy by scientifically planning annual targets, tapping potentials and integrating multi-dimensional plans to meet the market's requirements for timeliness of product switching. In order to better adapt to changes in market demand, we flexibly adjust our capacity planning to ensure that we meet market demand and fully release our production capacity amidst seasonal differences. Through the full-closed loop management tracking, we have successfully controlled the deviation, and the planned compliance rate of product delivery has reached almost 100%.

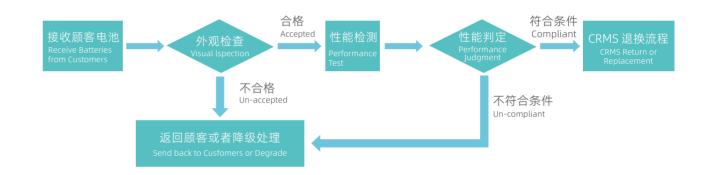
In order to enhance the brand image of our products and reduce customer complaints in the market, we have actively established and improved the *Quality Management System*. We have clarified the quality management training, analysis, process, customer complaints, commodity inspection, defective product control and red line indicators, standardized the quality management process and strengthened the quality enforcement. We have conducted regular market visits, and fed back the list of problems promptly to the production workshop for rectification, and ensured the effective solution of the problems through closed-loop tracking. At the same time, we have carried out the quality "Laying a Solid Foundation, Ensuring the Process, Creating High-Quality Products, Engaging Users" activities to enhance the competitiveness of Tianneng battery products and brand image, to create a "Tianneng fine products".

這一系列的管理舉措和活動的實施, 不僅使公司在生產效益上取得了顯著成效, 也為公司品牌形象的提升和市場口碑的穩步提升奠定了堅實基礎。

專題二: 環境 Theme II: Environment

The implementation of this series of management initiatives and activities has not only enabled the Company to achieve significant results in production efficiency, but also laid a solid foundation for the enhancement of the Company's brand image and the steady improvement of market reputation

產品售後處理流程 Product After-Sales Handling Process



■ 客戶服務 Customer Service

本集團在全國各地擁有 3,000 餘家經銷商, 已形成了以浙 江為基點, 輻射全國的龐大服務網絡。本著互惠共贏的原 則, 天能建立了完善的經銷商服務管理標準和流程, 同時 配備各類專職售後人員為遍佈全國的服務網絡 ,提供每週 至少一次的技術支援及產品培訓服務。

建立強大的客戶服務體系對於企業來說至關重要。本集團高度重視客戶服務,構建的客戶服務體系使我們在不斷提升客戶體驗的道路上不斷前進。遵循本集團制發的《400平臺市場客訴管理辦法》,在保護消費隱私的基礎上,提高客戶滿意度、提升品牌價值和增加市場競爭力,在競爭激烈的市場中脫穎而出,取得長期發展的優勢。

The Group has more than 3,000 dealers all over the country, and has formed a huge service network with Zhejiang as the base point, radiating all over the country. Based on the principle of mutual benefit and win-win situation, Tianneng has established perfect service management standards and processes for dealers. At the same time, we are staffed with various kinds of specialized after-sales personnel to provide technical support and product training services at least once a week for the service network all over the country.

Building a strong customer service system is crucial for an organization. The Group attaches great importance to customer service. The establishment of a strong customer service system enables us to move forward on the road of continuous improvement of customer experience. By complying with the Management Measures for Customer Complaints in the 400 Platform Market issued by the Group, we can improve customer satisfaction, enhance brand value and increase market competitiveness on the basis of protecting consumer privacy, so as to stand out from the crowd in the highly competitive market and gain an advantage in long-term development.

本集團的客戶服務體系如下:

The Group's customer service system is set out below:

- 組建一支專業、熱情的客戶服務團隊,具備良好的溝通 技巧和業務能力。
- 明確客戶服務流程,從諮詢、解決問題到後續跟蹤,確 保服務的高效性和一致性。
- 定期對客戶服務團隊進行培訓, 提升團隊的專業素質和 服務水準。同時設立激勵制度, 表彰優秀員工, 激發團 隊積極性和創造力。
- 建立完善的客戶關係管理系統, 記錄客戶信息、需求和 回饋,以便更好地滿足客戶需求和維護客戶關係。
- 設立服務品質監控機制, 定期評估服務水準, 及時發現 並改進服務中的不足之處。通過清晰的客戶服務理念, 並構建起完善的客戶服務體系。持續關注市場變化和客 戶需求, 不斷優化和完善服務體系, 從而提升公司的市 場競爭力和品牌形象, 以確保在競爭激烈的市場中保持 領先地位。

Assemble a professional and enthusiastic customer service team with excellent communication skills and business acumen.

Clarify the customer service process, from consultation, problem solving, to follow-up, in order to ensure efficiency and consistency of service.

Provide regular training for the customer service team to enhance the team's professional quality and service level. Meanwhile, set up an incentive system up to recognize outstanding employees and stimulate the team's enthusiasm and creativity.

Establish a comprehensive customer relationship management system to record customer information, needs and feedback in order to better fulfill customer needs and maintain customer relationships

Set up a service quality monitoring mechanism to regularly assess the service level, and promptly identify and improve the deficiencies in the service. Adopt a clear customer service concept and build up a perfect customer service system. Continuously pay attention to market changes and customer needs, and constantly optimize and improve the service system, so as to enhance the Company's market competitiveness and brand image, in order to ensure that it maintains a leading position in the highly competitive market.

本集團還通過以下三種方式進行客戶滿意度調研:

The Group conducts customer satisfaction surveys in the following three ways:

- 專題性電話調研回訪 (一次/季度), 每次會根據實際 情況設定不同的話術及調研問卷,以我司簽約的共贏商 為主,調研回訪後輸出調研回訪報告。
- 掛機滿意度調研(每次服務掛機結束後), 每次話務服 務結束後觸發的滿意度情況回訪, 頻率是即時, 2023 年度全年掛機滿意度為 98.9%。
- 實際現場走訪調研(不定期),根據實際市場情況,安 排走訪線路和人員、時間等, 最終輸出走訪報告。

Thematic telephone research visits (once/quarterly), each time set up different terms and research questionnaires according to the actual situation, mainly targeted on our Company's contracted suppliers and output research visit report after the research visits

The hang-up satisfaction survey (at the end of each service hang-up), which is a satisfaction follow-up triggered at the end of each call service, is real-time in frequency, and the annual hang-up satisfaction rate for FY2023 was 98.9%.

Conduct actual on-site visit and research (from time to time) and arrange the visit route and personnel, time, etc., according to the actual market situation and finally output the visit report.

客戶滿意度量化表

Customer Satisfaction Quantification Table

指標名稱 Indicator Name	單位 Unit	2023 年 Year 2023
發放的客戶滿意度調查問卷總數 Total Number of Customer Satisfaction Questionnaires Distributed	份 Copy	849
回收的滿意度調查問卷總數 Total Number of Satisfaction Questionnaires Recovered	份 Copy	712
回收的有效滿意度調查問卷總數 Total Number of Valid Satisfaction Questionnaires Recovered	份 Copy	712
問卷回收率 Questionnaire Recovery Rate	%	83.80%
客戶滿意度調查結果 Results of Customer Satisfaction Survey	%	掛機滿意度 98.9% Satisfaction with Hang-Ups

專題三: 社會責任 Theme III: Social Responsibility

2023年本集團處理客戶訴求的全年表現

The Group's full-year performance in handling customer requests in 2023

指標名稱 Indicator Name	單位 Unit	2023 年 Year 2023
客戶回饋回應速度 Customer Feedback Response Speed	天 Day	回應時效 24h,平均處理週期 5.54 天 Response time limit is 24h and average processing cycle is 5.54 days
客戶回饋回應率 Customer Feedback Response Rate	%	100%
客戶投訴 Complaints	次 Time	3221
累計客戶服務 Cumulative Customer Service	次 Time	96347







供應鏈管理 Supply Chain Management

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:







截至 2023 年 12 月 31 日,本集團主營業務供應商數量達到 3,300 餘家,均位於中國內地,其中簽署供貨商行為準則以及簽訂包含環境和勞工要求條款的供應商數量占比均達到 100%。本集團堅持「公開公正、誠信經營、長期合作、共享共贏」的原則,聚焦全球優質供應商,致力維護供應鏈生態系統的良性發展,善待供應商、共贏商和利益相關方,實現客戶價值、投資者利益和企業發展的互動共贏。公司制定了《供應商檔案管理制度》《供應商審核管理標準》《供應商退出與淘汰制度》等 9 項相關管理制度,通過嚴格的供應商准入機制有效把控供應商品質,同時針對供應鏈反賄賂問題也有一系列管理辦法,有效提升了供應鏈的可持續性。

本集團為保證公司與供應商之間的公平性和可持續性, 避免腐敗事件發生, 本集團在與供應商合作前要求其簽署《廉潔協定》, 有效地規避了在採購過程中存在的賄賂事件風險,進而實現公司供應鏈的穩固發展。

同時,本集團嚴格遵循供應商管理制度及流程,對供應商展開盡職調查,識別及評估供應商對環境及社會所產生的影響;通過供應商管理平臺(SRM)監測並識別供應商風險;每年對供應商展開打分匯總,績效評估。本集團鼓勵供應商獲得與環境保護、品質管制、職業健康與安全管理相關的認證,例如 ISO 14001、ISO 9001 和 ISO 45001等。這些認證將被納入供應商的績效考核範疇之一,使得供應商在綠色採購中發揮更積極主動的作用。

As of December 31, 2023, the number of suppliers of the Group's main business has reached more than 3.300, all of which are located in Mainland China. Among them, the number of suppliers that have signed the Supplier Code of Conduct and those that have signed clauses containing environmental and labor requirements have both reached 100%. The Group adheres to the principles of "Openness, Fairness, Integrity, Long-Term Cooperation and Win-Win Sharing", focuses on global high-quality suppliers, strives to maintain the benign development of the supply chain ecosystem, treats suppliers, win-winners and stakeholders well, and realizes win-win interactions among customers' value, investors' interests and corporate development. The Company has formulated 9 management systems, including Supplier File Management System, Supplier Audit Management Standard, and Supplier Exit and Elimination System. The Company effectively controls the quality of suppliers through strict supplier admission mechanism, and also has a series of management methods for anti-bribery in the supply chain, which effectively improves the sustainability of the supply chain.

報告主體內容 Main Content of the Report

In order to ensure fairness and sustainability between the Company and its suppliers and to avoid corruption incidents, the Group requires its suppliers to sign *Integrity Agreement* before cooperating with them, which effectively avoids the risk of bribery incidents in the procurement process and thus realizes the stable development of the Company's supply chain.

At the same time, the Group strictly follows the supplier management system and process, conducts due diligence on suppliers, identifies and evaluates the environmental and social impacts of suppliers, monitors and identifies supplier risks through the supplier management platform (SRM), and conducts annual supplier scoring and performance evaluation. The Group encourages suppliers to obtain certifications related to environmental protection, quality management and occupational health and safety management, such as ISO 14001, ISO 9001 and ISO 45001. These certifications will be included as part of the supplier's performance appraisal, enabling suppliers to play a more proactive role in green procurement.

對集團內部,我們優化供應鏈業務流程,創新供應鏈技術和模式,聚焦供應鏈物流環節搭建物流平臺,實現視覺化的全程物流監控,讓客戶更好地實施貨權的管控。對外部合作夥伴,我們建立供應鏈戰略聯盟,在充分借鑒吸收供應商優質經驗的同時,定期組織開展合格供應商評價工作,通過對產品品質、工藝裝備、程序控制、技術服務、安全生產等內容的考察、調研及審核,及時分享經驗,提出合理化建議,並通過技術、資金和人力支援,使部分供應商提升管理水準,實現價值鏈體系競爭力的共同提升。

為順應綠色可持續發展戰略, 供應商的環境、 社會和治理 (ESG) 治理水準也日益受到關注。本集團將新供應商的環 保和合規性標準設定為准入的底線, 以確保對新供應商的資 質實施嚴格控制。新供應商必須遵守特定的 ESG 相關要求,同時我們會對現有供應商的 ESG 合規性進行審查。通過這一舉措, 我們致力於建立一個更可持續、 負責任的供應鏈體系,共同推動環境友好型的商業實踐。

Internally, we optimize supply chain business processes, innovate supply chain technologies and modes, build a logistics platform focusing on supply chain logistics, and realize visual monitoring of the entire logistics process, so as to enable our customers to better control their cargo rights. For external partners, we have established a supply chain strategic alliance. While fully drawing on and absorbing the quality experience of suppliers, we regularly organize and carry out evaluation of qualified suppliers, through inspection, investigation and audit of product quality, process equipment, process control, technical services, safe production, etc., share experience and put forward rationalization proposals in a timely manner, and through technical, financial and human resources support, enable some of the suppliers to improve their management standards and realize the value of value chain. Through technical, financial and human resources support, we will enable some suppliers to improve their management standards and realize the joint enhancement of the competitiveness of the value chain system.

專題三: 社會責任 Theme III: Social Responsibility

In line with the green and sustainable development strategy, the level of Environmental, Social and Governance (ESG) governance of suppliers is also a growing concern. The Group has set environmental and compliance standards for new suppliers as the bottom line for access to ensure strict control over the qualifications of new suppliers. New suppliers are required to comply with specific related ESG requirements, while we review the ESG compliance of existing suppliers. Through this initiative, we are committed to building a more sustainable and responsible supply chain and working together to promote environmentally friendly business practices.







專題二: 環境

Theme II: Environment



绿色智造 Green Smart Manufacturing

能源管理 Energy Management

節能降耗 Energy Saving and Consumption Reduction

新型儲能 New Energy Storage 清潔能源推廣 Clean Energy Promotic 空物管理 Pollutant Management



綠色智造

Green Smart Manufacturing

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:







本集團踐行「雙碳」目標、紮根新能源實體經濟 37 年、「舉綠 色生態旗,打智能製造牌,走循環發展路」,開發出高性能的鉛 蓄電池、鋰離子電池、氣燃料電池和系統解決方案, 前瞻佈局 新型鈉離子等前沿領域,走出了一條綠色低碳高品質發展之 路。

The Group has been practicing the goal of "Dual Carbon" and rooted in new energy economy for 37 years, and has developed high-performance lead-acid batteries, lithium-ion batteries, hydrogen fuel cells and system solutions by "Uphold the Banner of Green Ecology, Hold an Ace of Intelligent Manufacturing in Hand, and Take the Road of Cyclic Development" and has been forward-looking in laying out new sodium ion and other frontier fields. The Company has developed high-performance lead-acid batteries, lithium-ion batteries, hydrogen fuel cells and system solutions, and laid out new sodium ion and other cutting-edge fields, and taken a green, low-carbon and high-quality development road.

天能積極發揮綠色榜樣示範和引領作用, 引導行業提升綠 色低碳技術水準,降低產品全生命週期碳排放,帶動新能源 產業鏈供應鏈綠色轉型升級,促進行業上下游協同減污降 碳發展。

Tianneng actively plays the role of green role model demonstration and leadership, guides the industry to improve the standard of green and low-carbon technology, reduces carbon emissions in the whole life cycle of products, drives the green transformation and upgrading of the new energy industry chain supply chain, and promotes the upstream and downstream collaborative development of the industry to reduce pollution and carbon emissions

5家「國家工業產品綠色設計示範企業」

5 "National Green Design Demonstration Enterprises for Industrial Products"

10家「國家綠色工廠」

10 "National Green Factories"

10家「國家綠色供應鏈管理示範企業」

10 "National Green Supply Chain Management Demonstration Enterprises"

22 項國家綠色產品等國字型大小榮譽

22 National Green Products and other national honors

參與制定國家、行業等各類標準 210 餘項

Participated in the formulation of more than 210 national and industry standards





綠色發展 Green Development

天能下属子公司自落戶貴州省台江縣以來將綠色發展理 念貫穿到生產製造的每個環節、打造循環經濟生態圈實 現經濟效益、社會效益、環境效益相統一。近年來,天能緊 緊圍繞國家「雙碳」戰略,以產業鏈思維、生態圈理念,推 動綠色低碳發展既做好拓寬新賽道的「加法」, 也做好節 能降碳的「減法」,走出了一條生態優先、綠色發展之路。

Tianneng's subsidiaries in Taijiang County, Guizhou Province, since the establishment of the green development concepts into every aspect of production and manufacturing, to create a circular economy ecosystem to realize the economic benefits, social benefits, environmental benefits of the unity. In recent years, Tianneng has closely focused around the national "Dual Carbon" strategy, promoted green and low-carbon development with the industry chain thinking and the concept of ecosphere, to not only to excel in broadening the new track but also to do a good job of energy saving and carbon reduction! "Tianneng has taken a road of ecological priority and green development.

專題三: 社會責任 Theme III: Social Responsibility

資源循環 Resource Cycle

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:







作為新能源產業新業態、新賽道,動力電池的回收體系、處理 技術不斷進步完善,為建立健全綠色低碳循環經濟體系注入 源源不斷的澎湃動能。本集團對可利用的污染物和廢棄物採 取科學管理措施,變廢為寶,進行資源再利用,既減少了環境 污染, 也提升了資源利用率。本集團佈局鋰電回收新賽道, 在 電池生產研發、退役電池回收利用等方面作出綠色發展的典 範。動力電池回收再利用,有效緩解我國電池金屬供給缺口, 對於保障產業鏈安全、穩定具有重要作用。

As a new industry and a new track in the new energy industry, the recycling system and treatment technology of power batteries are constantly progressing and improving, injecting a steady stream of surging kinetic energy for a sound green, low-carbon and recycling economic system. The Group adopts scientific management measures for available pollutants and wastes, turning waste into treasure and reusing resources, which not only reduces environmental pollution but also enhances the utilization rate of resources. The Group has laid out a new track for lithium battery recycling and made a model of green development in battery production and R&D, and recycling of decommissioned batteries. The recycling and reuse of power batteries effectively alleviates the supply gap of battery metals in China, and plays an important role in safeguarding the safety and stability of the industrial chain.



本集團建立鉛蓄電池、鋰離子電池兩大循環經濟生態圈,積極履行生產者責任延伸制,在全國建設了 4 大鉛蓄電池循環經濟產業園和 2 大鋰電池循環經濟產業園。每天都會有來自全國的 3,000 多噸廢電池進入天能循環經濟產業園。在廢鉛酸蓄電池回收處理方面,每生產一噸再生鉛可減少固體廢物 60%,減排二氧化硫 66%。回收再利用率均達 99%以上。與原生鉛冶煉相比,每生產一噸再生鉛能耗減少 70%至 75%,不僅使廢舊電池得到有效處理,每年還能夠節約標煤近 1,120 萬噸,減少鉛礦開採 2,250 萬噸。鋰電回收方面,本集团現有 1 萬噸年處置產能,加上江蘇省濱海縣的在建基地,建成後將實現每年 11 萬噸鋰資源綜合利用的能力,作為長三角地區的回收利用引擎。

本集團的循環產業實現了環境效益、經濟效益、社會效益的有機統一,為環境可持續發展做出了顯著貢獻,成為綠色增長的典範企業。通過綠色智造和循環回收,天能將綠色發展理念貫穿到產品設計、製造、回收處置全過程,形成了閉環式綠色產業鏈。

同時,本集團聚焦智慧儲能、氫能等領域的技術探索和產品創新,持續提高循環經濟領域的自主創新能力,促進了行業技術進步,積累了豐富的技術經驗和項目案例。「綠色產業」考驗的是企業的定力,更是一場技術變革。天能將不斷嘗試在科技創新中推進「綠色智造」高品質發展,走出有浙江特色的綠色低碳轉型路,為國家實現「雙碳」目標做出積極貢獻

The Group has established two major circular economy ecosystems for lead-acid batteries and lithium-ion batteries, actively implemented the extended producer responsibility system, and built four major lead-acid battery circular economy industrial parks and two major lithium-ion battery circular economy industrial parks in China. Every day, more than 3,000 tons of waste batteries from all over the country enter the Tianneng Circular Economy Industrial Park. In the recycling of waste lead-acid batteries, every ton of recycled lead produced can reduce solid waste by 60% and reduce sulfur dioxide emissions by 66%. The recycling rate reaches over 99%. Compared with primary lead smelting, the energy consumption of each ton of recycled lead can be reduced by 70% to 75%, which not only enables the effective treatment of waste batteries, but also saves nearly 11.2 million tons of coal and reduces the mining of lead mines by 22.5 million tons per year. In terms of lithium-ion batteries recycling, we have existing 10,000 tons of annual disposal capacity, together with the base under construction in Binhai County, Jiangsu Province, will achieve an annual capacity of 110,000 tons of lithium resources comprehensive utilization, serving as a recycling engine in the Yangtze River Delta region.

The Group's recycling industry has realized the organic unity of environmental, economic and social benefits, making significant contributions to the sustainable development of the environment and becoming a model enterprise for green growth. Through green manufacturing and recycling, Tianneng has integrated the concept of green development into the entire process of product design, manufacturing, recycling and disposal, forming a closed-loop green industrial chain.

At the same time, the Group focuses on technology exploration and product innovation in the fields of smart energy storage and hydrogen energy, continues to improve its independent innovation capability in the field of circular economy, promotes the technological progress of the industry, and accumulates a wealth of technological experience and project cases. The "Green Industry" is a test of the enterprise's determination and a technological change. Tianneng will continue to try to promote the high-quality development of "Green Smart Manufacturing" in scientific and technological innovation, walk out of the green low-carbon transformation road with Zhejiang characteristics, and make positive contributions to the country's realization of the "Dual Carbon" goal.

4大 FOUR

鉛蓄電池循環經濟產業園 Lead-acid batteries circular economy industrial parks **2**大

鋰電池循環經濟產業園 Li-on batteries circular economy industrial parks 3,000多噸

MORE THAN 3,000 TONS 來自全國的廢電池進入天能循環經濟產 業園(每日)

waste batteries from all over the country enter the Tianneng Circular Economy Industrial Park Every day

每生產一噸再生鉛 Each ton of recycled lead produced can reduce

減少固體廢物 Solid waste by 減排二氧化硫 Sulfur dioxide by

60%

66%

廢鉛酸蓄電池 回收再利用率均達

The recycling rate of waste lead-acid batteries exceeded

99% DAF

每生產一噸再生鉛 相比原生鉛減少能耗

Energy consumption per ton of recycled lead produced compared to virgin lead reduced by

70%-75%

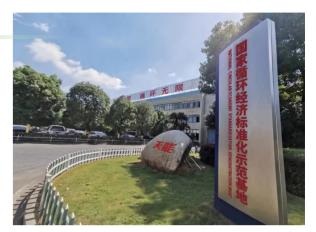


循環經濟示範 Circular Economy Demonstration

專題二: 環境 Theme II: Environment

天能電源材料有限公司的「廢鉛酸蓄電池回收處理項目」 榮獲國家標準委公佈的 2023 年國家循環經濟標準化示 範項目,共有六家單位獲此殊榮。這一示範項目在前期試 點建設的基礎上,不斷總結提煉循環經濟標準化模式及 經驗,並在集團內部的四大基地以及行業內的四家企業 開展了循環經濟標準化模式的複製推廣工作。通過依託 行業協會資源,進行媒體宣傳、展覽展示,並結合重大活 動日開展公益宣傳,實現了標準體系的持續更新和運行, 進一步推動了相應標準的實施,發揮了示範帶動效應,強 化了輻射帶動作用。

The "Waste Lead-acid Battery Recycling and Treatment Project" of Tianneng Power Materials Co., Ltd.(天能電源材料有限公司) has been awarded the National Circular Economy Standardization Demonstration Project for 2023 by the National Standards Committee, with a total of six units being awarded this honor. On the basis of the pilot construction in the early stage, this demonstration project has continuously summarized and refined the standardized model and experience of circular economy, and replicated and promoted the standardized model of circular economy in the four bases within the Group and four enterprises in the industry. By relying on the resources of industry associations, conducting media publicity, exhibitions and



天能電源材料有限公司 Tianneng Power Materials Co., Ltd.

displays, and carrying out public welfare publicity in conjunction with major event days, it has realized the continuous updating and operation of the standard system, further promoted the implementation of the corresponding standards, exerted demonstration-driven effects, and strengthened the radiation-driven role.standards, exerted demonstration-driven effects, and strengthened the radiation-driven role.

鉛蓄電池回收項目點火儀式

Lead-acid Battery Recycling Project Ignition Ceremony

2023 年 3 月, 江蘇天能資源循環科技有限公司的年 25 萬噸廢鉛蓄電池(含鉛廢料)無害化綜合利用項目舉行點 火儀式。該項目為本集團循環事業部重點項目, 開工建設 2 年來逐步完成綠色製造試產工作。 In March 2023, Jiangsu Tianneng Resource Recycling Technology Co., Ltd., held an ignition ceremony for harmless comprehensive utilization project of the annual 250,000 tons of waste lead-acid batteries (including lead waste). This project is a key project of the Circular Division of the Group, and the green manufacturing trial production has been gradually completed over the past 2 years since commencement.

獎項 Awards

本年,由中國循環經濟協會主辦的「2023 全國循環經濟科技創新工作會議」上,子公司浙江天能資源循環科技有限公司榮獲了「全國循環經濟技術中心」稱號。同時,子公司浙江天能新材料有限公司主導的廢舊動力鋰電池清潔回收綠色循環工藝項目榮獲科技進步獎(技術開發類)二等獎。

Subsidiary Zhejiang Tianneng Resource Recycling Technology Co., Ltd. has been awarded the title of "National Circular Economy Technology Center" at the "2023 National Circular Economy Science and Technology Innovation Work Conference" organized by China Association of Circular Economy this year. At the same time, subsidiary Zhejiang Tianneng New Material Co., Ltd. won the second prize of Science and Technology Progress Award (Technology Development Category) for the project of clean recovery and green recycling process of waste lithium power battery led by Tianneng.

專題一: 公司治理 Theme I: Corporate Governance

能源管理 Energy Management

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:









作為新能源電池企業,本集團全面鍛強動力電池產業鏈,聚力 構建新型儲能生態圈,推動實現動力電池和智慧儲能兩大核 心產業的協同發展。我們積極推動光伏和儲能電站的建設。 通過引入先進的光伏技術和儲能系統,提高能源利用效率,減 少對傳統能源的依賴,推動清潔能源的發展。

As a new energy battery enterprise, the Group comprehensively forges and strengthens the power battery industry chain, concentrates on building a new type of energy storage ecosystem, and pushes forward the realization of the synergistic development of the two core industries of power battery and intelligent energy storage. We are actively promoting the construction of photovoltaic and energy storage power plants. By introducing advanced photovoltaic technology and energy storage systems, we are committed to improving the efficiency of energy utilization, reducing reliance on traditional energy sources and promoting the development of clean energy.

■ 節能降耗 Energy Saving and Consumption Reduction

年內, 本集團發佈《關於加強集團總部節能降耗管理的通 知》《關於加快推進流程線上化和辦公無紙化的倡議》《集團 總部關於回收印表機調配的公告》等公告,加強用電管理, 抓實節水管理,推行共享印表機,減少一次性物品使用,並 強化監督檢查。為了更好地管理和控制能源的使用, 我們制 定了能源管理控制程序,以確保能源的高效利用和節約。

集團總部物業中心將組織牽頭聯合集團辦公室、審計監察 中心、人力資源中心等部門定期開展能耗使用監督檢查,對 不合規行為進行通報。旨在提高員工「節約就是效益」的意 識, 進一步降低經營成本和能耗消費, 在公司經營範圍內最 大限度的節能降耗, 牢牢把握「雙碳」發展新機遇, 全面構建 綠色發展體系,驅動企業高品質發展,為能源轉型和綠色發 展貢獻新的更大力量。

During the year, the Group has issued announcements such as *Notice on* Strengthening the Management of Energy Saving and Consumption Reduction at the Group Headquarters, Initiative on Accelerating Online Processes and Paperless Offices and Announcement on Recycling of Printer Deployment at the Group Headquarters, to strengthen the management of electricity consumption, to grasp the management of water conservation, to implement the sharing of printers, to reduce the use of disposable items and to strengthen supervision and inspection. In order to better manage and control the use of energy, we have formulated energy management control procedures to ensure the efficient utilization and saving of energy.

The Property Center of the Group will take the lead in organizing regular supervision and inspection of energy consumption in conjunction with the Group Office, Audit Supervision Center, Human Resource Center and other departments, and notify the non-compliance behaviors. The purpose is to improve the staff's awareness of "Saving Equals Benefit", further reduce operating costs and energy consumption, maximize energy saving and consumption reduction within the Company's scope of operation, firmly grasp the new opportunity of "Dual Carbon" development, comprehensively build a green development system, and drive the Company's high-quality development. We will further reduce operating costs and energy consumption, maximize energy saving and consumption reduction within the Company's scope of operation, firmly grasp the new opportunity of "Dual Carbon" development, comprehensively build a green development system, drive the enterprise's high-quality development, and contribute to energy transformation and green development.

本集團智慧型儲能電站廣泛應用於光伏儲能、 風電儲能等 電網側、 用戶側領域, 打造了長興雉城儲能電站電網側項 目、非洲光伏儲能離網項目、上海松江用戶側項目、長沙 汽車產業園智慧微電網系統等。我們在廠區建立了光伏綠 電系統, 充分利用廠區的空閒屋頂安裝光伏組件、 支架、 逆變器、交流匯流箱、接入櫃等設備, 完成光伏系統的建 設,採用自發自用餘電電網模式接入電網。

The Group's intelligent energy storage power plants are widely used in grid-side and user-side fields such as photovoltaic FSS and wind FSS. We have built the Grid-Side Project of Energy Storage Power Plant in Changxing County, Zhejiang Province, the Off-Grid Project of African Photovoltaic Energy Storage, the User-Side Project in Shanghai City, and the Intelligent Micro-grid System of Automobile Industrial Park in Changsha City, Hunan Province. We have established a PV green power system in our factory, fully utilized the vacant roof of the factory to install PV modules, racks, inverters, AC junction boxes, access cabinets and other equipment to complete the PV system, which is connected to the grid using self-generation and self-consumption residual power grid mode.

專題三: 社會責任 Theme III: Social Responsibility



天能智慧能源以客戶為中心,提供一站式低碳緑色電力解決方案

Tianneng Intelligent Energy provides customer-centered, one-stop, low-carbon green power solutions.

我們已建成屋頂光伏項目約 60.77Mw

We have completed approximately 60.77MW of rooftop PV projects

据建約 167.14mw

Approximately 167.14 MW proposed

項目全部建成後可形成 **227.91 MW** 規模的發電能力

After the project is fully completed, it can form a power generation capacity of 227.91MW.

每年可產生 2.39 億度綠電

It generates 239 million kWh of greenhouse gas per year

本集團全年能源消耗:

Annual energy consumption of the Group:

	單位 Unit	2023 年 Year 2023
綜合能源消耗 Comprehensive Energy Consumption	兆瓦時 MWh	3,547,221.70
外購用電總量 Total Purchased Electricity Consumption	兆瓦時 MWh	3,541,387.58
新能源發電總量 Total Photovoltaic Power Generation	兆瓦時 MWh	5,834.12
汽油消耗量 Gasoline Consumption	升 L	79,658.39
天然氣使用量 Natural Gas Consumption	立方米 m³	54,296,774.95
耗水總量 Total Water Consumption	萬立方米 10 thousand m³	1,054
製成品包裝材料的使用總量 Total Consumption of Packaging Materials for Finished Goods	順 ton	32,762

室 案例 Case



水資源循環 Water Resources Cycle

本集團注重水資源的可持續利用。在生產過程中,我們採取節水措施,優化用水系統,確保高效利用水資源的同時,減少對環境的影響。鉛蓄電池生產廢水以「生化、斜板沉澱」工藝配套中水回用系統為主,水回收利用率70%以上,廢水總鉛實測排放濃度在0.15mg/m3以內。我們努力實現水資源的循環利用,以減緩水資源枯竭的問題。

The Group focuses on the sustainable utilization of water resources. During the production process, we adopt water conservation measures and optimize the water consumption system to ensure the efficient use of water resources while reducing the impact on the environment. The wastewater from lead-acid battery production is mainly reused in a "Biochemical & Inclined Plate Sedimentation" process with a water reuse system, with a water reuse rate of more than 70%, and the measured concentration of total lead in wastewater discharged is within 0.15mg/m3. We strive to realize the recycling of water resources to slow down the problem of water depletion.

■ 新型儲能 New Energy Storage

作為新能源企業,本集團深刻認識到,儲能是能源變革的關鍵技術之一,也是實現「雙碳」發展的重要路徑。天能將充分發揮全產業鏈支撐、多技術路線並行的領先優勢,以示範場景建設推廣,不斷壯大先進光伏和新型儲能產業集群。

天能將充分發揮新能源電池企業優勢, 聯動上下游, 整合高端項目、優勢資源, 助力加快構建儲能產業生態, 強化產業鏈供應鏈韌性; 充分發揮產業優勢, 與地方政府共同建立儲能投資平臺,建設園區智慧能源管理平臺,降低企業用電成本,培育產業鏈關鍵節點企業,通過政企協同、產業鏈協同,共同破解「卡脖子」問題。

As a new energy enterprise, the Group deeply recognizes that energy storage is one of the key technologies for energy transformation and an important path to achieve "Dual Carbon" development. Tianneng will give full play to its leading advantages of full industrial chain support and parallel multi-technology routes, and will continue to grow its advanced PV and new energy storage industry clusters through the construction and promotion of demonstration scenarios.

Tianneng will give full play to the advantages of new energy battery enterprises, link upstream and downstream, integrate high-end projects, advantageous resources, help accelerate the construction of the energy storage industry ecology, strengthen the toughness of the industrial chain supply chain; give full play to the industrial advantages, and work with the local government to establish an investment platform for energy storage, construct the park's intelligent energy management platform, reduce the cost of electricity, cultivate key industry chain node enterprises and solve the "bottleneck" problems through the government-enterprise coordination and industry chain synergy.



本集团董事局主席在安徽省先進光伏和新型儲能產業集群建設推進大會上發言 Chairman of the Board of Directors at the conference to promote the construction of advanced photovoltaic and new energy storage industry clusters in Anhui Province





「和平共儲」電站項目

"Peaceful co-storage" power station project

2023年,本集團助力共建的世界最大鉛炭智慧電站「和平共儲」項目一期投入運營。该項目以最大程度地發揮天能鉛碳電池的特性,建設高效穩定的電站,將電池作為主要的能源儲備源,以滿足工廠的電力需求。通過巧妙地利用峰谷電差,為部分集團工廠提供穩定電力供應,體現了儲能經濟效益。

In 2023, the "Peaceful co-storage" power station project, the world's largest lead-carbon smart power factory, which the Group helped to build, has officially commenced operation. The Project maximizes the characteristics of Tianneng's lead-carbon batteries and builds highly efficient and stable power plants that use the batteries as the main source of energy reserves to meet the power needs of factories. By skillfully utilizing the peak-to-valley electrical difference, the project provides a stable power supply for some of the Group's factories, thus showing the economic benefits of energy storage.



「和平共儲」電站 "Peaceful co-storage" power station

儲能項目投產並網慶典

Energy Storage Project Commissioning and Grid Connection Celebration

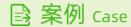
2023年11月,本集團新建的鋰電池基地一期6GWh投產暨200MWh儲能電站項目並網成功慶典活動舉行。上述兩個項目的順利達成都是天能儲能產業生態的進一步壯大,助推儲能產業再上新臺階。

In November 2023, a ceremony was held to celebrate the successful commissioning of the first phase of the 6GWh lithium-ion battery base project of the Group and the successful grid connection of the 200MWh energy storage power station project of the Group. The successful completion of the above two projects is a further expansion of Tianneng's energy storage industry ecosystem, which has helped to push the energy storage industry to a new level.



集團鋰電池基地投產儀式慶典

Ceremony to celebrate the commissioning of the Group's lithium-ion batteries base





東南亞市場儲能合作

Energy Storage Cooperation in Southeast Asian Markets

2023年11月, 天能與越南 BEIN 股份公司簽署儲能 戰略合作協定。此次合作, 雙方將充分發揮技術、 資源和市場等方面優勢, 共同開展儲能領域合作與交流, 推動天能儲能產品在東南亞市場的推廣與應用,助力越南綠色經濟、綠色轉型,實現可持續發展。

In November 2023, Tianneng signed a strategic cooperation agreement on energy storage with BEIN Vietnam. In this cooperation, both parties will give full play to their advantages in technology, resources and market to jointly carry out cooperation and exchanges in the field of energy storage, promote the promotion and application of Tianneng's energy storage products in Southeast Asian markets, and help Vietnam's green economy and green transformation to realize sustainable development.

專題三: 社會責任 Theme III: Social Responsibility

液冷儲能項目

Liquid-Cooled Energy Storage Project

2023 年,本集團建設了首個百 MW 級的液冷儲能項目。該項目採用先進磷酸鐵鋰電池、 智能化 BMS 系統、EMS 管理系統、一體化建設鋰電儲能系統,具有工作效率高、運行速度快,循環壽命長、安全性能強等特性,適用於削峰填谷、調峰調頻、輔助新能源並網等應用場景,以實現綜合效益提升。

In 2023, the Group constructed the first 100MW-class liquid-cooled energy storage project. The project adopts advanced lithium iron phosphate batteries, intelligent BMS system, EMS management system and integrated system warehouse to build a lithium-ion energy storage system, which is featured with high efficiency, fast operation, long cycle life and strong safety performance, and is suitable for application scenarios such as peak shaving and valley filling, peak shifting and frequency regulation, and assisting new energy grid connection to realize comprehensive benefit enhancement.



■ 清潔能源推廣 Clean Energy Promotion

氫能源的使用將在全球範圍內產生積極的環境影響, 為可持 續發展和地球環境的改善提供有效的解決方案。通過推動氫 能源的發展,我們有望迎來更清潔、更綠色的未來。本集團 致力於氫燃料電池技術的研究推廣,推動清潔能源的使用做 出了積極貢獻。本集團的氫能燃料電池產品廣泛應用於交 通、工程機械、能源等領域。這對於減少碳排放、改善空氣 品質和推動可再生能源的發展具有重要意義。

The use of hydrogen energy will have a positive environmental impact on a global scale, providing an effective solution for sustainable development and the improvement of the Earth's environment. By promoting the development of hydrogen energy, we are expected to usher in a cleaner and greener future. The Group is committed to the research and promotion of hydrogen fuel cell technology and has made positive contributions to the promotion of the use of clean energy. The Group's hydrogen fuel cell products are widely used in transportation, construction machinery and energy. This is of great significance in reducing carbon emissions, improving air quality and promoting the development of renewable energy.



自研氫燃料電池系統裝車運行

Self-Developed Hydrogen Fuel Cell System Loaded for Operation

2023年, 天能氫能源科技有限公司(天能氫電)研發的 大功率氫燃料電池系統成功裝車運行,進入實車工況運營 階段。該系統能夠有效提高系統功率密度,實現了全工況 範圍的氫氣高效循環利用, 同時保障電堆穩定、 高效運 行,保障燃料電池系統在高效率區間運行,核心指標處於 行業領先水準。

In 2023, the high-power hydrogen fuel cell system researched and developed by Tianneng Hydrogen Energy Technology Co., Ltd. (Tianneng Hydrogen) was successfully loaded into vehicles and entered the stage of live vehicle operation. The system can effectively improve the system power density, realize the efficient recycling of hydrogen in the whole range of working conditions, and at the same time ensure the stable and efficient operation of the electric piles, guarantee the fuel cell system to operate in the high efficiency zone, and the core indexes be at the leading level in the industry.

氫能源裝載機樣機下線

Hydrogen Energy Loader Prototype off the Assembly Line

2023年, 天能氫電與山西格潤時代工程機械有限公司合 作,天能氫電提供先進的氫燃料發動機系統解決方案,山 西格潤時代提供整車控制技術支援,雙方聯合研發的首台 氫能源裝載機樣車於 4 月下線, 標誌著天能氫電在氫燃 料電池系統應用領域實現新突破。

In 2023, Tianneng Hydrogen cooperated with Shanxi Grun Times Construction Machinery Co., Ltd. (Shanxi Gerun Times). Tianneng Hydrogen provided advanced hydrogen fuel engine system solutions while Shanxi Gerun Times provided technical support for vehicle control. The first prototype hydrogen loader jointly developed by the two parties rolled off the assembly line in April, marking a new breakthrough for Tianneng Hydrogen Power in the application field of hydrogen fuel cell



專題二: 環境 Theme II: Environment

集團董事局主席參加 2023 國際儲能和氫能與燃料電池技術和裝備 及應用(上海)大會暨展覽會

Chairman of the Board of Directors of the Group attended the 2023 international energy storage and hydrogen fuel cell technology and equipment and application (Shanghai)



天能氫能系統新品發佈會 Tianneng hydrogen energy system new product launching event

獎項 Awards

2023年3月, 中國氫能裝備與燃料電池產業大會在北 京開幕, 天能氫電獲得「2022年度影響力燃料電池企 業獎」。

2023年4月,由中國改革報《能源發展》週刊、中國 產業發展促進會氫能分會共同舉辦的「第八屆中國能源 發展與創新論壇」在北京召開。天能氫電憑藉在山西省 氫能工程機械示範項目中的突出表現, 獲評「踐行雙碳 目標 2022 年度最佳創新項目獎」。

In March 2023, China Hydrogen Equipment and Fuel Cell Industry Conference was opened in Beijing, and Tianneng Hydrogen won the "2022 Influential Fuel Cell Enterprise Award".

In April 2023, the "8th China Energy Development and Innovation Forum" was held in Beijing, which was co-organized by Energy Development, Weekly Magazine of China Reform Newspaper and the Hydrogen Energy Branch of China Association for the Promotion of Industrial Development. Tianneng Hydrogen has been awarded the "Best Innovative Project Award for Practicing the Dual Carbon Goal in 2022" for its outstanding performance in the Hydrogen Energy Engineering Machinery Demonstration Project of Shanxi Province.



2022 年度影響力燃料電池企業獎 2022 Influential Fuel Cell Enterprise Award



踐行雙碳目標 2022 年度最佳創新項目獎 Best Innovative Project Award for Practicing the Dual Carbon Goal in 2022

污染物管理 Pollutant Management

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:







本集團已通過了 ISO14001 環境管理體系認證。為加強環保管理,減少污染物排放,我們頒佈並實施了《天能控股集團環安管理體系制度彙編(B/0版)》,具體制度包括《環安設備設施管理制度》《污染物管理制度》《環安監測預警管理制度》《環安三同時管理制度》《投資項目環安審批管理制度》《清潔生產管理制度》《碳資源管理制度》等。

本集團執行各類國家和地方要求的污染物排放限值標準, 全面構建污染物自行監測、第三方委託檢測、固定污染源線 上監測及政府部門監督相結合的全方位污染物防控體系, 採用行業內最領先的技術和裝備,保障治理設施長期穩定 運行,實現廢氣、廢水等各類污染物達標排放。 The Group has passed the ISO14001 Environmental Management System Certification. In order to strengthen environmental protection management and reduce pollutant emissions, we have promulgated and implemented the Compilation of Environmental Safety Management System of Tianneng Holding Group (Version B/0), which includes the following systems: Environmental Safety Equipment and Facility Management System, Pollutant Management System, Environmental Safety Monitoring and Early Warning Management System, Three Simultaneity Management System for Environmental Safety, Environmental Safety Approval and Management System for Investment Projects, Clean Production Management System and Carbon Resource Management System, among others.

The Group follows the pollutants emission limit standards of various countries and local governments, constructs a comprehensive pollutant prevention and control system that combines pollutants self monitoring, third-party commissioned testing, online monitoring of fixed pollution sources, and government supervision. With the most advanced technology and equipment in the industry, the company is able to ensure the long-term stable operation of treatment facilities and standard discharge of various pollutants, including waste gas and wastewater.

廢氣:本集團採用合適的工藝手段、引入先進設備,多措並 舉妥善處理生產過程中的廢氣,滿足監管要求。

廢水:本集團嚴格遵守《水污染防治法》等法律法規,對廠區產生的廢水進行統一管理並對處理後的污水進行抽查,確保排放的廢水水質符合《污水綜合排放標準》和地方排放要求,公司各產業廢水污染治理水準處於國際領先水準。

有害固體廢棄物:本集團編制了《固體廢物管理制度》,對生產過程中產生的含鉛廢物、廢勞保等危險廢物按照《固體廢物防治法》規定建設了危險廢物貯存間,並規範收集、貯存、轉移、處置流程,定期委託有資質的處置單位進行處置,完善台賬,實現產生、貯存、處置全生命週期的管理。

無害固體廢棄物:對於經營產生的無害固體廢棄物,包括廢棄包裝材料、廢鐵等一般固廢,公司建立一般固廢貯存間並委託有資質的處置單位進行循環利用,實現一般固廢的分類收集、轉移及合規處置。生活垃圾定期交由當地環衛部門妥善處理。

Exhaust Gas: The Group adopts appropriate process means, introduces advanced equipment, and takes multiple measures to properly treat the exhaust gas in the production process to meet the regulatory requirements.

Wastewater: The Group strictly abides by the Water Pollution Prevention and Control Law and other laws and regulations, carries out unified management of wastewater generated in the plant and conducts spot checks on treated wastewater to ensure that the quality of discharged wastewater complies with the Comprehensive Wastewater Emission Standards and local discharge requirements. The Group is at the international leading level in terms of wastewater pollution control in the various industries.

Hazardous Solid Waste: The Group has prepared the *Solid Waste Management System*, constructed a hazardous waste storage room in accordance with the provisions of the *Solid Waste Prevention and Control Law* for the lead-containing wastes, waste labor insurance and other hazardous wastes generated in the production process, standardized the process of collection, storage, transfer and disposal, and regularly entrusted qualified disposal units to dispose of them, and perfected the ledger to realize the management of the whole life cycle of generation, storage and disposal.

Harmless Solid Waste: For harmless solid waste generated from operation, including waste packaging materials, scrap iron and other general solid waste, the Company establishes a general solid waste storage room and entrusts qualified disposal units to carry out recycling, realizing classified collection, transfer and compliant disposal of general solid waste. Domestic garbage is regularly handed over to the local sanitation department for proper disposal.





2023年本集團部分子公司排放物情況如下:

The emissions of some of the Group's subsidiaries in 2023 were as follows:

公司或子公司名称 Name of company or subsidiary	主要污染物及特征污染物的名称 Name of main pollutants and characteristic pollutants	排放方式 Emission method		核定的排放总量指标 (吨 / 年) Total approved emission (tonnes/year)		
	铅及其化合物 Lead and its compounds		0.25	0.1459		
	硫酸雾 Sulfuric Acid Mist	处理后有组织排放 Organised emissions after treatment	5	4.82598	0	
天能电池集团股份有限公司	氮氧化物 Nitrogen oxide		30	0.24		
Tianneng Battery Group Co.,Ltd.	化学需氧量 Chemical oxygen demand		150	1.98		
	氨氮 Ammonia	处理后纳管排放	30	0.1		
	总铅 Total lead	Post-treatment discharge	0.5	0.00998		
	铅及其化合物 Lead and its compounds	处理后有组织排放	0.25	0.5943		
		メレモル 日 出土バイル Organised emissions after treatment	150	4.636		
折江天能动力能源有限公司	总铅 Total lead		0.5	0.0053	0	
アルス 前と切り 前を形式 ロコント Energy Co.,Ltd.	化学需氧量 Chemical oxygen demand	处理后纳管排放至园区污水厂 Post-treatment discharge to	150	17.97		
	复氮 Ammonia	park sewage plant	30	3.59		
	铅及其化合物 Lead and its compounds		0.35	0.2275		
	硫酸雾 Sulfuric Acid Mist	处理后有组织排放 Organised emissions after treatment	5	5.76		
浙江天能电池(江苏) 有限公司	总铅 Total lead		0.5	0.005	0	
hejiang Tianneng Battery (Jiangsu) Co.,Ltd.	化学需氧量 Chemical oxygen demand	处理后接入市政管网	150	8.46		
	复氮 Ammonia	Connect to municipal pipe network after treatment	30	0.77		
	铅及其化合物 Lead and its compounds		0.35	0.238	0	
光江工作内地	硫酸雾 Sulfuric Acid Mist	处理后有组织排放 Organised emissions after treatment	5	1.32		
浙江天能电池 江苏新能源有限公司	总铅 Total lead	处理后接入市政管网 Connect to municipal pipe network after treatment	0.5	0.006		
Zhejiang Tianneng Battery Jiangsu New Energy Co.,Ltd.	化学需氧量 Chemical oxygen demand		150	5.293		
	复氮 Ammonia		30	0.68		
	铅及其化合物 Lead and its compounds	处理后有组织排放	0.5	0.6586		
天能电池集团(安徽)	总铅 Total lead	Organised emissions after treatment 处理后排入园区污水处理厂 Discharge to park sewage	0.5	0.06782	0	
有限公司 Tianneng Battery Group (Anhui)	化学需氧量 Chemical oxygen demand		150	I		
Co.,Ltd.	氨氮 Ammonia	plant after treatment	30	1		
	铅及其化合物 Lead and its compounds	61 vm c + /0/041646	0.5	1.043		
	硫酸雾 Sulfuric Acid Mist	处理后有组织排放 Organised emissions after treatment	5	I		
天能集团(河南)能源科技	总铅 Total lead		0.5	0.075	0	
有限公司 Tianneng Group (Henan) Energy Technology Co.,Ltd.	化学需氧量	处理后纳管排放	150	14.925		
reciliology Co.,Lta.	Chemical oxygen demand 氨氮	Post-treatment discharge	30	1.825		
济源市万洋绿色能源	Ammonia ・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・・	处理后有组织排放	0.5	0.3		
	Lead and its compounds 二氧化硫 Sulfur dioxide	Organised emissions after treatment 任氨燃烧超低排放 Low-NOx combustion with ultra-low emissions	10	I	0	
	氮氧化物 Nitrogen oxide		30	0.99		
有限公司 Jiyuan Wanyang Green Energy	总铅 Total lead		I	I		
Co.,Ltd.	化学需氧量 Chemical oxygen demand	厂区污水站处理后 进入城镇污水管网	50	11.92		
	Chemical oxygen demand 氨氮 Ammonia	Connect to town sewage pipeline after plant sewage station treatment	5	1.04		

公司或子公司名称 Name of company or subsidiary		排放方式 Emission method		核定的排放总量指标(吨 / 年) Total approved emission (tonnes/year)	
-	铅及其化合物 Lead and its compounds		2	0.3432	
	福及其化合物 Cadmium and its compounds		0.05	/	
	二氧化硫 Sulfur dioxide		100	16.418882	
	格及其化合物 Chromium and its compounds	处理后有组织排放 Organised emissions after treatment	1	1	
安徽天畅金属材料有限公司 Anhui Tianchang Metal	氮氧化物 Nitrogen oxide		100	31.42	0
Materials Co.,Ltd.	颗粒物 Particulate matter		10	1.563	
	锡及其化合物		1	0.352	
-	Tin and its compounds		1	0.772	
	Antimony and its compounds		0.4	1	
	Arsenic and its compounds 颗粒物		10	16.14	
	Particulate matter 铅及其化合物		2(承诺更加严格排放限值 0.4/DA006 为 0.6)	0.83512	
	Lead and its compounds 氮氧化物	处理后有组织排放 Organised emissions after treatment	2(Commitment to stricter emission limits 0.4/DA006 is 0.6)	36.82	
f江天能电源材料有限公司	Nitrogen oxide 二氧化硫				0
Zhejiang Tianneng Power Supply Material Co.,Ltd.	Sulfur dioxide 化学需氧量		100	19.65	U
-	Chemical oxygen demand 氨氮	从现后纳德非故	500	34.5	
	Ammonia 总铅	处理后纳管排放 Post-treatment discharge	25	0.255	
	Total lead 镉及其化合物		0.2	0.01134	
-	Cadmium and its compounds	处理后有组织排放 Organised emissions after treatment	1	I	0
-	颗粒物 Particulate matter		10	3.461	
	铅及其化合物 Lead and its compounds		2	0.2565	
	铬及其化合物 Chromium and its compounds		1	I	
	揮發性有機物 VOCs		60	1	
	砷及其化合物 Arsenic and its compounds		0.4	0.0005	
	二氧化硫 Sulfur dioxide		100	33.338	
	氮氧化物 Nitrogen oxide		100	31.301	
	硫酸雾 Sulfuric Acid Mist		10	2.453	
江苏天能资源循环	动植物油 Animal and vegetable oils		100	1	
科技有限公司 Jiangsu Tianneng Resource	悬浮物 Suspension		400	0.518	
Recycling Technology Co.,Ltd.	总氮(以 N 计) Total nitrogen (in N)		45	0.302	
	化学需氧量 Chemical oxygen demand		500	3.024	
-	总磷(以P计) Total phosphorus (in P)	处理后纳管排放 Post-treatment discharge	8	0.035	0
-	氨氮(NH3-N) Ammonia (NH3-N)	Sauron adoriugo	35	0.043	
-	总铅 Total lead		0.2	0	
-	pH 值 pH value		6-9	/	
	五日生化需氧量 Five-day BOD		300	0	
	铅及其化合物 Lead and its compounds		2	0.345	
	二氧化硫	处理后有组织排放	100	53.574	
	Sulfur dioxide 氮氧化物	Organised emissions after treatment	100	42.84	
能集团(濮阳)再生资源 有限公司	Nitrogen oxide 化学需氧量		不外排	0	0
Tianneng Group (Puyang) Renewable Resources Co.,Ltd.	Chemical oxygen demand 氨氮	处理后纳管排放	Not discharged externally 不外排	0	
	Ammonia 总铅	Post-treatment discharge	Not discharged externally 不外排		
	Total lead		Not discharged externally	0	

氣候風險管理 Climate Risk Management

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:



隨著氣候變化的不斷加劇, 我們企業深刻關注氣候風險對 業務運營和全球經濟的影響。天能主營業務的 90% 以上 用於電動輕型車,在終端應用領域具有天然的低碳、環保 優勢。

本集團 2023 年售出約 5.01 億只動力電池。按每組電池 (4 只 電池為一組) 蓄電後可騎行 60 公里, 每組電池可充放電 400 次計算, 天能全年售出的電池累計行駛里程可達到 30,060 億 公里。假設以80%代替摩托車里程,20%代替轎車里程,那麼 天能一年售出的電池代替摩托車里程部分為 24.048 億公里, 代替汽車里程部分為 6.012 億公里。

As climate change continues to intensify, our business is deeply concerned about the impact of climate risk on business operations and the global economy. More than 90% of the Group's main business is used in light electric vehicles, which has a natural low-carbon and environmentally friendly advantage in end-use applications.

The Group sold approximately 501 million motive batteries in 2023. Based on the calculation that each battery (4 batteries as a set) can last for 60 kilometers after storing electricity, and each battery can be charged and discharged for 400 times. The cumulative driving mileage of the batteries sold by Tianneng for the whole year can reach 3,006 billion kilometers. Assuming that 80% of motorcycle mileage is replaced and 20% of car mileage is replaced, then for the batteries sold by Tianneng in a year, the portion of motorcycle mileage replaced is 2,404.8 billion kilometers, the portion of car mileage replaced is 601.2 billion kilometers.

天能每年售出約

Tianneng sold annually

501 million motive batteries

累計行駛裏程可達

The accumulated mileage can reach

30,060 億公惠





在摩托車和轎車的使用過程中,主要的溫室氣體排放來源於 汽油的使用,除去電動輕型車自身在行駛過程中產生的溫室 氣體、經換算本集團一年售出的動力電池相當於減少了 541.08 萬噸一氧化碳和 22.665.24 萬噸二氧化碳的排放。

假設每公頃土地栽種松樹 1,000 棵,可實現每天吸收二氧化 碳 1 噸,一年可吸收二氧化碳 365 噸。那麼本集團一年售出 的電池所減少的二氧化碳排放, 相當於種植 620,965.48 公頃 的松樹林一年吸收的二氧化碳量,由於每公頃土地栽種松樹 1,000 棵, 那麼本集團一年售出的電池減少的二氧化碳量相 當於種植了約 6.21 億棵松樹。

In the use of motorcycles and traditional cars, the main source of greenhouse gas emissions is the use of gasoline, excluding the greenhouse gases produced by the electric light vehicles themselves in the process of driving, the conversion of the Group's annual sales of motive batteries is equivalent to a reduction of 5.41 million tons of carbon monoxide and 226.65 million tons of carbon dioxide emissions.

Assuming that 1,000 pine trees are planted on each hectare of land, the Group can absorb 1 ton of carbon dioxide per day and 365 tons of carbon dioxide per year. Then the reduction of carbon dioxide emissions from the motive batteries sold by the Group in a year is equivalent to the amount of carbon dioxide absorbed by planting 620,965.48 hectares of pine forests in a year. Since 1,000 pine trees are planted on each hectare of land, the reduction of carbon dioxide emissions from the motiev batteries sold by the Group in a year is equivalent to the planting of approximately 621 million pine trees.

天能每年售出約

專題二: 環境 Theme II: Environment

Tianneng sold annually

5.01 億支動力電池

501 million motive batteries

可實現減少一氧化碳

專題三: 社會責任 Theme III: Social Responsibility

Reduced carbon monoxide

541 萬噸

5.41 million tons



天能每年售出約

Tianneng sold annually

信支動力電池

501 million motive batteries

可實現減少二氧化碳

Reduced carbon dioxide

22,665 萬噸

226.65 million tons



本集團努力通過創新技術和有效管理來減少碳排放, 採取 了一系列的環保舉措。然而, 碳排放量的測算涉及到複雜 而多層次的資料收集和計算過程。我們在積極採用先進的 測量和監測技術, 以確保碳排放量資料的準確性。在確保 資料的精准性和可比性之前, 我們選擇慎重地不公開這些 具體數字。本集團相信, 環保責任是每個企業的基本義 務, 我們更注重採取切實可行的環保行動, 會繼續努力改 進環保實踐,並逐步完善碳排放資料的披露。

The Group endeavors to reduce its carbon emission through innovative technology and effective management by adopting a series of environmental initiatives. However, the measurement of carbon emissions involves a complex and multi-layered process of data collection and calculation. We are actively adopting advanced measurement and monitoring technologies to ensure the accuracy of our carbon emissions data. We have chosen to prudently withhold these specific figures before ensuring the accuracy and comparability of the information. The Group believes that environmental responsibility is the basic obligation of every enterprise. We place greater emphasis on taking practical and feasible actions to protect the environment and will continue to strive to improve our environmental protection practices and progressively improve the disclosure of carbon emission information.

天能每年售出約

Tianneng sold annually

501 million motive batteries

相當於種植松樹 Equivalent to planting pine trees

621 million trees







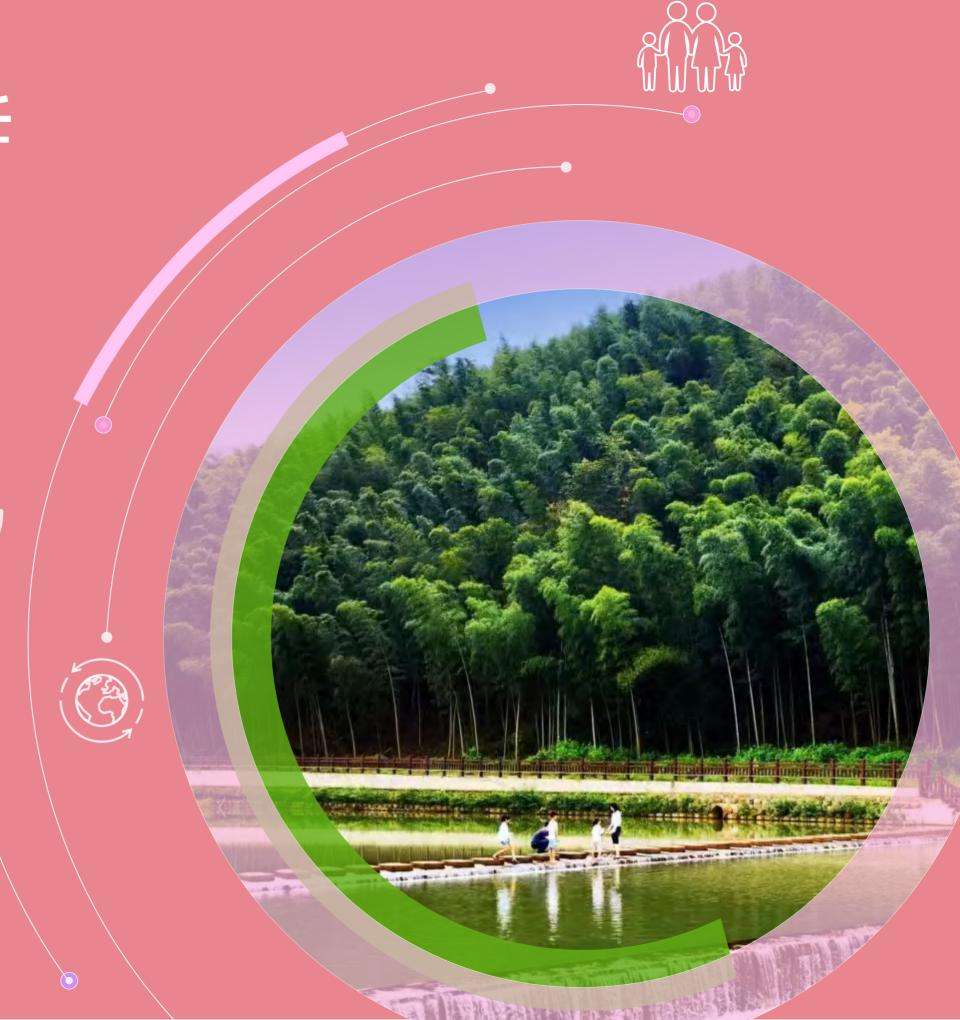
專題三: 社會責任 Theme III: Social Responsibility



就業與納稅 建言獻策 海外拓展 公益慈善

共同富裕

Employment and Taxes Advices and Suggestions
Overseas Expansion **Public Charities Common Prosperity**

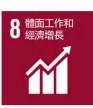


就業與納稅 Employment and Taxes

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:







本集團致力於提供多元化的就業機會, 在新能源電池業務 領域招聘專業人才,同時注重為不同層次、背景和技能的 人才提供機會。促進社會的多元發展的同時, 為更廣泛的 人群提供可持續的就業機會。此外, 本集團制定並實施了 公平薪酬和福利政策,以確保員工在薪酬和福利方面能夠 享有公正的待遇,為整個社會創造更加公平和健康的就業 環境。

by recruiting professionals in the new energy battery business area while focusing on providing opportunities for personnel of different levels, backgrounds and skills. It promotes the diversified development of the society while providing sustainable employment opportunities for a wider range of people. In addition, the Group has formulated and implemented a fair remuneration and benefits policy to ensure that employees can enjoy fair treatment in terms of remuneration and benefits, so as to create a fairer and healthier employment environment for the whole society.

The Group is committed to providing diversified employment opportunities

本集團先後開辦了天能培訓中心、天能數智培訓學校、天 能帥福得工匠學院等學習、提供多樣化的職業技能培訓等 措施, 助力員工高品質就業。近年, 天能加快了轉型升級和 高品質發展的步伐, 需要新鮮力量加入公司, 共同發展; 同時, 天能積極回應國家「穩就業」的部署, 強化了招聘力 度,本年度招聘了1,020名大學應屆畢業生,為歷年來最 高。2023年,本集團新增對外投資,位於江西省信豐縣、浙 江省長興縣等的項目如期投產,為社會提供新增崗位。

The Group has successively set up Tianneng Training Center, Tianneng Digital Intelligence Training School, Tianneng Shuaifude Craftsmen College and other learning programs to provide diversified vocational skills training and other measures to help its employees find high-quality employment. In recent years, Tianneng has accelerated the pace of transformation, upgrading and high-quality development, which requires fresh strength to join the Company for common development; at the same time, Tianneng has responded positively to the deployment of the State to "Stabilize Employment" and strengthened its recruitment efforts, and recruited 1,020 fresh graduates in the current year, which is the highest number in the past few years. In 2023, the Group made new external investments and its projects in Xinfeng County, Jiangxi Province and Changxing County, Zhejiang Province were commissioned as scheduled, providing new jobs for the society.

本集團以合規的方式履行納稅義務, 準確申報和支付各項 稅款。遵循國家稅收法規, 同時積極主動配合稅務部門的 審計和調查工作,確保稅收申報的透明度和真實性。本集 團通過合理合法的稅收規劃, 在保障自身發展的同時, 為 國家經濟發展創造了更多的就業機會和財富。

The Group fulfills its tax obligations in a compliant manner by accurately declaring and paying all taxes. It complies with national tax laws and regulations, and at the same time proactively cooperates with the tax authorities in their audits and investigations to ensure the transparency and authenticity of tax declarations. Through reasonable and lawful tax planning, the Group has created more employment opportunities and wealth for the economic development of the country while safeguarding its own development.



江西新能源製造項目投產儀式 New energy manufacturing project commissioning ceremony in Jiangxi Province

專題二: 環境 Theme II: Environment

助力畢業生就業 Helping Graduates Find Employment

2023年7月,本集團「2023屆校招大學生訓練營」 圓滿收官。經過為期八天的封閉式訓練, 通過軍訓磨 礪、文化融入、團隊融合,新員工們懂得了獨立與協 作, 收穫了堅韌與成長, 成功跨越了職場第一關。

In July 2023, the Group's "2023 Campus Recruitment Training Camp" was successfully concluded. After eight days of closed training, new employees learned to be independent and collaborative, gained resilience and growth, and successfully crossed the first hurdle in the workplace through military drills, cultural integration and team integration.

獎項 Awards

本集團在稅收方面展現了強烈的社會責任感, 2023 年, 本集團在全國各地共繳納稅收超人民幣 43.2 億 元,第9次獲得湖州「金象」企業、「納稅大戶」兩 項榮譽。

The Group has demonstrated a strong sense of social responsibility in terms of tax liabilities. 2023, the Group paid a total of more than RMB4.32 billion in taxes across the country, and was awarded the honor of "Golden Elephant" enterprise and "Big Taxpayer" for the 9th time in Huzhou City.



湖州市「金象」企業獎 The "Golden Elephant" Enterprise Award

建言獻策 Advices and Suggestions

本集團董事局主席張天仟先生長期以來一直致力於關注線 色發展,在他擔任全國人大代表的11年間,每年平均提交 20 份建議議案, 展現出色的履職能力。作為全國人大代 表,張天任先生特別關注環保議題,三分之一的建議議案 與生態環境有關。在 2023 年的全國「兩會」上,作為第十 四屆全國人大代表,張天任先生提交了涉及修訂《環境保 護法》等 4 份議案和新能源產業高品質發展等 27 份議案, 著重關注法治建設和助力「雙碳」戰略。

在 2016 年和 2017 年,張天任先生連續兩年建議對《循環 經濟促進法》進行全面修改, 以提高資源綜合利用效率和 水準。 2018 年, 他建議加快制定 《生態文明建設促進 法》, 以構建完整、協調、科學的生態文明建設法律保障 體系。2021年,他提出通過「適度法典化」路徑編纂《生 態環境法典》。此外, 2022年, 他建議制訂《應對氣候變 化法》,通過法治手段推動「雙碳」戰略的實施。

Mr. Zhang Tianren, Chairman of the Board of Directors of the Group, has long been committed to focusing on green development. During his 11 years as a deputy to the National People's Congress (NPC), he has submitted an average of 20 proposals and motions each year, demonstrating his outstanding ability to fulfill his duties. As a National People's Congress deputy, Mr. Zhang pays special attention to environmental protection issues, and one-third of the proposed motions are related to the ecological environment. In the 2023 National People's Congress, as a representative of the 14th National People's Congress, Mr. Zhang Tianren has submitted 4 motions related to the revision of the Environmental Protection Law and 27 motions related to the high-quality development of the new energy industry, focusing on the construction of the rule of law and assisting in the "Dual Carbon" strategy.

In 2016 and 2017, Mr. Zhang proposed a comprehensive revision of the Circular Economy Promotion Law for two consecutive years to improve the efficiency and level of comprehensive utilization of resources. In 2018, he proposed to speed up the enactment of the Ecological Civilization Promotion Law to build a complete, coordinated, and scientific legal guarantee system for the construction of an ecological civilization. In 2021, he proposed to codify the Ecological Environment Code through the path of "Moderate Codification". In 2022, he proposed to formulate the Law on Coping with Climate Change, so as to promote the implementation of the "Dual Carbon" strategy through the means of the rule of law



專題三: 社會責任 Theme III: Social Responsibility

本集團董事局主席張天任先生出席第十四屆全國人民代表大會一次會議 Mr. Zhang Tianren, Chairman of the Board of Directors of the Group, attended the First Session of the 14th National People's Congress

本年, 主席先生繼續關注重點領域和新興領域的立法, 不 僅提交了修訂《環境保護法》的議案, 還提出制定《農村 生態環境保護法》, 並繼續建議制定 《應對氣候變化 法》。緊密圍繞國家重大改革、發展戰略,不斷修改完 善建議。「踐行綠色發展, 我責無旁貸。」履行社會責 任, 彰顯企業擔當, 不辱使命履職, 是人大代表一份神 聖的責任, 張天任先生在推動生態環境法治建設的道路 上砥礪前行。

This year, Mr. Chairman continued to pay attention to legislation in key and emerging areas. He not only has submitted a motion to amend the Environmental Protection Law, but also proposed the enactment of the Rural Ecological Environment Protection Law, and continued to recommend the enactment of a law on combating climate change. He has closely focused on the country's major reforms and development strategies and continued to revise and improve our proposals. "I am duty-bound to practice green development." Fulfilling Social Responsibility, Undertaking Corporate Responsibility and Performing One's Duty without Fail, is a sacred responsibility of the Deputy to the National People's Congress. Mr. Zhang Tianren is advancing on the path of promoting the rule of law in the ecological environment.



海外拓展 Overseas Expansion

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:





2023年,本集團在擴大國際市場方面取得了顯著的成就,特別是在 10 個重點國家的人員佈局方面,實現了當地語系化的人才配置。這些國家包括越南、泰國、印尼、哥倫比亞、阿根廷、奈及利亞等。其中,已經取得穩定業績輸出的有 6 個國家,這標誌著公司在這些市場上取得了可觀的業績。

此外,公司在 5 個國家已經設立了本地租賃辦公室,進一步鞏固了在這些市場的實力。值得一提的是,公司在泰國和荷蘭的兩個辦事處分別於 2023 年 5 月和 7 月正式開業,為公司的國際化進程注入了新的活力。

天能公司在渠道佈局方面也取得了顯著進展。2023年, 我們與 20 余家海外經銷商簽訂天能品牌的合作協定, 覆蓋的國家包括越南、 泰國、 菲律賓、 韓國、 烏茲別克斯坦等。這一舉措將有助於擴大公司在這些國家的市場份額, 為品牌的國際推廣打下堅實基礎。

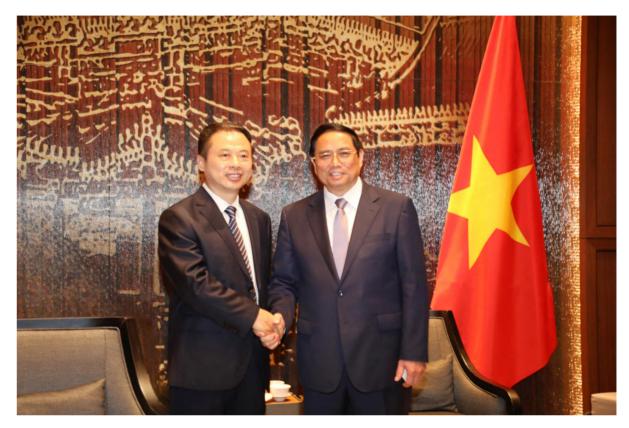
同時,公司計劃通過經銷商在這些國家展開終端門店的佈局,以越南為試點,2023年完成了海外門頭改造6個。這將進一步提升品牌在國際市場的知名度,為公司在全球範圍內的可持續增長奠定基礎。

In 2023, the Group made notable achievements in expanding its international markets, particularly in the placement of localized personnel in 10 key countries. These countries include Vietnam, Thailand, Indonesia, Colombia, Argentina, and Nigeria, etc. Among them, six countries have already achieved stable performance output, which marks the Company's considerable performance in these markets.

In addition, the Company has established local leasing offices in five countries, further consolidating its presence in these markets. It is worth mentioning that the Company's two offices in Thailand and the Netherlands have been officially opened in May and July 2023 respectively, injecting new vitality into the Company's internationalization process.

Tianneng has also made significant progress in its channel layout. In 2023, the Group signed cooperation agreements with over 20 overseas distributors for the Tianneng brand, covering countries including Vietnam, Thailand, the Philippines, South Korea, Uzbekistan, etc. This initiative will help expand the Company's market share in these countries and lay a solid foundation for the international promotion of the brand.

Meanwhile, the Company plans to launch the layout of terminal stores in these countries through distributors, with Vietnam as a pilot, and has completed the renovation of six overseas storefronts in 2023. This will further enhance brand awareness in the international market and lay a foundation for the Company's sustainable growth globally.



越南總理范明政先生接見集團董事局主席張天任先生

Mr. Pham Minh Thanh, Prime Minister of Vietnam meeting Mr. Zhang Tianren, Chairman of the Board of Directors of the Group

此外, 由天能發起的第二屆天能全球化戰略聯盟夥伴大會 (TGA) 的成功舉辦也為公司在國際合作方面取得了積極的成果。來自 13 個國家及地區的客戶和賓客參與了為期兩天的活動。本集團與印度、越南、印尼、泰國等國家的 9 家戰略合作夥伴簽約了九個重大項目及 6 項本地化合作項目,為公司未來在國際市場的發展奠定了堅實的基礎。

In addition, the successful organization of the second Tianneng Globalization Strategic Alliance Partner Meeting (TGA) event initiated by Tianneng also achieved positive results for the Company in terms of international cooperation. Customers and guests from 13 countries and regions participated in the two-day event. The Group signed nine major projects and six localization cooperation projects with nine strategic partners in India, Vietnam, Indonesia and Thailand, laying a solid foundation for the Company's future development in the international market



公益慈善 Public Charities

2023 環境、社會及管治報告

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:





本集團作為新能源電池行業領軍企業,一方面以科技創新驅動高品質發展,另一方面積極承擔「企業公民」的角色,以實際行動回報社會關心。多年來,天能累計向社會捐贈了人民幣數千萬元的物資和現金,用於各類搶險救災、公益慈善、養老助學等。

drives high-quality development through technological innovation on the one hand, and actively assumes the role of a "corporate citizen" on the other hand, taking practical actions to return the social concern. Over the years, Tannen has donated tens of millions of RMB in materials and cash to the society for various kinds of disaster relief, public welfare and charity, and old age assistance and education.

As a leading enterprise in the new energy battery industry, the Group

2023 年,國家工信部定點幫扶集中捐贈儀式在四川省南充市舉行,天能向四川省南部縣捐贈人民幣 10 萬元。從 2021年起,天能每年該地區進行捐贈,用於幫扶家境貧寒、品學兼優的學生,以及優秀特困教師。此外,天能還積極回應國家號召,在多個投資地與當地農村結對共建,把產業幫扶覆蓋到全國各地,變輸血為造血,促進共同富裕。

In 2023, a centralized donation ceremony for targeted help from the MIIT of China was held in Nanchong City, Sichuan Province, where Tianneng donated RMB100 thousand to Nanbu County, Sichuan Province. The Group donated RMB100 thousand to Nanbu County in Sichuan Province, an area where Tianneng has been making annual donations since 2021 for the purpose of helping students from poor families with good academic performance and outstanding teachers with special difficulties. In addition, Tianneng has also actively responded to the call of the state to pair up with local villages in a number of investment sites, covering all parts of the country with industrial assistance, turning blood transfusion into blood creation and promoting common prosperity.

共同富裕 Common Prosperity

本章內容所涉及的可持續發展目標:

The sustainable development goals covered in this chapter:









本集團在做強新能源產業,做大共富蛋糕的同時,與浙江省湖州市長興縣新川村開展共建結對已有 25 年。通過數字化賦能工程、多業態經濟工程、新鄉賢帶富工程「三大工程」,助力新川村實現共同富裕,為推動全國實施鄉村綠色振興工作提供了寶貴經驗。

在本集團董事局主席、 新川村黨委書記張天任先生的率領下, 天能充分發揮帶動輻射作用, 積極推進新川村的「智慧未來鄉村」建設, 為鄉村發展注「智」賦能。引導當地村民發展電池配套產業, 形成以動力電池為核心的新能源、新材料、新服務等產業生態圈。持續探索「產業富農」的發展新路徑, 不斷壯大綠色優質產業, 發展綠色經濟。

本集團還助力新川村,建設鄉村振興案例館、文化大禮堂、幸福之家、供電通信便民設施等多項精品工程,形成了以新能源高端製造為龍頭,配套服務產業協調發展,農旅經濟、精品民宿、農村電商等第三產業有效銜接的特色綠色產業體系,驅動生態優勢轉化為發展優勢,吸引了大批在外青年返鄉創業,走出了一條產業強、生態優、百姓富的道路。

While strengthening the new energy industry and enlarging the cake of common wealth, the Group has insisted on pairing with Xinchuan Village, Changxing County, Zhejiang Province, for 25 years. Through the "Three Projects", namely the Digital Empowerment Project, the Multi-industrial Economy Project and the New Villager Leader Project, the Group has helped Xincheon Village realize common wealth, providing valuable experience in promoting the implementation of green revitalization of villages across the country.

Under the leadership of Mr. Zhang Tianren, Chairman of the Board of Directors of the Group and Secretary of the Party Committee of Xinchuan Village, Tianneng gives full play to its role as a driving force and actively promotes the construction of the "Smart Future Village" in Xinchuan Village to empower the development of the village with "Intelligence". The Company guides local villagers to develop battery supporting industries, forming an industrial ecosystem of new energy, new materials and new services with power batteries as the core; continuously explores the new development path of "Industrial Enriches Agriculture", and continuously grows green high-quality industries and develops a green economy.

By assisting Xinchuan Village, the construction of Rural Revitalization Case Gallery, Cultural Hall, Happy Home, Power Supply and Communication Facilities for the convenience of the people and a number of high-quality projects, the Group has formed a characteristic green industrial system with high-end manufacturing of new energy as the leader, coordinated development of supporting service industries, and effective connection of tertiary industries such as rural tourism economy, high quality homestay, and rural e-commerce, which drives the transformation of ecological advantages into development advantages, attracts a large number of young people outside the country to return to their hometowns to start their own businesses. We have created a path of strong industry, good ecology and prosperity for the people.

在本集團的支持下, 新川村成立3家「強村公司」, 創新 性地把現代股權基金模式引入鄉村振興, 不僅盤活了村民 閒置資金, 用於發展綠色工業、休閒農業、旅遊經濟、精 品民宿等特色優勢產業, 不斷壯大村級集體經濟, 豐富鄉 村經濟業態, 進一步延長富民產業鏈, 還讓村民成為股 東, 共享鄉村發展紅利。年內, 浙江省公佈的首批「萬企 興萬村」行動省級實驗項目, 天能集團與新川村「企村共 建」項目光榮上榜。

With the support of the Group, Xinchuan Village has set up three "Strong Village Companies", which innovatively introduce the modern equity fund model into rural revitalization. It not only activates the idle funds of the villagers for the development of green industry, leisure agriculture, tourism economy, high quality lodgings and other characteristic advantageous industries, but also continues to promote the village collective economy, enriches the rural economic pattern, and further extends the wealth industry chain, but also allows the villagers to become shareholders and share the dividends of rural development; further extends the enriching industry chain, but also lets the villagers become shareholders, share the dividends of rural development. During the year, Zhejiang Province announced the first batch of provincial experimental projects "Ten Thousand Enterprises Revitalize Ten Thousand Villages" action, Tianneng Group and Xinchuan Village "Enterprise-Village Co-Construction" project has been honored to be on the list.

2023 年本集團在新川村召開了第四屆鄉賢大會。 2019 年以 來,天能協同新川連續舉辦了四屆新鄉賢大會,持續深化新 鄉賢帶富工程,全面推進產業、人才、文化、生態、組織振 興,擦亮了新川村共同富裕的幸福底色,讓老百姓的腰包越 來越鼓、 日子越來越紅火。 2023 年村集體經濟收入超人民 幣 760 萬元,村民人均年收入 15 萬元。

In 2023, the Group held the fourth Township Sage Conference in Xinchuan Village. Since 2019, Tianneng has held four consecutive New Township Sage Conferences in collaboration with Xinchuan, continued to deepen the New Township Sage Bringing Wealth Project, comprehensively pushed forward the revitalization of industry, personnel, culture, ecology and organization, laid a foundation for Xinchuan Village's common prosperity, let the people's wallets become more and more bulging and their days become more and more prosperous. In 2023, the village's collective economic income was about RMB7.6 million and villager's per capita annual income was RMB150 thousand.



天能在新川村主辦首屆籃球邀請賽 Tianneng Hosts First Basketball Invitational Tournament in Xinchuan Village

智慧鄉村 Smart Countryside

近年來, 本集團助力新川村加快佈局 5G 網絡、雲等新基 建, 讓 5G 逐步覆蓋整個村子, 提升鄉村旅遊數字化水 準,形成「智慧旅遊」「數字文旅」等新型服務模式。

新川村在長興率先啟用「未來鄉村」數字平臺, 在這個 平臺上, 整合了黨務村務、文明誠信、法律志願服務、 就業就醫服務等, 將所有信息公開到戶, 讓村級事務在 陽光下「亮曬」, 真正幫助村民實現簡單事項「最多跑 一次」甚至是「足不出戶」, 讓老百姓享受到數字化帶 來的便捷生活。

Xinchuan Village in Changxing took the lead in enabling the "Future Village" digital platform. On this platform, it has integrated the party affairs, village affairs, civilization and honesty, legal volunteer services, employment and medical services, etc.. All the information is public to the household, so that the village affairs are transparent, helping villagers "Run an Errand at Most" or even "Without Leaving Home" . so that the people enjoy the convenience of digitalization.

共同富裕推進大會

Conference on Promoting Common Prosperity

本集團主辦的 2023 年共同富裕推進大會在新川村隆重舉 行。現場舉行了共富助力儀式, 廣大鄉賢慷慨解囊, 現場 共募得美麗鄉村建設公益基金超 1500 萬元。

The 2023 Conference on Promoting Common Prosperity organized by the Group was held in Xinchuan Village. The scene held a ceremony to help the common wealth, a large number of villagers generous donations, the scene raised a total of beautiful village construction public welfare fund of more than RMB15 million.

In recent years, the Group has assisted Xinchuan Village in

accelerating the layout of 5G network, cloud and other new

infrastructures, so as to gradually cover the entire village with 5G,

enhance the digitalization of rural tourism, and form a new service

model such as "Smart Tourism" and "Digital Cultural Tourism".



2023 年共同富裕推進大會 2023 Common Wealth Promotion Conference



聚智聚力共繪和美鄉村,同心同行共創美好未來

Gathering wisdom and efforts to construct a beautiful countryside, and working together to create a better future

本年, 中國鄉村振興與發展研究中心將「新川模式」確 立為研究項目。北京師範大學王玉海教授發佈北京師範 大學中國鄉村振興與發展研究中心撰寫的 《新時代高品 質推進鄉村振興的新川模式》, 並授予新川村「中國鄉 村振興和共同富裕研究基地」 牌匾, 並指出「新川模 式」為中國全面推進鄉村振興、 走中國式鄉村現代化道 路和實現共同富裕提供了學習、推廣、借鑒的理論範例 和實踐樣本。

This year, China Rural Revitalization and Development Research Center established "Xinchuan Model" as a research project. Professor Wang Yuhai, Beijing Normal University released "Xinchuan Model of High-Quality Promotion of Rural Revitalization in the New Era" written by China Rural Revitalization and Development Research Center of Beijing Normal University, and awarded a plaque of "China Rural Revitalization and Common Prosperity Research Base" to Xinchuan Village, and pointed out that "Xinchuan Model" provides a theoretical example and practical sample for China to comprehensively promote rural revitalization, take the road of Chinese-style rural modernization and realize common prosperity.



共同富裕建設案例論壇 Common Prosperity Building Case Forum



生態美推動共同富 綠色轉型典型案例

Eco-beauty Promotes Common Prosperity - Typical Cases of **Green Transformation**

專題二: 環境 Theme II: Environment

《中國環境報》刊發《浙江以「生態美」推動「共同 富」》的文章,報導從千萬工程、騰龍換鳥、點綠成金 三個維度, 全面解讀浙江高品質發展建設共同富裕示範 區的「共富密碼」。文中巧妙切入「騰籠換鳥」視角, 解鎖天能探索新路徑, 打造「鉛、鋰」雙循環經濟生態 圈, 輻射帶動新能源產業綠色轉型, 推動浙江省高品質 發展發展的典型案例。

China Environment News published an article entitled "Zhejiang's Ecological Beauty" Promotes "Common Prosperity", reporting from three dimensions, namely the Ten Million Project, the Vacate the Cage and Exchange Birds and Turn Green into Fortune, a comprehensive interpretation of "Common Prosperity Code" of Zhejiang's high-quality development and construction of common Prosperity demonstration area. The article skillfully cuts into the perspective of "Vacate the Cage and Exchange Birds", unlocking the typical case of Tianneng exploring a new path to create a "Lead & Lithium" dual-cycle economic ecosystem, radiation-driven green transformation of the new energy industry, and promoting high-quality development in Zhejiang Province.



《中國環境報》報道版面 China Environmental News newspaper page

專題二: 環境 Theme II: Environment



Appendix:Pointer Index

《環境、社會及管治報告指引》及《可持續發展報告準則(GRI)》指標索引

Index of pointers to the Environmental, Social and Governance Reporting Guidelines and Sustainability Reporting Guidelines (GRI)

	層面、一般披露及關鍵績效指標 rs, Dimensions, General Disclosure and Key Indicators		《GRI》 標準 GRI Standard	披露位置 Disclosure Content
A. 環境	Environment			
A1 排放物	Emissions			
一般披露	有關廢氣及溫室氣體排放、向水及土地的排汙、有害及無害廢棄物的產生等的政策	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	能源管理 污染物管理
Seneral Disclosure	Policies on emissions and greenhouse gases, discharges to water and land, generation of hazardous and non-hazardous waste, etc.	GRI 305	排放 Emissions	Energy Management Pollutant Management
A1.1	排放物種類及相關排放數據 Types of emissions and related emission data	GRI 305	排放披露項 305-1、305-2、 305-3、305-6及305-7 Emissions Disclosures 305-1, 305-2, 305-3, 305-6 and 305-7	污染物管理 Pollutant Management
A1.2	直接 (範圍 1) 及能源間接 (範圍 2) 溫室氣體 排放量 (以噸計算) Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tons)	GRI 305	排放披露項 305-1、305-2、305-3 及 305-4 Emissions Disclosures 305-1, 305-2, 305-3 and 305-4	能源管理 氣候風險管理 Energy Management Climate Risk Management
A1.3	所產生有害廢棄物總量(以噸計算) Total amount of hazardous waste generated (in tons)	GRI 306	廢棄物披露項 306-2 (a) Waste Disclosure 306-2 (a)	污染物管理 Pollutant Management
A1.4	所產生無害廢棄物總量(以噸計算) Total amount of non-hazardous waste generated (in tons)	GRI 306	廢棄物披露項 306-2 (b) Waste Disclosure 306-2 (b)	污染物管理 Pollutant Management
A1.5	描述所訂立的排放量目標及為達到這些目標 所採取的步驟 Describe the emission targets set and the steps taken to achieve them.	GRI 305	排放報告要求 1.2 及披露項 305-5 Emissions Reporting Requirements 1.2 and Disclosure 305-5	能源管理 污染物管理 Energy Management Pollutant Management
A1.6	描述處理有害及無害廢棄物的方法,及描述所訂立的減廢目標及為達到這些目標所採取的步驟 即 Describe methods for dealing with hazardous and non-hazardous wastes and describe waste reduction targets and steps taken to achieve them.	GRI 306	廢棄物披露項 306-2 及 306-4 Waste Disclosures 306-2 and 306-4	污染物管理 Pollutant Management
A2 資源使用	Use of Resources			
一般披露 General Disclosure	有效使用資源(包括能源、水及其他原材料)的 政策 Policies for the efficient use of resources (including energy, water and other raw materials)	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	線色製造 Green Manufact 資源循環 Resource Cycle 能源管理 Energy Managei 污染物管理 Pollutant Manag
A2.1	按類型劃分的直接及/或間接能源(如電、氣或油)總耗量(以千個千瓦時計算)及密度總耗水量及密度 Total direct and/or indirect energy consumption (e.g., electricity, gas or oil) and intensity by type (in thousands of kilowatt-hours)	GRI 302	能源披露項 302-1 及 302-3 Energy Disclosures 302-1 and 302-3	能源管理 Energy Management

A2.2	總耗水量及密度 Total water consumption and density	GRI 303	水與放流水披露項 303-1 Water and Effluents Disclosure 303-1	能源管理 Energy Management		
A2.3	描述所訂立的能源使用效益目標及為達到這 些目標所採取的步驟 Describe the energy efficiency targets set and the steps taken to achieve them.	GRI 302	能源披露項 302-4 及 302-5 Energy Disclosures 302-4 and 302-5	資源循環 能源管理 Resource Cycle Energy Management		
	描述求取適用水源上可有任何問題,以及所訂 立的用水效益目標及為達到這些目標所採取	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	能源管理		
A2.4	的步驟 Describe any problems in accessing suitable water sources, as well as the water efficiency targets set and the steps taken to achieve them.	GRI 303	水與放流水披露項 303-3 Water and Effluents Disclosure 303-3	Energy Management		
A2.5	製成品所用包裝材料的總量(以順計算) Total amount of packaging materials used for manufactured goods (in tons)	GRI 301	物料披露項 301-1 Materials Disclosure 301-1	能源管理 Energy Management		
A3 環境及天	- 然資源 Environment and Natural Resources					
一般披露 General Disclosure	減低發行人對環境及天然資源造成重大影響 的政策 Policies to minimize the issuer's significant impact on the environment and natural resources	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	線色智造 Green Smart Manufacturing 資源循環 Resource Cycle 節能降耗 Energy Saving and 節能降耗 Consumption Reduction 新型儲能 New Energy Storage 清潔能源推廣 Clean Energy Promotion		
		GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	AT 644.0A+T		
	描述業務活動對環境及天然資源的重大影響 及已採取管理有關影響的行動	GRI 303	水與放流水披露項 303-2 Water and Effluents Disclosure 303-2	節能降耗 新型储能 清潔能源推廣 Energy Saving and Consumption Reduction New Energy Storage Clean Energy Promotion		
A3.1	Describe the significant impacts of the business activities on the environment and natural resources	GRI 304	生物多樣性披露項 304-2 Biodiversity Disclosure 304-2			
	and the actions taken to manage those impacts.	GRI 306	廢棄物披露項 306-3(c) 及 306-5 Waste Disclosures 306-3(c) and 306-5			
A4 氣候變化 Climate Change						
一般披露 General Disclosure	識別及應對已經及可能會對發行人產生影響的重大氣候相關事宜的政策 Policies for identifying and responding to significant climate-related matters that have had and may have an impact on the issuer	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	氣候風險管理 Climate Risk Management		
A4.1	描述業務活動對環境及天然資源的重大影響及已採取管理有關影響的行動 Describe significant climate-related matters that have had and may have an impact on the issuer, and actions to address them	《GRI 準則》尚未包含此項指標 <i>GRI Standards</i> do not cover this indicator		氣候風險管理 Climate Risk Management		

天能動力國際有限公司



	層面、一般披露及關鍵績效指標 es, Dimensions, General Disclosure and Key Indicators		《GRI》標準 GRI Standard	披露位置 Disclosure Content
B3.1	按性別及僱員類別(如高級管理層、中級管理層)劃分的受訓僱員百分比 Percentage of employees trained by gender and employee category (e.g., senior management, middle management)	《GRI 準則》尚未包含此項指標 This indicator is not yet included in the GRI Guidelines		員工培訓 Staff Training
B3.2	按性別及僱員類別劃分,每名僱員完成受訓 的平均時數 Average number of hours of training completed per employee, by gender and employee category	GRI 404	訓練與教育披露項 404-1 Training and Education Disclosure 404-1	員工培訓 Staff Training
B4 勞工準則	Labor Guidelines			
一般披露 General Disclosure	有關防止童工或強制勞工的政策及遵守相關 法律及規例 Policies on prevention of child or forced labor and compliance with relevant laws and regulations	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	雇傭及勞工 員工發展 Employment and Labor Employee Development
		GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	
B4.1	描述檢討招聘慣例的措施以避免童工及強 制勞工	GRI 408	童工披露項 408-1 (c) Child Labour Disclosure 408-1 (c)	員工發展 Employee Development
	Describe measures to review recruitment practices to avoid child and forced labor.	GRI 409	強迫或強制勞工披露項 409-1 (b) Forced or Compulsory Labour Disclosure 409-1 (b)	
		GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	員工發展 Employee Development
B4.2	描述在發現違規情況時消除有關情況所採取的步驟	GRI 408	童工披露項 408-1 (c) Child Labour Disclosure 408-1 (c)	
	Describe the steps taken to eliminate the situation when a violation is detected	GRI 409	強迫或強制勞工披露項 409-1 (b) Forced or Compulsory Labour Disclosure 409-1 (b)	
營運慣例 c	Operating Practice 理 Supply Chain Management			
一般披露 General Disclosure	管理供應鏈的環境及社會風險政策 Policies for managing environmental and social risks in the supply chain	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	供應鏈管理 Supply Chain Management
B5.1	按地區劃分的供應商數目 Number of suppliers by region	GRI 2	一般揭露披露項 2-6 General Disclosures Disclosure 2-6	供應鏈管理 Supply Chain Managemen
		GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	
B5.2	描述有關聘用供應商的慣例,向其執行有關慣例的供應商數目,以及相關執行及監察方法 B5.2 Describe the practices relating to the engagement of suppliers, the number of suppliers to whom such practices have been implemented, and the relevant enforcement and monitoring methods	GRI 308	供應商環境評估披露項 308-1及308-2 Supplier Environmental Assessment Disclosures 308-1 and 308-2	供應鏈管理 Supply Chain Management
		GRI 414	供應商社會評估披露項 414-1 及 414-2 Supplier Social Assessment Disclosures	

414-1 and 414-2

專題三: 社會責任 Theme III: Social Responsibility

	層面、一般披露及關鍵績效指標 es, Dimensions, General Disclosure and Key Indicators		《GRI》 標準 GRI Standard	披露位置 Disclosure Content
B5.3	描述有關識別供應鏈每個環節的環境及社會 風險的慣例,以及相關執行及監察方法 Describe practices for identifying environmental and social risks at each stage of the supply chain, and related implementation and monitoring methods.	GRI 414	供應商社會評估披露項 414-1 及 414-2 Supplier Social Assessment Disclosures 414-1 and 414-2	供應鏈管理 Supply Chain Management
B5.4	描述在揀選供應商時促使多用環保產品及服務的慣例,以及相關執行及監察方法 Describe the practice of promoting the use of environmentally friendly products and services in the selection of suppliers, as well as the related implementation and monitoring methods.	《GRI 準則》尚未包含此項指標 This indicator is not yet included in the GRI Guidelines		供應鏈管理 Supply Chain Management
B6 產品責	任 Product Liability			
	右關所担併高县和服務的時期的中央 鹿	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	
一般披露	有關所提供產品和服務的健康與安全、廣告、標籤及私隱事宜以及補救方法的政策及一般披露 遵守相關法律及規例 Policies on health and safety, advertising, labeling and privacy matters and remedies for the products and services provided and compliance with laws and regulations	GRI 416	顧客健康與安全披露項 416-2 Customer Health and Safety Disclosure 416-2	
General Disclosure Po		GRI 417	營銷與標示披露項 417-2 及 417-3 Marketing and Labelling Disclosures 417-2 and 417-3	產品責任 Product Liability
		GRI 418	客戶隱私披露項 418-1 Customer Privacy Disclosure 418-1	
B6.1	已售或已運送產品總數中因安全與健康理由 而須回收的百分比 Percentage of total products sold or shipped that are subject to recall for safety and health reasons	《GRI 準則》尚未包含此項指標 This indicator is not yet included in the GRI Guidelines		產品責任 Product Liability
	接獲關於產品及服務的投訴數目以及應	GRI 2	一般揭露披露項 2-29 General Disclosures Disclosure 2-29	
B6.2	對方法 Number of complaints received about products and	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	客戶服務 Customer Service
	services and how they were responded to	GRI 418	客戶隱私披露項 418-1 Customer Privacy Disclosure 418-1	
B6.3	描述與維護及保障知識產權有關的慣例 Describe practices relating to the maintenance and protection of intellectual property rights	《GRI 準則》尚未包含此項指標 This indicator is not yet included in the GRI Guidelines		知識產權 Intellectual Property Rights
B6.4	描述質量檢定過程及產品回收程序 Describe the quality check process and product recall procedures	《GRI 準則》尚未包含此項指標 This indicator is not yet included in the GRI Guidelines		產品責任 Product Liability
B6.5	描述消費者資料保障及私隱政策,以及相關執行及監察方法 Describe the consumer data protection and privacy policy, and how it is enforced and monitored.	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	客戶服務 Customer Service

	層面、一般披露及關鍵績效指標 es, Dimensions, General Disclosure and Key Indicators		《GRI》 標準 GRI Standard	披露位置 Disclosure Content		
B7 反貪污	B7 反貪污 Anti-Corruption					
一般披露	有關防止賄賂、勒索、欺詐及洗黑錢的政策 及遵守相關法律及規例	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	廉潔反貪污		
General Disclosure	Policies on prevention of bribery, extortion, fraud and money laundering and compliance with relevant laws and regulations	GRI 205	反貪腐披露項 205-3 Anti-corruption Disclosure 205-3	Clean and Anti-Corruption		
B7.1	於匯報期內對發行人或其僱員提出並已審結的 貪汙訴訟案件的數目及訴訟結果 Number of corruption cases filed and concluded against the issuer or its employees during the reporting period and the outcome of such cases	GRI 205	反貪腐披露項 205-3 Anti-corruption Disclosure 205-3	廉潔反貪污 Clean and Anti-Corruption		
B7.2	描述防範措施及舉報程式,以及相關執行及監 察方法	GRI 2	一般揭露披露項 2-26 General Disclosures Disclosure 2-26	廉潔反貪污		
B7.2	Describe precautionary measures and reporting procedures, and how it is enforced and monitored.	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	Clean and Anti-Corruption		
B7.3	描述向董事及員工提供的反貪汙培訓 Describe the anti-corruption training provided for directors and employees	《GRI 準則》尚未包含此項指標 This indicator is not yet included in the GRI Guidelines		廉潔反貪污 Clean and Anti-Corruption		
社區 Cor	nmunity					
B8 社區报	資 Community Investments					
一般披露 General Disclosure	有關以社區參與來瞭解營運所在社區需要和確保其業務活動會考慮社區利益的政策 Policies on community involvement to understand the needs of the communities in which it operates and to ensure that its operations take into account the interests of the community	GRI 3	重大主題揭露 3-3 Material Topics Disclosure 3-3	公益慈善 共同富裕 Public Charities Common Prosperity		
B8.1	有專注貢獻範疇(如教育、環境事宜、勞工需求、健康、文化、體育) Focus on areas of contribution (e.g., education, environmental issues, labor needs, health, culture, sports)	GRI 203	間接經濟衝擊披露項 203-1 (a) Indirect Economic Impacts Disclosure 203-1 (a)	公益慈善 共同富裕 Public Charities Common Prosperity		
B8.2	在專注範疇所動用資源(如金錢或時間) Use of resources (e.g., money or time) in the area of specialization	GRI 201	經濟績效披露項 201-1 (a-ii) Economic Performance Disclosure 201-1 (a-ii)	公益慈善 Public Charities		