

TIANNENG POWER INTERNATIONAL LIMITED 天能動力國際有限公司

(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

2021 環境、社會及管治報告

2021Environmental, Social and Governance Report

2021環境、社會及管治報告 2021Environmental, Social and Governa

持續締造價值共創美好生活

Continue to Create Value and Create A Better Life

- 1.1 天能概況 Enterprise Profile
- 1.2 產品與服務 Products and Services
- 1.3 發展理念 Development Concept
- 1.4 經營狀況 State of Operation

Page 01-05

治理護航 價值指引

Governance as Escort, Value Guide

- 2.1 組織架構 Organizational Structure
- 2.2 治理結構 Governance Structure
- 2.3 溝通機制 Communication Mechanism
- 2.4 內部管控 Internal Control
- 2.5 環安體系Environmental Protection and Security System
- 2.6 供應鏈管理 Supply Chain Management

Page 06-16

踐行權益保障彰顯責任擔當

Practice Rights and Interests Protection and Demonstrate Responsibility

- 3.1 保障員工權益Protection of Employee Benefits
- 3.2 保障投資者權益Protection of Investor Benefits
- 3.3 保障客戶權益Protection of Customer Benefits
- 3.4 保護知識產權 Protection of Intellectual Property

Page 17-28





守護綠色家園 Safeguard the Green Homeland

4.1 升級綠色智造助力實現雙碳目標

Upgrade Green Smart Manufacturing and Help to Achieve the Dual Carbon Goal

4.2 智慧能源+資源再生構築綠色發展生態圈

Smart Energy + Resource Regeneration and Build a Green Development Ecosystem

- 4.3 以綠色能源解決方案商之姿賦能低碳出行 Enable Low-Carbon Travel by Providing Green Energy Solutions
- 4.4 加快污染防治推進生態環境提能升級 Speed up Pollution Prevention and Control and Upgrade the Ecological Environment
- 4.5 聚力行業夥伴承擔"低碳"發展使命 Gather Industry Partners and Undertake the Mission of Low-Carbon Development

Page 29-44



普惠發展 價值共用

Inclusive Development Value Sharing

- 5.1 納稅與就業 Taxes and Employment
- 5.2 建言獻策 Proposals Offering
- 5.3 公益慈善 Public Benefit and Charity
- 5.4 村企共建助力共同富裕

Village and Enterprise Cooperation Contributes to Common Prosperity

Page 45-54

- 附錄01: 關於本報告 Page 55-56 About the Report
- 附錄02:《環境、社會及管治報告》指標索 Page 57-60
 Indicator Index of the Environmental, Social and Governance Report



and Create A Better Life

1.1 天能概況 Enterprise Profile
 1.2 產品與服務 Products and Services
 1.3 發展理念 Development Concept
 1.4 經營狀況 State of Operation





天能概況 Enterprise Profile



天能集團總部圖 Picture of Tianneng GroupHeadquarters

天能動力國際有限公司(「天能」或「本公司」)及 連同其附屬公司(「本集團」)是中國新能源動力電 池行業的龍頭企業,創始於1986年。2007年,天能在 香港聯合交易所有限公司(「聯交所」)主板上市。 經過三十多年的發展,本集團現已成為以電動輕型車 動力電池製造與服務為主,集新能源動力電池、汽車 起動啟停電池、儲能電池、電動特種車動力電池等多 品類電池的研發、生產、銷售,以及廢舊電池回收和 可再生資源迴圈利用、綠色智能製造產業園、智慧物 流平臺等為一體的能源集團。

在"共同富裕"背景下,企業社會責任被賦予了新的 內涵和使命。天能始終不忘初心,堅守實體經濟,以 科技創新鍛造企業核心競爭力,以綠色理念引領行業 高質量發展。天能對國家,對社會,對員工,對股 東,對生態環境,對子孫後代都負有積極的責任,奉 獻綠色能源,呵護綠水青山,締造美好生活。這是天 能矢志不移的價值觀,也是堅持不懈的奮鬥夢想。 Founded in 1986, Tianneng Power International Limited ("Tianneng" or "the company") and its subsidiaries ("the Group") are leading companies in the new energy power battery industry in China. In 2007, Tianneng was listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "SEHK"). After more than 30 years of development, the Group is now focusing on the manufacture and service of electric light vehicle power batteries, taking into account the development, production , and sales of new energy power batteries, automobile start-stop batteries, energy storage batteries, electric special vehicle power batteries and other types of batteries, while operating renewable resource recycling, green intelligent manufacturing industrial park, intelligent logistics platform and other businesses

Under the background of "Common Prosperity", corporate social responsibility is endowed with new connotation and mission.Tianneng always remains true to its original aspiration, sticks to the real economy, forges its core competitiveness with scientific and technological innovation, and leads the high-quality development of the industry with green concept.Tianneng has a positive responsibility for the country, society, employees, shareholders, ecological environment, and future generations. We dedicate green energy, care for lucid waters and lush mountains, and create a better life.

產品與服務 Products and Services

本集團產品與服務的核心板塊包括高端環保電池、新 能源電池以及可再生新材料。 The core segments of the Group's products and services include high-end environmentally-friendly batteries, new energy batteries, and recyclable materials.

高端環保電池

高端環保電池是天能依託研發與工藝創新打造的密封 型免維護鉛蓄電池系列產品,是高穩定性、高性價 比、可回收性優秀的環境友好型電池產品,應用領域 涵蓋電動輕型車、電動特種車、汽車起動啟停、儲能 備用等。

新能源電池

本公司新能源電池以鋰離子電池為主,亦包括燃料電 池等下一代電池產品的生產和研發。新能源電池業務 應用領域主要分為動力類領域和非動力類領域兩類。 其中,動力類的應用領域包括電動輕型車、電動乘用 車以及電動商用車等,非動力類的應用領域包括消費 類電子產品和儲能領域。

可再生新材料

天能積極履行生產者責任延伸義務,對廢舊電池中的 金屬、塑膠、殘酸等物質進行回收利用。

High-end Environmentally-Friendly Batteries

The high-end environmentally friendly batteries are a series of sealed, maintenance-free lead-acid batteries created by Tianneng relying on R&D and technological innovation. They are environmental friendly battery products with high stability, cost-effectiveness, and excellent recyclability. Their applications range from cover electric light vehicles, electric special vehicles, starting and stopping of cars, energy storage and backup, etc.

New Energy Batteries

The company's new energy batteries are mainly lithium-ion batteries, and also involve the production and R&D of next-generation battery products such as fuel cells. The application fields of new energy batteries are mainly divided into two categories: power applications and non-power applications. Among them, power applications include electric light vehicles, electric passenger cars, and electric commercial vehicles, the non-power applications include consumer electronics and energy storage.

Green Renewable Materials

Tianneng actively fulfills the producer's extended obligation to recycle metals, plastics, residual acids, and other substances in used batteries.



發展理念 Development Concept

核心價值觀 Core Value

使命 Mission

企業願景 Enerprise Vision "責任創新奮鬥分享"

" Responsible, Innovative, Hard-working and Sharing"

奉獻綠色能源, 締造美好生活 Devote to green energy and create a happy life

成為最受尊敬的世界一流新能源公司。 To become the most respected world-class new energy company

03/04 Page

經營狀況 State of Operation

2021年,在全球能源轉型與國內"雙碳"目標下,天 能恪守創新變革新發展理念,以"實業,科技,資 本"三輪驅動發展戰略為指引,立足綠色能源解決方 案商的定位,堅持"以客戶為中心,以市場為導 向",堅定不移走安全、理性的高質量可持續發展道 路。

於二零二一年十二月三十一日,本團實現營業額約人 民幣856.16億元,較上年同期增長59.95%,總資產約 為人民幣327.39億元,較上年同期增加41.11%。

一年來,集團行業龍頭地位更加鞏固,綜合實力再上 新臺階。本集團位居全球新能源公司500強、中國企業 500強、中國民營企業500強、中國民營企業製造業 500強、中國輕工業百強企業、中國輕工業電池行業十 強等多個榜單。 In 2021, under the global energy transition situation and the domestic "Dual Carbon" target, Tianneng adheres to the new development concept of innovation and reform, guided by the three-wheel drive development strategy of "Industry, Technology, Capital", based on the positioning of green energy solution provider, adhere to the "Customer-Centered and Market-Oriented", and firmly take the safe and rational high-quality sustainable development road.

For the year ended 31 December 2021, the Company's consolidated turnover was approximately RMB85,616 million, representing an increase of 59.95% as compared to that of the previous year. As at 31 December 2021, the total assets of the Group were approximately RMB32,739 million, representing an increase of 41.11% as compared to that of the previous year.

Over the past year, the Group's leading status in the industry has been consolidated and its comprehensive strength has reached a new level. The Group is in the lists including Top 500 Global New Energy Enterprises, Top 500 Chinese Enterprises, Top 500 Chinese Private Enterprises, Top 500 Chinese Private Manufacturing Enterprises, Top 100 Chinese Light Industry Enterprises, and Top 10 Enterprises in the Chinese Light Industry Battery Industry.



02治理護航 價值指引 Governance as Escort, Value Guide

- 2.1 組織架構 Organizational Structure
- 2.2 治理結構 Governance Structure
- 2.3 溝通機制 Communication Mechanism
- 2.4 內部管控 Internal Control
- 2.5 環安體系Environmental Protection and Security System
- 2.6 供應鏈管理 Supply Chain Management



組織架構 Organizational Structure

本集團不斷完善頂層設計,梳理優化組織架構、流程 及崗位體系,厘清職責邊界、明確權力和責任,推進 管控模式和集分權方案實施落地,為未來長期價值的 增長夯實了組織基礎。 The Group continues to improve the top-level design, sort out and optimize the organizational structure, process, and post system, clarify the boundaries of rights and responsibilities, and promote the implementation of the management and control models and the centralization and decentralization scheme, laying an organizational foundation for long-term value growth in the future.



組織結構圖 Organizational Chart



治理結構 Governance Structure

本集團始終將"依法治企、誠信經營"作為行為準則,遵循香港聯合交易所《證券上市規則》的指引, 通過規章制度、內部管理、風險防控和及時、全面、 公開的資訊披露構建企業管治平臺。

本集團重大事項的決策由董事會作出。董事會由八名 董事組成,其中三人為獨立非執行董事。各位董事忠 實勤勉履職,主要職能包括審核及批准企業戰略、審 查內部控制制度及運營合規制度等。本集團定期召開 董事會,所有董事可在會議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。審核委員會之主要職責為審閱本集團 之財務報告程式及內部控制系統,以及就委任、續聘 及辭任本公司獨立外聘核數師及相關薪酬以及委任條 款向董事會提供建議。提名委員會負責物色合格的董 事會人員,並在需要時就董事的委任或續聘等相關問 題向董事會提供建議。薪酬委員會的主要責任為就本 公司與董事及高級管理人員薪酬有關的政策向董事會 提供建議。

本集團聘請專業法律工作者作為常年的法律顧問,並 設立了內控法務中心、審計監察中心,即時對經營決 策、經營過程和內部規章制度進行監督、審核。為維 護股東合法的知情權,本集團制定了嚴格的資訊披露 制度及措施。資訊披露的內容分為定期報告和臨時報 告,定期報告每年披露兩次,包括中期報告和年度報 告。 The Group always regards "managing enterprises in accordance with the law and operating in good faith" as the code of conduct, follows the guidelines of Hong Kong Stock Exchange's Securities Listing Rules, and builds a corporate governance platform through rules and regulations, internal management, risk prevention and control, and timely, comprehensive, and public information disclosure.

Decisions on major issues of the Group are made by the board of directors. The board of directors consists of eight directors, three of whom are independent non-executive directors. Directors perform their duties faithfully and diligently, whose main duties include reviewing and approving corporate strategies, reviewing internal controls and operational compliance. The Group convenes meetings of the board on a regular basis, and all directors can express their opinions on management and other matters at the meeting.

There are three special committees under the Board of Directors: 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 procedures and internal control system, and to advise the board of directors on the appointment, renewal, and dismissal of the Company's independent external auditor and related terms of remuneration and appointment. The Nomination Committee is responsible for identifying qualified board members and advising the Board on matters related to the the appointment or renewal of directors, as required. The main responsibility of the Remuneration Committee is to advise the Board of Directors on the Company's policy related to the remuneration of directors and senior management.

The Group employs professional legal practitioners as perennial legal consultants and has established an Internal Control Legal Affairs Center and an Audit Supervision Center to supervise and review business decisions, business processes, and internal rules and regulations in real time. To safeguard the shareholders' legitimate right to know, the Group has formulated strict information disclosure systems and measures. The content of information disclosure is divided into periodic reports and provisional reports. Periodic reports are disclosed twice a year, including interim reports and annual reports.

溝通機制 Communication Mechanism

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,全方位打通溝通管 道,用心傾聽各方聲音,履行相應責任。 The Group builds cooperation and keeps close contact with interested parties, through conferences organization, investigation, seminars, and other activities, gets through multiple communication channels, listens to voices from all parties with concentrated attention, and performs corresponding responsibilities.

利益相關方 Interested Parties	主要溝通方式/活動 Main Communication Mode/Activities
員工 Staff	職工代表大會、員工培訓、工會活動、意見徵集、投訴信箱等 Congress of Workers and Staff, Staff Training, Labor Union Activities, Opinion Collection, Complaint Letter Box
消費者 Customers	線上推廣、展會、發佈會、市場調研、客戶滿意度調研等 Marketing Online, Exhibitions, Release Conference, Market Investigation and Survey, Customer Satisfaction Investigation and so on
客戶 (主要指共赢商) Customers (mainly co-winners)	市場調研、經銷商大會、培訓會等 Market Survey, Dealer Conference, Training Conference
投資者 Investors	股東大會、業績發佈會、路演、披露、郵件、電話、座談等 Stockholders' Conference, Performance Release Conference, Road Show, Disclosure, Email, Telephone, Informal Discussion
供應商 Suppliers	調研考察、業務交流、會議、問卷等 Investigation and Survey, Business Communication, Conference and Ques- tionnaire



利益相關方 Interested Parties	主要溝通方式/活動 Main Communication Mode/Activities
行業組織 Industrial Organization	參與/為主制定標準、參加會員大會、行業峰會、合作共用等 Participation/Taking Standard Making as Principle, Participation in General Assembly, Industry Summit, Cooperation and Share
合作夥伴 Cooperative Partner	商務往來、戰略合作、會議等 Business Contacts, Strategic Cooperation, Conference
科研機構 Scientific Research Institutions	產學研用、技術交流與合作、會議等 Industry-College-Institute Cooperation, Technical Exchanges and Coopera- tion, Conference
媒體 Media	見面會、發佈會、定向溝通、走訪等 Meet-And-Greet, Release Conference, Orienteering Communication, Inter- view
社區 Community	參與活動、共建共用、公益慈善等 Participation in Activities, Joint Efforts to Build and Share, Public Benefit and Charity
政府 Government	參加或邀請參加會議,專案洽談、業務溝通、政務往來等 Participation in Conference or Sending Invitation, Projects Negotiation, Business Communication, Government Affairs Contacts

内部管控 Internal Control

獨立審計

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《審計工作製度》和《監察管理 製度》,明確了各項審計流程。審計部獨立開展本集 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。

本集團還聘請中匯安達會計師事務所為本集團提供會 計報表審計、淨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彙報,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。

Independent Audit

The Group has set up the Audit Supervision Center, an independent audit institution directly led by the Chairman of the Board, formulated the Audit Supervision Management System, and clarified various audit processes. The Audit Department independently conducts internal management audits and special audits of the Group, without any intervention or restrictions from other departments.

The Group also hires ZHONGHUI ANDA CPA Limited to provide the Group with related audit services such as auditing of accounting statements and verification of net assets. The results of external audit are reported directly to the Board of

Directors by the firm's staff, which not only strengthens the internal risk management of the enterprise, but also effectively avoids the occurrence of violations of laws and regulations.

風險監控

本集團不斷深化內控體系建設,發佈內控稽核指引, 升級印章管控手段,強化陽光採購建設,創新資產管 理機制,全面開展流程管理創新變革,加強數位化風 控平臺建設,進一步降低了經營風險。對專案基地開 展內控評價,及時識別相關缺陷,並進行有效整改; 對經營管理巡視巡察,開展各類審計,有效開展了降 本減損工作。對新產業、新平臺、新業務發展,從專 案投前調研、架構設計到運營管理,實行全過程、全 流程、全方位管控,確保穩健運營。

Risk Monitoring

The Group has continuously deepened the construction of internal control system, issued internal control and audit guidelines, upgraded seal control means, strengthened sunshine procurement construction, innovated asset management mechanism, comprehensively carried out process management innovation and reform, strengthened the construction of digital risk control platform, and further reduced operational risks. The Group conducts internal control evaluations on project bases, identifies relevant deficiencies in a timely manner, and makes effective rectifications; It also conducts inspections on operation and management, carries out various audits, and effectively reduces costs and losses.For the development of new industries, new platforms, and new businesses, from pre-investment research, architecture design to operation management, it implements the whole process and all-round control to ensure sound operation.



本集團風險控制框架如下:

The Group's risk control framework is as follows:

角色 Role	責任人 Person in Charge	責任 Duties
由上而下,識別和管 理公司層面的戰略及 業務風險 Top-down identifi- cation and man- agement of com- pany-level strategic and business risks	董事會 (通過審核委 員會、審計監察等部 門) Board of Directors (through the Audit Committee, Audit S u p e r v i s i o n Department, etc.)	監察公司的風險管理政策及流程。 確定可能出現及新出現風險的性質和程度。 評估和發佈風險管理及內部控制制度並確保 所有流程妥善執行。 定期就香港聯合交易所上市規則等組織中層 以上管理人員學習。 Monitor the company's risk management policies and procedures. Determine the nature and degree of possible and emerging risks. Assess and publish risk management and internal control systems and ensure that all processes are properly implemented. Regularly organize the management staff of middle-level and above to study the listing rules of Hong Kong Stock Exchange
由下而上, 通過各經 營、職能部門進行風 險評估、監督及有效 溝通避免運營層面的 風險 Bottom-up risk assessment, super- vision and effective communication through various operating and functional depart- ments to avoid operational risks	各經營及職能部門分 管領導 Leaders in charge of each operational and functional department	識別、評估及管理公司面臨的經營風險。 監察風險管理及內部控制系統及實施新的控 制。 將風險控制及評估納入各部門考核評價體 系。 Identify, assess and manage the compa- ny's risks. Monitor risk management and the inter- nal control systems and implement new controls. Set incorporate risk control and assess- ment into each department's evaluation system.

角色 Role	責任人 Person in Charge	責任 Duties
由下而上,通過各經 營、職能部門進行風 險評估、監督及有效 溝通避免運營層面的 風險 Bottom-up risk assessment, super- vision and effective communication through various operating and functional depart- ments to avoid operational risks	經營及職能部門具體執 行人員 Specific executives of the operational and functional depart- ments	於各自組織內各部門進行風險識別、評估及 減緩,並形成內部控制報告。 於組織內的業務營運及職能方面制定並推行 風險管理流程。 持續改進流程和做好風險評估。 Conduct risk identification, assessment and mitigation in each department of their organizations, and form internal control reports. Develop and implement risk manage- ment processes for business operations and functions within the organization. Continuously improve processes and conduct risk assessments.
獨立機構 Independent Insti- tution	外部審計機構及專業 公司 External audit insti- tutions and profes- sional institution	向審核委員會、董事會報告及討論工作中所 出現的有關會計及經營系統中的內部控制缺 陷,並協助改進。 Report to the Audit Committee and the Board of Directors and discuss any inter- nal control deficiencies in the accounting and operating systems that have emerged during the work, and assist in improvement.



反貪懲腐

本集團在其經營過程中提倡高標準的商業誠信,不容 忍任何形式的貪污或賄賂。不論本集團在任何地區經 營業務,均嚴謹遵守所有關於反貪及賄賂的法律法 規。本集團已制定嚴格的反貪汙政策,並以培訓或巡 查等方式預防並管理可能發生的利益衝突及行賄事 件。

本集團在總結以往反貪汙工作經驗的基礎上,結合案 例強化相關培訓,公佈舉報管道(電話、郵箱、微信 公眾號等),對檢舉、揭發損害公司利益行為的人員 予以鼓勵和保護,對企業腐敗舞弊行為給予堅決打 擊,有力維護企業和股東的合法權益,確保企業健康 發展。

回顧年內,本集團在核心經濟活動的反貪汙工作上, 對採購、工程建設、資金資產管理等方面進行審計285 項。全年開展反貪汙教育培訓78場,巡視巡查22場, 發現問題整改率達100%。

Anti-corruption

The Group promotes high standards of business integrity in its operations and does not tolerate any form of corruption or bribery. Regardless of the region in which the Group operates its business, we strictly abide by all laws and regulations regarding anti-corruption and bribery. The Group has formulated strict anti-corruption policies and prevents and manages possible conflicts of interest and bribery through training or patrol.

On the basis of summary of previous anti-corruption work experience, the Group strengthened relevant training in combination with cases, and announced reporting channels (hotline, email, WeChat public account, etc.) to encourage and protect personnel who report and expose behaviors that harm the Company's interests, and to resolutely crack down corruption and fraud, so that the lawful rights and interests of the enterprise and shareholders are strongly protected to ensure the healthy development of the enterprise.

Looking back at the past year, the Group conducted audit on more than 285 items of procurement, engineering construction, capital asset management and other aspects in the anti-corruption work of core economic activities. 78 anti-corruption education trainings and 22 inspections and patrols were conducted throughout the year, with 100% rectification rate.

環安體系 Environmental Protection and Security System

2021年,本集團常態化抓好風險管控,全面深入推進 平安建設,進一步保障了高質量發展的良好態勢。相 關舉措包括:建立"二級公司自查自糾+事業部督查檢 查+集團督察管控"的三級檢查機制、深度開展內控體 系建設、環安資訊一體化、環安制度流程體系建設和 組織開展風險分級管控與隱患排查治理,通過重點領 域內控專項治理、生產現場精准化治理、聯絡員專題 培訓教育活動等。實現自我加壓,從根本上消除事故 隱患,大力提升集團本質安全水準。

一年來,集團夯實環保安防基礎。強化安全底線意識 和環保紅線思維,整合內部優質資源,以政策研判、 機制優化、管理賦能、督查檢查等為抓手,進一步促 進環保安防高效管理,為集團安全發展提供有力的基 礎和支撐。

本集團還持續優化網格化管理體系,組織聯絡員開展 各類專題培訓教育活動67場,大大提高了隊伍的風險 識別能力;不斷固化日常監管運行機制,進一步提升 了風險防控和應急處置能力;建立考核機制,針對突 發性和群體性事件、公共危機、重大經營風險等造成 集團經濟或品牌受損的,對主體責任人實行一票否 決。縱深推進政企聯動共建機制,形成了上下聯動、 協同推進的強大合力。 In 2021, the Group normalized risk management and control, comprehensively and deeply boosted safety construction, which further ensured the good momentum of high-guality development. The relevant measures include establishing a three-level inspection mechanism of "Second-level company self-inspection and self-correction + business department supervision and inspection + group supervision and control", launching an internal control risk system, realizing the integration of safety and environmental information, constructing a safety and environmental institution process system, and carrying out risk classification management and control as well as hidden danger investigation and management. Through the compilation of risk maps in key areas, precise management of production sites, and special training and education activities for liaison officers, we have realized self-pressurization, fundamentally eliminating hidden dangers of accidents, and vigorously improving the intrinsic safety level of the group.

Over the past year, the Group has consolidated the foundation for environmental protection and security. We strengthened the safety bottom line the awareness of and environmental protection red line , integrated internal high-quality resources, and use use policy analysis, mechanism optimization, management empowerment, supervision and inspection as effective means to further promote environmental protection, safety and efficient management, thus providing powerful foundation and support for the safe development of the Group.

The Group also continued to optimize the grid management system, organized 67 special training and education activities for liaison officers, greatly improving the risk identification capabilities of the part-time team continuously solidified. The daily supervision and operation mechanism was , and the risk prevention and emergency response capabilities were further improved. The assessment mechanism has been established, and if mass emergencies, public crises, major business risks, etc., which cause damage to the Group's economy or reputation, the main responsible person shall be vetoed by one vote. The government-enterprise cooperation and co-construction mechanism has been further promoted, forming a strong synergy of upper and lower linkages and coordinated advancement.



供應鏈管理 Supply-chain Management

本著"公開公正、誠信經營、長期合作、共用共贏" 的原則,本集團樂於與全球優質供應商攜手並進,共 同優化供應鏈管理,致力維護供應鏈生態系統的良性 發展。

對內,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"天暢智運"平臺, 實現可視化的全程物流、可視化的監控,幫助客戶更 好地實施貨權的管控。未來,我們將構建集線上交 易、資金結算、物流服務、金融服務、資訊服務於一 體的供應鏈集成服務平臺,提高供應鏈的市場回應效 率和產品服務的品質穩定性。 Based on the principles of "openness and fairness, honest operation, long-term cooperation, sharing and win-win", the Group is willing to go hand in hand with global high-quality suppliers to jointly optimize supply chain management and strive to maintain the healthy development of the supply chain ecosystem.

Internally, we have optimized the supply chain business processes, innovated supply chain technologies and models, focused on the logistics links of the supply chain, and built a "TianchangZhiyun" supply chain platform to realize the visualization of whole-process logistics and visual monitoring, and help customers better implement cargo rights management and control. In the future, we will build a comprehensive supply chain service platform that integrates online transactions, fund settlement, logistics services, financial services, and information services to improve the market response efficiency of the supply chain and the quality and stability of product services.

對外,我們建立供應鏈戰略聯盟,在充分借鑒吸收供 方優質經驗的同時,定期組織開展合格供方評價工 作,通過對產品品質、工藝裝備、過程控制、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 持,幫助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。 Externally, we have established strategic alliances in the supply chain. While fully drawing on the high-quality experience of suppliers, we regularly organize evaluations of qualified suppliers. Through the inspection, survey and review of product quality, process equipment, process control, technical services and safety production, we share experiencesn a timely manner and put rationalization suggestions. We provide support in echnology, capital, manpower, etc., to help some suppliers improve their management level and achieve the joint improvement of the competitiveness of the value chain system. 2021環境、社會及管治報告 2021Environmental, Social and Governance Report

O3踐行權益保障 彰顯責任擔當 Practice Rights and Interests Protection and Demonstrate Responsibility

- 3.1 保障員工權益Protection of Employee Benefits
- 3.2 保障投資者權益Protection of Investor Benefits
- 3.3 保障客戶權益Protection of Customer Benefits
- 3.4 保護知識產權 Protection of Intellectual Property





保障員工權益 Protection of Employee Benefits

本集團視員工為企業的最大財富。尊重員工的個人價 值、重視人才培養與激勵,不斷提升員工的歸屬感、 幸福感和成就感。本集團獲評為"全國模範勞動關係 和諧企業""全國就業與社會保障先進民營企業" "全國工人先鋒號""全國文明單位"等榮譽。 The Group regards employees as the greatest fortune of the enterprise, respects personal value, pays attention to talent training and motivation, and enhances the sense of belonging, happiness and accomplishment. The Group has been rated as "National Model Enterprise of Harmonious Labor Relations", "National Employment and Social Security Advanced Private Enterprises", "National Worker Pioneer", and "National Workers Pioneer".

天能建立健全良好的人才選用機制, 秉持著"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重視內部人員培養和外部高端人才引入。公司積極努力為員工營造多元化、公平、公正的工作環境。建立《天能集團人力資源管控規定》《天能集團招聘管理辦法》等管理制度, 並在制度中明確公司對員工的培訓、晉升、終止合同、退休等相關問題。確保所有員工不因宗教、性別、殘疾等因素而受到區別對待。

天能員工總數超20000餘人,其中男性占比約61%, 女性占比約39%。管理人員中本科及以上學歷占比近 四成,擁有專業技術資格(職稱)人員近千人。 Tianneng has established a sound talent selection mechanism, adhering to the employment concept of "Let the right person be in the right place, and allow contributors to get equivalent return", and attaches importance to internal personnel training and external high-end talent introduction in the company's overall operation and management. The Company actively strives to create a diversified and impartial working environment for its employees and establishes management systems such as "Regulations on Human Resource Management " and "Control of Tianneng Group and Recruitment Management Measures of Tianneng Group" to clarify the training, promotion, contract termination, retirement and other related issues for employees, ensuring that all employees are not discriminated against on the basis of religion, gender, disability, etc.

The total number of employees in Tianneng exceeds 20000, of which about 61% are male and 39% are female. Nearly 40% of the management personnel have a bachelor's degree or above, and nearly 1000 persons have professional and technical qualifications.

公平就業

本集團嚴格遵循當地相關法律法規,堅持平等雇傭, 在人員招聘及晉升過程中,杜絕因求職者或雇員的種 族、性別、年齡、婚姻狀況、宗教信仰及國籍產生的 歧視行為,拒絕任何職場上的歧視或騷擾。為人才提 供公平、公正的就業機會。

基本保障

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 法規及僱傭合同所訂。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。

薪酬福利

本集團堅持以人為本,為員工提供具備競爭力的薪酬 及福利待遇。2021年,本集團進一步完善組織績效、 個人績效考核和薪酬分配制度,建立突出崗位價值、 工作業績、創新成果的薪酬福利機制,確保收入增長 與企業效益相匹配。基於業務不同發展階段,本集團 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。同時,本集團還建立了創新專案跟投 機制,為集團戰略目標實現建立了共創、共用、共擔 的利益共用與約束機制,激發了員工動力和組織活 力。

Fair Employment

The Group strictly abides by relevant local laws and regulations, insists on equal employment, and eliminates discrimination against candidates in terms of race, gender, age, marital status, religion or nationality in recruitment and promotion process, and rejects discrimination or harassment in any workplace. The group provide fair and equitable employment opportunities.

Basic Employment Protection

The group strictly implements the provisions of the "Labor Law" for equal employment, to ensure 100% legal and compliant employment. All staff must sign a labor contract on entry day and the Group pays for them insurances and housing fund for them according to the regulations. Employees are legally entitled to marriage leave, maternity leave and other holidays. Working hours, remuneration overtime, statutory holidays, paid vacations and related treatment are in accordance with the stipulations in local labor laws. The labor union organizes congress of workers each year to discuss big issues related to workers' rights and interests.

Salary and Welfare

The Group adheres to the people-oriented principle and provides employees with competitive remuneration and benefits. In 2021, the Group further formulated and improved the organizational performance, individual performance appraisal management and remuneration distribution systems. The Group has established a compensation and welfare mechanism that highlights post value, work performance and innovation results to ensure that income growth matches corporate benefits. Based on the different stages of business development, the Group has built a comprehensive differential compensation incentive system to further optimize short-term and medium - and long-term incentive programs. At the same time, the Group has also established the mechanism of innovative co-investment project, and established the benefit sharing and constraint mechanism of co-creation, sharing and undertaking for the realization of the Group's strategic goals, which has stimulated the motivation of employees and the vitality of the organization.



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等。 While providing a safe and healthy working environment for all employees, the Group also provides a series of benefits for employees. We help to solve basic problems such as staff housing, transportation and children's education. We have constructed clean and tidy dormitories at the headquarters and multiple bases. For employees, and also provide multi-shift, multi- route shuttle services, canteen food allowance, employee shopping vouchers. Moreover, various sports and leisure activities were organized to create a work module that combines task and rest.

案例: "金秋助學"讓更多貧困學子圓夢

2021年8月,天能位於河南省濮陽市的子公司開展一年 一度的"金秋助學"活動。在此次活動,天能為10名 考上一本以上大學的天能員工子女發放助學金共計3萬 元。受資助的員工表示,將繼續在崗位上刻苦勤奮工 作,用優異的績效回報公司的關愛。濮陽子公司已經 連續8年舉辦"金秋助學"活動,累計資助大學生60餘 名,發放教育補助金近20萬元。

天能位於安徽省界首市的子公司也為跨入高校的28名 困難職工子女,發放了23,500元助學金和定制行李 箱。 Case: "Student Assistance in Golden Autumn" enables more poor students to realize their dreams

In August 2021, Tianneng's subsidiary in Puyang city, Henan Province launched the annual "Student Assistance in Golden Autumn" activity.In this event, Tianneng distributed a total of 30,000 Yuan to 10 children of Tianneng employees who were admitted to first-tier or higher colleges and universities.The subsidized employees said that they would continue to work hard and repay the company's care with excellent performance. Puyang subsidiary has held the "Student Assistance in Golden Autumn" activity for 8 consecutive years, with a total of more than 60 college students subsidized and nearly 200,000 Yuan of education subsidies issued.

Tianneng subsidiary in the capital city of Anhui province also handed out 23,500 Yuan in grants and custom-made suitcases to 28 children of poor workers who entered colleges and universities.

健康安全

本集團嚴格遵守《安全生產法》《職業病防治法》等 法律法規,壓實各部門、各單位健康安全主體責任, 防範風險。天能堅持以人為本,建立健全職業健康安 全管理體系,不斷改進員工工作環境與安全條件。天 能每年開展員工職業健康監護行動,並建立員工健康 檔案。同時,天能也積極開展應急演練、安全知識培 訓、消防技能比武、安全宣傳等活動。天能全年開展 員工安全培訓約4萬人次,各類應急演練約400場。

公司通過了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。集團在每個基地均設有心理健康室,跨部門全程 提供心理健康諮詢服務,保障廣大員工的心理健康。

Health Safety

The Group strictly abides by laws and regulations such as "the Work Safety Law" and "the Law on the Prevention and Control of Occupation Diseases", consolidates the main responsibility of each department and unit for health and safety, and prevents risks. Tianneng insists on people-oriented, establishes and improves the occupation health and safety management system, and continuously improves the working environment and safety conditions of employees. Tianneng conducts employee occupational health monitoring activities every year and establishes employee health records. Meanwhile, Tianneng also actively carries out emergency drills, safety knowledge training, fire fighting skills competitions, safety publicity and other activities. We have carried out about 40,000 employees safety trainings and about 400 emergency drills throughout the year.

The Company has passed ISO45001 occupational health and safety management system certification, and has developed a number of management systems in the Company like Tianneng Group EHS Management System, Emergency Management System, and Industrial Injury Treatment Management System, aiming to realize the safety management idea of "hierarchical management and line responsibility" and adhering to the safety production responsibility system of all staff. At the same time, the Company has standardized the emergency management work, established and maintained the emergency management system, prevented and reduced the risk of emergencies, and improved the ability to deal with emergencies. The Group has a mental health room in each base, providing cross-department mental health consultation services to ensure the mental health of employees.



案例:安全生產月築牢安全防線

為普及消防安全應急救援等專業常識,提升員工應急 能力,同時強化消防意識,進一步築牢安全防線,公 司在2021年舉行"安全生產月"活動,參與人員達 5,700人次。 Case: Build a Strong Defense Line of Security in Safety Production Month

In order to popularize the professional knowledge of fire safety emergency rescue, improve the emergency ability of employees, strengthen the awareness of fire fightin, and further build a solid defense line of safety. The Company held the "Safety Production Month" activity in 2021, involving about 5,700 people.

活動包括現場模擬火災疏散、初期火災滅火演練、夜 間突擊消防演練、消防器材使用培訓等。其中消防器 材使用培訓及初期火災滅火演練進一步使員工熟悉掌 握乾粉滅火器、二氧化碳滅火器、消防栓、一鍵報 警、一鍵斷電、絕緣棍等消防器材的操作使用步驟及 方法,全面提升全員應急專業技能。 Activities include simulated fire evacuation, initial fire extinguishing drill, night assault fire drill, and fire equipment use training. The training on the use of firefighting equipment and the initial firefighting drill further familiarized the staff with the operation procedures and methods of dry powder fire extinguisher, carbon dioxide fire extinguisher, fire hydrant, one-button alarm, one-button power off, insulation rod and other firefighting equipment and comprehensively improved the emergency professional skills of all staff.



消防知識講解 Fire Knowledge Explanation



乾粉滅火器實操 Practical Operationof Dry Powder Fire Extinguisher

人才培養

本集團始終把人才作為支撐企業發展的第一資源。持續引進行業領軍人才,培養內部人才,優化人才結構,夯實業務發展的人才基石。

本年內,在鋰電、氫能、全球化等關鍵崗位持續引進 領軍人才和核心人才,多人次入選國家級引才、省級 引才、省萬人計畫,以高端人才支撐業務發展;並積 極回應集團發展需求,提高研發技術類及行銷類崗位 配置比例,提高本科及以上員工占比,通過各類員工 關懷活動降低員工流失率,用一支穩定性好、素質 高、能力強的人才隊伍支撐業務發展。

同時,天能在內部加快內生性人才培養,持續開展幹 部梯隊培養、青年人才培養、校招大學生培養、業務 精英訓練、職能條線能力提升等多層次、多類別人才 培養專案;重視組織經驗沉澱,持續培養內部講師、 開發內部課程與微課、提煉文化案例和業務案例;通 過推進學習型組織建設完善內部人才能力提升與職業 發展體系,搭建關注員工發展、助力員工成長的事業 平臺。

Talent Training

The Group always takes talents as the first resource to support the development of the enterprise. Continue to introduce industry-leading talents, cultivate internal talents, optimize the talent structure, and consolidate the talent foundation for business development.

This year, we will continued to recruit leading talents and core talents in key positions in our lithium electricity, hydrogen energy, globalization and other businesses. We have selected a number of people into National Talent Introduction Program, Provincial Talent Introduction Program and Provincial 10,000 Talents Program to support business development with high-end talents. We actively respond to the Group's development strategy, improve the proportion of R&D Technology and marketing positions, increase the proportion of employees with a bachelor's degree or above, reduce the staff turnover rate through all kinds of staff care activities, and support business development with a stable, high-quality and capable talent team.

At the same time, Tianneng accelerates its internal talent training and continues to carry out multi-level and multi-category talent training programs such as cadre training, young talent training, college student training, business elite training, and functional line ability improvement; pays attention to the accumulation of organizational experience, continuously cultivates internal lecturers, develops internal courses and micro classes, refines cultural cases and business cases; improves the internal talent ability improvement and career development system and builds a business platform that focuses on staff development and helps staff growth by promoting the construction of the learning organization.



案例: 2021年遠航班培訓課程

2021年天能開設遠航班培訓課程,包括後備副總監及 新任副總監共計64人參加了此次的培訓課程。此次課 程以打造"會幹事,敢幹事,幹成事"的幹部隊伍為 目標,通過兩條主線任務,讓員工完成對工作場景中 的複雜型任務的挑戰任務,完成領導力認證。培訓綜 合滿意度達97.22%。 Case: "Yuanhang Class" Training Course in 2021

In 2021, Tianneng opened "Yuanhang Class" Training Course , and 64 people, including the backup deputy director and the new deputy director, attended the training course. This course aims to build a cadre team of "capable, courageous and accomplished". Through two main tasks, lets employees face the challenges of complex tasks in the work scene and complete the leadership certification. The overall satisfaction rate of training reached 97.22%.



遠航班培訓課 Voyage Course Training Course



文娛生活

本集團為適應廣大員工的精神文化訴求,陶冶員工情 操,建設了籃球場、羽毛球場等文娛設施,並不定期 組織豐富多彩的活動,包括拓展訓練、家屬聯誼會、

"文化大使"講好身邊故事活動等。除此之外,本集 團通過刊發《天能報》、《天能人》等內部讀物與雜 誌,利用官方網站以及微信公眾號、抖音、快手等自 媒體平臺,傳播天能好聲音,彙聚發展正能量,在行 業和社會上產生了強烈反響。 **Cultural & Recreational Activities**

To meet the spiritual and sport demands of employees, the Group has built recreational facilities such as basketball courts and badminton courts, and organizes a variety of activities from time to time, including extended training, family day, and storytelling by "Culture Ambassador". In addition, the Group continues to publish internal reading materials such as Group News and Tianneng Staff to utilize the official website and WeChat public account, TikTok, Kuaishou, and other self-media platforms to spread the good news of Tianneng and gather positive energy for development, which has produced a strong resonance in the industry and society.

保障投資者權益 Protection of Investors

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。除規定的資訊披露途徑 外,本集團還安排專人通過投資者熱線電話、郵件往 來、來訪接待、本集團網站投資者關係專欄和本集團 官方微信等豐富的管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。 The Group attaches great importance to the management of investor relations, the investors' right to know, and investor protection education. In addition to the prescribed information disclosure channels, the Group also arranges special personnel to maintain close communication with investors through various channels such as investor hotlines, email correspondence, visiting receptions, the investor relations column of the Group's website, and the Group's official WeChat account to strengthen the construction of investor relationship platforms and improve the efficiency and quality of investor relationship services.



保障客戶權益 Protection of Customers

本集團堅持以客戶為中心,不斷完善產品體系、行銷 體系、服務體系,不斷提升產品品質、技術研發實力 和服務水準。本集團秉承"以客戶為中心"的服務理 念,實施"誠心、貼心、細心、耐心、舒心"五心服 務滿意工程,積極加強客戶關係管理,變被動服務為 主動服務。通過每年開展2次客戶滿意度調查、淨推薦 值(NPS)調查,公司全面瞭解客戶需求,努力滿足 並超越客戶需求及期望,獲得客戶忠誠,成為同行業 跟進和超越的對象。 The Group adheres to customer-centricity, continuously improves product system, marketing system, and service system, and constantly improves product quality, technical research and development strength, and service level. Adhering to the "customer-centric" service concept, we implemented the "SCCPR Service Satisfaction Project" of being sincere, considerate, careful, patient, and reassuring, actively trengthens customer relationship management, and changes passive service into active service. Through conducting two customer satisfaction surveys and Net Promoter Score (NPS) surveys every year , the company has a comprehensive understanding of customer needs, strives to meet and exceed customer needs and expectations, gain customer loyalty, and becomes the object to be followed and surpassed in the industry.



天能電池經銷商 Tianneng battery reseller

本集團在全國各地擁有3000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700餘人為遍佈全國 的服務網絡提供技術支持及產品培訓服務。該培訓每 週至少進行一次,每次覆蓋30人以上。 The Group has more than 3,000 resellers across the country and has formed a huge service network based in Zhejiang and radiating the whole country. We carried out cooperation based on the principle of mutual benefit and win-win, and has established complete service management standards, processes, and systems. At the same time, more than 700 full-time after-sales personnel are employed to provide technical support and product training services for the service network all over the country. The training is conducted at least once a week, covering more than 30 people each time. 為有效保護企業品牌形象以及消費者權益,天能設立 了品牌維權辦公室,制定了假冒電池回饋、打擊、管 控機制和預防對策,包括:開通打假維權熱線、建立 獎懲規定、配置維權打假專職人員等。天能對市場上 的假冒天能電池產品現象進行調查、取證、溯源,並 會同工商行政管理局、公安等執法部門對造假、售假 行為給予嚴厲懲處和堅決打擊。2021年全年,本集團 在全國範圍內聯合各地區執法部門開展專項品牌維 權、打假行動10餘場,有效減少了假冒天能電池流通 市場,保護了消費者利益。

2021年,公司提供並優化了400電話服務全流程閉環 保障,通過微信公眾號、微信客訴群、QQ共贏商群、 客戶服務專線、400熱線平臺以及開展客戶滿意度調查 的方式,建立起客戶服務鏈接管理。基於產品特性, 公司也在售後車間建立起產品專線維修平臺,為客戶 提供培訓、維修學習等服務。2021年,天能也增加7 個駐外服務辦事處,增加3處重點客戶現場服務點,實 現了市場服務效率的有效提高。 To effectively protect the corporate brand image and consumer rights, and interests Tianneng has established a brand rights protection office, formulated counterfeit battery feedback, crackdown, management and control mechanisms, and preventive measures, including opening a protection hotline, establishing a reward and punishment system, arranging full-time personnel to safeguarding rights and crack down on counterdeiting, and investigateand deal with counterfeit Tianneng battery products on the market. Furthermore, we cooperated with the Administration for Industry and Commerce, public security and other law enforcement agencies to harshly punish and resolutely crack down on fraud and sales. During the whole year of 2021, the Group has launched more than 10 special brand protection actions in cooperation with law enforcement agencies across the country, effectively reducing the counterfeit Tianneng battery circulation market and protecting consumer interests.

In 2021, the company provided and optimized the whole process of "400" hotline service closed-loop guarantee, and established customer service link management through Wechat public account, Wechat customer complaint group, QQ win-win business group, customer service special line, 400 hotline platform, and customer satisfaction surveys. Based on product characteristics, the company has also established a dedicated maintenance platform in the after-sales workshop to provide customers with training, maintenance learning, and other services.In 2021, Tianneng has also increased 7 overseas service offices and 3 key customer service sites, effectively improving the efficiency of market service.



400熱線平臺 "400" hotline platform

未來,天能將通過數位化技術,重點搭建線上+線下的 立體化售後服務平臺,到2023年完成全國1,000家的 售後服務網路建設,充分實現4小時回應、3天處理完 結的售後服務時效承諾。 In the future, Through digital technology, Tianneng will focus on building an online + offline three-dimensional after-sales service platform, and complete the construction of 1,000 after-sales service networks nationwide by 2023, fully realizing the after-sales service time-effectiveness commitment of 4-hour response and 3-day processing.



保護知識產權 Protection of Intellectual Property Rights

本集團高度重視科技研發,先後與8名院士合作,引進 國家級引才計畫人才7名,省級引才計畫人才12名,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、綠色迴圈等多個領域。



天能科技研發創新團隊 Tianneng's R&D innovation team

本集團設有專案與知識產權管理部,專門負責專案申報 及知識產權管理工作,有效保證本集團核心競爭力。 集團2021年參與制定國標行標等技術標準16份,參與 編制的第一份國際標準正式發佈實施;完成專案、榮 譽申報500餘項,完成專利申請600餘件,並獲得國家 綠色設計產品、國家綠色供應鏈管理企業、中國專利 優秀獎、全國供應鏈創新與應用示範企業、中國輕工 業科技創新先進集體等榮譽稱號。工信部工業互聯網 創新發展工程、科技部國家重點研發計畫等重點專案 順利推進;工信部綠色供應商招標、工信部國家電子 資訊發展基金等重大專案通過驗收。

截止2021年12月底,天能集團累計擁有授權專利2935餘件。

The Group attaches great importance to scientific and technological research and development. It has cooperated with 8 academicians, introduced 7 talents from the national talent introduction plan and 12 talents from the provincial talent introduction plan, and established an innovation team composed of international top experts from the United States, Japan, South Korea, and so on. The research industry involves new energy batteries, new energy materials, intelligent manufacturing, green cycle, and other fields.

The Group sets up the department of Projects and Intellectual Property. It is totally responsible for jobs related projects application and intellectual property management, which effectively guarantees the core competitiveness of the Group. In 2021, the Group participated in compiling 16 technology standards including international industry standards; and the international standards for which it participated for the first time have been issued and implemented; besides, more than 500 projects have applied for approval and honorary titles and 600 have completed with the patent application. It has also won honorary titles such as National Green Design Product, National Green Supply Chain Management Enterprise, China Patent Outstanding Award, National Supply Chain Innovation, and Application Demonstration Enterprise, and China Light Industry Technology Innovation Advanced Group. We have successively gained the approval of the Green Supplier Biddingand National Electronic Information Development Foundation by the Ministry of Industry and Information Technology (MIIT).

As of December 2012, Tianneng has owned over 2,935 authorized patents.



Safeguard the Green Homeland

4.1 升級綠色智造助力實現雙碳目標

Upgrade Green Smart Manufacturing and Help to Achieve the Dual Carbon Goal 4.2 智慧能源+資源再生構築綠色發展生態圈

- Smart Energy + Resource Regeneration and Build a Green Development Ecosystem 4.3 以綠色能源解決方案商之姿賦能低碳出行
 - Enable Low-Carbon Travel by Providing Green Energy Solutions
- 4.4 加快污染防治推進生態環境提能升級 Speed up Pollution Prevention and Control and Upgrade the Ecological Environment
- 4.5 聚力行業夥伴承擔"低碳"發展使命 Gather Industry Partners and Undertake the Mission of Low-Carbon Development



升級綠色智造助力實現雙碳目標 Upgrade Green Smart Manufacturing and Help to Achieve the Dual Carbon Goal

天能的綠色轉型是從2004年開始的。2004年5月,時 任浙江省委書記習近平來到天能考察,勉勵天能"騰 籠換鳥",走綠色可持續的發展道路。2019年11月, 在習近平總書記和法國總統馬克龍見證下,天能和法 國帥福得公司簽約。雙方共同開發、製造和銷售高性 能鋰電池,向全球市場提供動力和儲能領域的清潔能 源系統解決方案。天能綠色高質量發展道路越走越堅 實。2020年9月,中國明確提出了2030年"碳達峰" 與2060年"碳中和"目標。天能作為全球新能源電池 領域的領軍企業,助力"雙碳"工作,首當其衝,責 無旁貸。

工業碳排放位列全球第三,是實現"雙碳"目標的重要一環。天能把綠色發展理念貫穿到產品設計、製造、回收處置的全過程中,通過綠色智造和迴圈回收,打造閉環式產業鏈,全面融入綠色產業生態,助力"雙碳目標"的實現。

Tianneng's green transformation began in 2004. In May 2004, Xi Jinping, then-secretary of Zhejiang Provincial Party Committee, came to Tianneng to inspect and encouraged it to "vacate the cage to change the bird" and take the road of green and sustainable development. In November 2019, witnessed by General Secretary Xi Jinping and French President Emmanuel Macron, Tianneng signed a contract with France Saft Company. The two companies jointly develop, manufacture and sell high-performance lithium batteries to provide clean energy system solutions for power and energy storage to the global market. The road of green and high-quality development of Tianneng is becoming more and more solid. In September 2020, China set the goal of "Carbon Peak" by 2030 and "Carbon Neutral" by 2060. As a leading enterprise in the field of new energy batteries, Tianneng is the first to bear the brunt to help the "Dual Carbon" strategy.

An important part of achieving the "Dual Carbon" goal is that industrial carbon emissions rank third in the world. Tianneng has put the concept of green development into the whole process of product design, manufacturing, recycling, and disposal. Through green intelligent manufacturng and recycling, Tianneng has created a closed-loop industrial chain, fully integrated into the green industrial ecology, and helped achieve the "Dual Carbon" goal.



天能"綠色智造"工廠 Tianneng's "Green Intelligent Manufacturing" Factory

近年來,天能全面探索綠色增長新模式,從綠色產 品、綠色車間、綠色工廠、綠色園區、綠色標準、綠 色供應鏈等入手,借助互聯網、大數據等手段,將 "綠色智造"主線貫穿到生產經營全流程,引領產業 向綠色、高端、智能方向發展。目前,天能共有30個 專案上榜國家綠色製造名單,16項綠色設計產品入選 全國綠色領跑產品名單。 In recent years, Tianneng has comprehensively explored a new model of green growth. Starting from green products, green workshops, green factories, green parks, green standards, green supply chains, etc., with the help of the Internet, big data, and other means, it puts "green intelligent manufacturing" into the whole process of production and operation, leading the industry to develop in a green, high-end, and intelligent direction. At present, Tianneng has a total of 30 projects on the National Green Manufacturing List and 16 green design products on the National Green Leading Products List.

智慧能源+資源再生構築綠色發展生態圈 Smart Energy + Resource Regeneration and Build A Green Development Ecosystem

儲能與資源迴圈是"雙碳"目標落地的重要支撐。天 能攜智慧能源解決方案與資源再生解決方案持續精 進,傾力構築綠色發展生態圈為未來蓄勢。 Energy storage and resource cycle is an important support for the realization of the "Dual Carbon" goal. Tianneng continues to improve with smart energy solutions and resource regeneration solutions, striving to build a green development ecosystem to build momentum for the future.



在智慧能源領域,天能積極開發多層次儲能產品和系 統解決方案,推進產業鏈條延伸和高端化升級,尤其 在儲能上已形成綠色高能鉛炭電池、鋰離子電池、氫 燃料電池等一系列解決方案,可根據客戶的不同應用 場景,提供最佳方案。譬如在電網側儲能專案應用 中,天能以高能鉛炭電池為依託、以智慧儲能管理系 統為核心,攜手國家電網浙江省電力公司,建成全國 首個電網側鉛炭式儲能電站——長興10千伏雉城儲能 電站。在浙江省首批在建的4個電網側儲能電站專案 中,天能就參與了其中的2個專案。

天能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 電網側專案、非洲光伏儲能離網專案、上海松江用戶 側專案、長沙汽車產業園智能微電網系統等。



Tianneng Smart Energy Storage Power Station is widely used in photovoltaic + energy storage, wind power + energy storage, and other fields on the grid side and user side. It has created the grid side project of Changxing Zhicheng Energy storage Power Station, the Off-grid Project of Photovoltaic Energy Storage in Africa, the user side project of Shanghai Songjiang, and the smart micro-grid system of Changsha Automobile Industrial Park, etc.



2020年12月27日,天能"高性能鉛炭電池產業化示範專 案"榮獲中國工業大獎

On December 27, 2020, Tianneng's "High Performance Lead- Carbon Battery Industrialization Demonstration Project" won the China Industry Award 2021年12月23日,天能帥福得2MWh儲能系統正式交 付投運。該系統採用了IP20防護等級電池箱,確保1C 持續充放電能力的同時,達到電芯熱均衡要求,使箱 體內部溫差控制在3℃範圍內,有效提高系統迴圈使用 壽命。依託出色的安全管理和熱管理,該系統可適應 海拔4000米高度環境,核心安全控制技術保障系統在 運行過程中的高性能與高安全性。



天能帥福得2MWh儲能系統交付儀式 Tianneng Saft 2MWh energy storage system delivery ceremony

On December 23, 2021, Tianneng Saft 2MWh energy storage system was officially put into operation. The system uses IP20 protection grade battery box to ensure 1C continuous charging and discharging capacity, and at the same time meet the requirements of thermal balance of the cells, so that the temperature difference inside the box is controlled within the range of 3°C, which effectively improving the cycle life of the system. Relying on excellent safety management and thermal management, the system can adapt the environment at an altitude of 4,000 meters, and the core safety control technology guarantees the high performance and high safety of the system during operation.

據悉,成組系統後,可充分滿足客戶在發電側、電網 側及用戶側不同場景下的電力需求,發揮應急供電、 削峰填穀、調峰調頻等重要作用,有助於改善客戶的 產品品質和使用性能,降本的同時提高盈利能力。專 案的落地標誌著公司在鋰電儲能領域取得重大突破。



天能花園式工廠 Tianneng's garden-style factory

It is reported that the group system can fully meet the power demands of customers in different scenarios on the power generation side, the power grid side , and the user side, and play an important role in emergency power supply, peak cutting and valley filling, and peak and frequency regulation. This helps to improve the product quality and performance for customers, reducing costs and increasing profitability.The landing of the project marks a major breakthrough in the field of lithium electric energy storage.


在資源再生領域,天能主動打造電池生產、使用、梯 次利用、回收與資源再生全閉環,挖掘城市"新礦 山"的價值。依託鉛鋰強大的管道力,通過在全國各 地的終端門店,將廢舊電池分散回收、集中處置、無 害化再生利用,形成了閉環式的迴圈經濟生態圈。同 時,加快大循環事業的全國佈局,除已在15個省取得 了回收試點資質外,全國最大的廢舊電池 "回收雲" 平臺也已經上線運行。

2009年起,天能先後在浙江長興、安徽界首、河南濮 陽和貴州臺江建成鉛蓄電池迴圈經濟產業園,並在北 京、上海等20餘省建設規範有效的回收體系。採用國 際最先進的再生鉛熔煉工藝,打造了鉛蓄電池行業集 "回收—冶煉—再生產"為一體的閉環式綠色迴圈產 業鏈。

天能在動力電池回收領域穩佔優勢地位的同時,正在 大步進軍鋰電池回收領域,逐步構建了"鉛、鋰"雙 循環體系。天能在浙江長興規劃建設年處理2.3萬噸廢 舊鋰電池回收再利用新材料基地,與同產能的原礦企 業相比,年可減少廢水、廢渣排放數百萬噸,取得國 家工信部《新能源汽車廢舊動力蓄電池綜合利用行業 規範條件》再生利用、梯次利用資質。 In the field of resource regeneration, Tianneng takes the initiative to create a full closed loop of battery production, use, cascade utilization, recycling and resource regeneration to tap the value of the city's "new mines". Relying on the strong channel power of lead and lithium, through the terminal stores throughout the country, the waste batteries are recycled, centrally disposed, and recycled in a harmless manner, forming a closed-loop economic ecosystem. At the same time, to accelerate the national layout of the major recycling business, In addition to obtaining the qualification of pilot recycling in 15 provinces, the country's largest "recycling cloud" platform for used batteries has also been launched.

Since 2009, Tianneng has built lead battery recycling economic industrial parks in Changxing, Zhejiang province, Jieshou, Anhui Province, Puyang, Henan Province, and Taijiang, Guizhou Province, and has established standardized and effective recycling systems in more than 20 provinces including Beijing and Shanghai. Adopting the most advanced secondary lead smelting process in the world, the Company has created a closed-loop green industry chain integrating "recovery, smelting, and reproduction" in the lead battery industry.

While holding a dominant position in the field of power battery recycling, Tianneng is striding into the field of lithium battery recycling, and has gradually built a "lead, lithium" double-cycle system. Tianneng plans to build a new material base for the recycling and reuse of 23,000 tons of waste lithium batteries per year in Changxing, Zhejiang province.Compared with raw ore enterprises with the same capacity, it can reduce the annual discharge of wastewater production and slag by millions of tons. It was obtained Recycling Utilization and Cascade Utilization Qualification of Industry Specification Conditions for Comprehensive Utilization of Waste Power Batteries of New Energy Vehicles by the Ministry of Industry and Information Technology of the People's Republic of China.

以綠色能源解決方案商之姿賦能低碳出行 Enable Low-Carbon Travel by Providing Green Energy Solutions

汽車、交通、能源行業構成了緊密且完整的"碳鏈 條",其中交通領域的碳排放占全國終端碳排放約 15%。天能2021年售出約3.4億支動力電池。按每組電 池(4支電池為一組)蓄電後可騎行60公里,每組電池 可充放電400次計算,天能每年售出的電池累計行駛里 程可達到20,400億公里。

中國當前摩托車排放量限值為每公里排放一氧化碳 2g,每億公里排放一氧化碳200噸;中國當前轎車排 放量限值為每公里排放一氧化碳1g,每億公里排放一 氧化碳100噸。

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(累計行駛里程20,400億公 里),代替摩托車里程部分為16,320億公里,可實現 減少一氧化碳排放3,264,000噸;代替轎車里程部分為 4,080億公里,可實現減少一氧化碳排放408,000噸, 則天能一年售出的電池可實現減少一氧化碳3,672,000 噸,即367.2萬噸。

摩托車百公里油耗為2.5升,汽油的碳排放係數為每升 2.3Kg,摩托車百公里排放為5.75Kg,億公里排放為 5750噸。轎車百公里油耗為9升,汽油的碳排放係數 為每升2.3Kg,轎車百公里排放為20.7Kg,億公里排 放為20,700噸。 The automobile, transportation, and energy industries form a tight and complete "carbon chain", of which the carbon emissions transportation sector's account for about 15% of the country's terminal carbon emissions. Tianneng sells about 340 million power batteries in 2021. According to the calculation that each battery (4 batteries as a group) can ride for 60 km after being charged, and each battery can be charged and discharged 400 times, the cumulative mileage of the batteries sold by Tianneng every year can reach 2.04 trillion km.

China's current limit motorcycle emission is 2 grams of carbon monoxide per kilometer and 200 tons per 100 million kilometers. China's current car emission limit of carbon monoxide is 1 gram of carbon monoxide per kilometer and 100 tons per 100 million kilometers.

Assuming that 80% of the batteries sold by Tianneng in a year (with a cumulative mileage of 2,040 billion kilometers) are used for motorcycles and 20% for cars, then the mileage of motorcycles is 1632 billion kilometers, which can reduce carbon dioxide emissions by 3.264 million tons. Similarly, the mileage of cars is 408 billion kilometers, which can reduce carbon dinoxide emissions by 0.408 million tons. Then the batteries sold by Tianneng can reduce carbon monoxide by 3,672,000 tons, or 3.672 million tons, in a year.

The fuel consumption per 100 kilometers of motorcycles is 2.5 liters, the carbon emission coefficient of gasoline is 2.3Kg per liter. The emission of motorcycles is 5.75 kg per 100 km, and the emission per 100,000 km is 5,750 tons.The fuel consumption of the car is 9 liters per 100 kilometers, the carbon emission coefficient of gasoline is 2.3Kg per liter, the emission of the car is 20.7Kg per 100 kilometers, and the emission of the 100 million kilometers is 20,700 tons.



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(累計行駛里程20,400億公 里),代替摩托車里程部分為16,320億公里,可實現 減少二氧化碳排放9,384萬噸;代替轎車里程部分為 4,080億公里,可實現減少二氧化碳排放8,445.6萬 噸,由於電池用於電動車後每億公里自身會產生1,200 噸二氧化碳排放量,那麼天能一年售出的電池在行駛 過程中共產生2,448萬噸二氧化碳,則天能一年售出的 電池可實現減少二氧化碳15,381.6萬噸。 Assuming that 80% of the batteries sold by Tianneng in a year (with a cumulative mileage of 2,040 billion kilometers) are used for motorcycles and 20% for cars, then the mileage of motorcycles is 163.2 billion kilometers, which can reduce carbon monoxide emissions by 93.84 million tons. Similarly, the mileage of cars is 408 billion kilometers, which can reduce carbon monoxide emissions by 84.456 million tons. Since the batteries themselves produce 1,200 tons of carbon dioxide emissions per 100 million kilometers of electric vehicles, so the battery sold by Tianneng produce 24.48 million tons of carbon dioxide on the road and reduce carbon dioxide by 153.816 million tons a year.

假設每公頃土地栽種松樹1000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。 If 1,000 pine trees are planted on each hectare of land, it can absorb 1 ton of carbon dioxide per day and 365 tons of carbon dioxide per year.

天能一年售出的電池可實現減少二氧化碳15,381.6萬 噸,相當於種植421,414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1000棵,那麼天能 一年售出的電池減少的二氧化碳量相當於種植了約4.2 億棵松樹。 The battery sold by Tianneng in one year can reduce carbon dioxide by 153.816 million tons, equivalent to the amount absorbed by planting 421,414 hectares of pine forest in one year. With 1, 000 pine trees planted per hectare, the amount of carbon dioxide that Tianneng reduced by selling batteries in a year is equivalent to planting about 420 million pine trees.



天能榮獲2020—2021年度節能減碳先鋒企業獎 Tianneng Won the Pioneer Enterprise Award of Energy Saving and Carbon Reduction in 2020-2021 天能迴圈經濟產業園通過採用全球最先進全自動機械 破碎、水力分選工藝和純氧低溫轉爐連續熔煉再生技 術,相比於傳統的原生鉛生產方式,節能減排效益明 顯。每生產一噸再生鉛,可實現節約標煤60%,節水 50%,減少固體廢棄物60%,減少二氧化硫66%。

天能還在光伏、儲能及智能微網領域取得了實質性進展。其中分佈式光伏電站專案成功並網發電,可實現 年發電量約252萬度,節約標準煤約881噸,減少二氧 化碳排放約2438m³,減少二氧化硫排放約73.375 噸;商業化智能微網鉛炭儲能電站150KW/1.6MWh專 案,保證用戶電力增容120KW,降低對電網的功率衝 擊,降低了當地的電網故障率;1MW/8MWh智能微 網鉛炭/鋰電儲能電站專案也正在有序推進中。

目前,天能已建成非洲光伏儲能離網專案、岡比亞總 統別墅光儲系統、智能微網鉛炭電池儲能電站等多個 專案。在中央電視臺《朝聞天下》報導的浙江省首批 在建的4個電網側儲能電站專案中,天能參與了兩個專 案——長興10千伏雉城儲能電站專案,以及衢州灰坪 鄉大麥源儲能電站專案。其中,"10千伏雉城儲能電 站專案"也是全國首座電網側儲能電站。 Tianneng Circular Economy Industrial Park adopts the world's most advanced fully automatic mechanical crushing, hydraulic separation process, and continuous smelting and regeneration technology of pure oxygen low temperature converter. Compared with the traditional primary lead production method, the energy saving and emission reduction benefits are obvious. Every ton of recycled lead produced can save 60% of standard coal, 50% of water, 60% of solid waste, and 66% of sulfur dioxide.

Tianneng has also made substantial progress in the fields of photovoltaics, energy storage, and smart micro-grids. Among them, the distributed photovoltaic power station project has been successfully connected to the grid for power generation, which can achieve an annual power generation of about 2.52 million kWh, saving about 881 tons of standard coal, reducing carbon dioxide emissions by about 2438m³, and reducing sulfur dioxide emissions by about 73.375 tons; the commercial intelligent micro-grid lead-carbon energy storage 150KW/1.6MWh power station project ensures that the user's power capacity can be increased by 120KW, reducing the power impact on the grid, and the local grid failure rate; the 1MW/8MWh smart micro-grid lead-carbon/lithium energy storage power station project is also progressing in an orderly manner.

At present, Tianneng has built a number of projects such as the off-grid photovoltaic energy storage project in Africa, the solar storage system of the Presidential Villa in Gambia, and the intelligent micro-grid lead-carbon battery energy storage power station. In the first batch of 4 grid-side energy storage power station projects under construction in Zhejiang Province reported by CCTV's "Morning New", Tianneng participated in two projects, namely, Changxing 10kV Zhicheng Energy Storage Power Station Project, and QuzhouHuiping Village Damaiyuan Energy Storage Power Station Project. Among them, the "10kV Zhicheng Energy Storage Power Station Project" is also the country's first grid-side energy storage power station.



加快污染防治推進生態環境提能升級 Speed up Pollution Prevention and Control and Upgrade the Ecological Environment

天能積極打造環境友好型企業,把綠色生態理念貫穿 到產品設計至處置全生命週期,通過產品設計生態 化、生產工藝清潔化、裝備製造智能化、資源利用迴 圈化等創新舉措,實現了電池從設計、生產、使用到 回收等各個環節的污染防治。

本集團還制定了嚴謹的突發環境事件應急預案,包括 進行環境風險評估、設置應急指揮部、應急物資配置 以及制訂應急演練計畫,每年定期開展各類突發環境 事件應急演練,每三年對預案進行更新並向當地生態 環境主管部門備案。 Tianneng actively builds an environmentally-friendly enterprise, embeds the concept of green ecology throughout the entire life cycle of products from design to disposal. Through innovative measures such as ecological product design, clean production process, intelligent equipment manufacturing, and recycling of resources, it has realized the battery pollution prevention of battery in every link from design, production, use to recycling.

The Group has also formulated a rigorous emergency response plan for environmental emergencies, including emergency headquarters, emergency material allocation, and emergency drill plans. It regularly conducts emergency drills for environmental emergencies every year, updates the plan every three years, and reports to the local competent department of ecological environment for record.

此外,天能始終宣導企業與環境和諧發展,將環境保 護作為企業發展的底線,除對園區設置大氣防護距離 以及防護綠地外,還定期對園區周邊環境開展大氣、 水體以及土壤等監測活動,通過引入先進的監測設備 與培養專業技術團隊,實現了污染物因數人工日常監 測、線上24小時監測。 In addition, Tianneng always advocates the harmonious development of enterprises and the environment, and regards environmental protection as the foundation of enterprise development. In addition to setting environmental protection distances and protecting green buffers in the park, monitoring activities such as atmospheric, water and soil around the park are also rgularly carried out. By introducing advanced monitoring equipment and cultivating professional technical teams, manual daily monitoring of pollutant factors and online 24-hour monitoring have been realized. 天能執行各類嚴於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、第三方委託監測、 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,保障治理設施長期穩定運行,實現 廢水、廢氣等各類污染物達標排放。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,既減少了對環境的污染,也提升了資源利用 率。

天能定期通過相關政府資訊發佈平臺向社會發佈各類 污染物監測數據及評價報告,並按年度進行企業環境 資訊公開報告編制。近三年,通過污染物管理體系的 不斷完善,天能實現了環境污染零事故。

天能遵循產業及行業發展規則,環境職業健康和安全 管理體系(EHS),堅持節能減排,扎實推進污染防 治,努力將"三廢"消滅在工藝過程之中。除此之 外,天能建立了專業管理團隊,有力地保證了生態環 境建設和安全生產工作的順利開展。如天能制定了 《天能集團環安管理體系制度彙編》涵蓋了《天能集 團全員環安生產責任制》、《天能集團環安三同時管 理制度》、《天能集團污染物管理制度》《天能集團 員工職業健康管理制度》等一系列環境與安全管理制 度,委託有資質的單位對生產環境進行影響評估以及 安全評估,保證綠色生產。



天能集團綠色循環經濟產業園 Tianneng's green circular economic industrial park

Tianneng strictly implements pollutant discharge limit standards, comprehensively builds an all-round pollutant prevention and control system that combines pollutant self-monitoring, third-party entrusted monitoring, and government supervision to ensure the long-term stable operation of treatment facilities, and achieves up-to-standard discharge of wastewater and exhaust pollutants. We also take scientific management measures for exploitable pollutants and wastes, turning waste into treasure and reusing resources, which not only reduces environmental pollution, but also improves resource utilization rate.

Tianneng regularly releases pollutant monitoring data and evaluation reports of the factory area to the public through relevant government information platforms and prepares corporate environmental reports on an annual basis. In the past three years, through the continuous improvement of the pollutant management system, Tianneng has achieved zero environmental pollution accidents.

Tianneng observes the industry and sector development rules and the Environmental Occupational Health and Safety Management System (EHS), adheres to energy conservation and emission reduction, solidly promotes pollution prevention, and strives to eliminate the "three wastes" in the technological process. In addition, Tianneng has established a professional management team to effectively ensure the smooth development of ecological environment construction and safe production. For example, Tianneng has formulated a series of environmental and safety management systems such as Tianneng Group Environmental Protection Management System, Tianneng Group Safety Management System, Tianneng Group Occupational Prevention Management System, and entrusts qualified units to conduct impact assessment and safety assessment on the production environment to ensure green production.



聚力行業夥伴 承擔"低碳"發展使命 Gather Industry Partners and Undertake the Mission of "Low-Carbon" Development

世界能源發展的變局,關係到世界經濟、氣候與環境 的發展變化,是全球命運共同體的核心發展內容與全 球性課題,更關係到每個家庭與個人的能源使用與能 源安全。

天能堅持開放的合作態度,積極參與國際性的行業展 會與學術會議,並且與國內多家主流車企開展合作, 深入推進氫能和燃料電池產業化發展。2021年公司參 加了中國新能源電池技術高峰論壇、2021世界電池產 業博覽會暨第六屆亞太電池展、第五屆新型電池電解 質/隔膜材料技術國際論壇、第四屆先進高功率電池國 際研討會等各種活動,掌握行業動態,瞭解技術發展 趨勢,促進行業發展。

面對全球氣候變化與環境要求,所有能源企業都承擔 著"低碳"發展使命;面對社會的關切,所有能源企 業都有保障能源安全的責任;面對市場痛點,所有能 源企業都應對市場無序競爭說"不"。 The changes in world energy development are related to the development and changes of the world economy, climate, and environment. They are the core development content and global issues of the global community with a shared future, and are also related to the energy use and energy security of each family and each individual.

Tianneng adheres to an open and cooperative attitude, actively participates in international exhibitions and academic conferences, and cooperates with many domestic mainstream automobile companies to further promote the industrialization development of hydrogen energy and fuel cells. In 2021, Tianneng participated in the China New Energy Battery Technology Summit Forum, the World Battery Industry Expo 2021, i.e. the 6th Asia Battery Sourcing Fair, the Fifth International Forum on Electrolyte & Separator Materials for Advanced Batteries, and the 4th International Conference on Advanced High Power Battery, etc. Through various activities, Tianneng is able to grasp industry trends, understand technology development tendency, and promote industry development.

In the face of global climate change and environmental protection requirements, all energy enterprises undertake the mission of "low carbon" development. In the face of social concerns, all energy enterprises have the responsibility to ensure energy security. In the face of market pain points, all energy enterprises must say "no" to disorderly competition.

2021環境、社會及管治報告 2021Environmental, Social and Governance Report

2021年11月18日至11月20日,由天能集團總冠名的 WBE2021世界電池產業博覽會暨第六屆亞太電池展在 廣交會展館隆重開展。本次展會展覽面積達40000平 方米,參展企業559家,是新能源領域及電池行業的一 場盛會。會上,在提高行業標準、規範市場行為、確 保能源安全方面,天能倡議提高整個行業企業的協同 能力,共同應對一些挑戰,不僅要發揮好協會的作 用,也要發揮好企業協同的作用。



天能參加2021世界電池產業博覽會暨第六屆亞太電池展 Tianneng attended WBE2021 i.e. The 6th Asia Battery Sourcing Fair

截止目前,天能參與制定國際、國家及行業標準150餘 項,多項標準填補行業空白,不僅規範了行業秩序, 還引領行業綠色高質量發展。

此外,天能主動承擔行業責任。2018年,天能開行業 先河創辦行業首個節日—819電池節。時至今日, 819電池節已連續舉辦四屆,成為展現行業智慧結晶的 重要窗口,探索行業發展趨勢,共謀行業未來發展的 重要平臺。



From November 18th to November 20th, 2021, the WBE2021 (World Battery Industry Expo 2021) i.e., the 6th Asia Battery Sourcing Fair, which was named after Tianneng Group, was held at the Canton Fair Complex. With an exhibition area of 40,000 square meters and 559 exhibitors, this exhibition is a grand event in the field of new energy and battery industry. At the exhibition, in terms of improving industry standards, regulating market behavior, and ensuring energy security, Tianneng proposed to improve the synergy of enterprises in the entire industry and jointly cope with some challenges, not only to play the role of the association, but also to play a good role in corporate synergy.

So far, Tianneng has participated in the formulation of more than 150 international, national and industry standards. Many standards fill the gaps in the industry, which not only regulates the market order, but also leads the industry towards green and high-quality development of the industry.

Additionally, Tianneng takes the initiative to take responsibility for the industry. In 2018, Tianneng pioneered the industry and set the 8.19 first festival, the 8.19 Battery Festival. Up to now, the 8.19 Battery Festival has been held for four consecutive years and it has become an important window to display the wisdom of the industry, explore the development trend of the industry, and seek the future development.



案例:與徐工集團簽署戰略合作協議

由於氫能叉車具有零排放無污染、安全性高、加氫速 度快、可實現長時間持續工作等優點,在環保壓力下 被認為有望率先啟動規模化商用。天能和徐工集團達 成戰略合作,入局氫能叉車領域,將圍繞新能源領域 開展技術、產品、市場方面的協同創新,積極推廣綠 色搬運,低碳營運,對推進國內氫能叉車的規模化應 用起到積極作用。2021年,天能氫燃料電池系統團隊 叉車專案組完成開發LD20-C-01氫電20kW級別系統, 成功搭載徐工集團3.5T叉車,在重污染的裝卸搬運領 域及城市運營領域取得重點突破。



天能氫電系統搭載徐工集團3.5T叉車 Tianneng hydrogen power system is equipped onto XCMG 3.5T forklift

Case: Tianneng signed a strategic cooperation agreement with XCMG

Due to the advantages of zero emission and no pollution, high security, fast hydrogenation speed, and long-term continuous operation, hydrogen energy forklifts are considered to be the first to start large-scale commercial use under the pressure of environmental protection. Tianneng and XCMG had reached a strategic cooperation and entered the field of hydrogen energy forklifts. They will carry out collaborative innovation in technology, products, and markets around the new energy field, actively promote green carrying and low-carbon operations, and play a positive role in promoting the large-scale application of domestic hydrogen energy forklifts. In 2021, the forklift project team of Tianneng hydrogen fuel cell system completed the development of the LD20-C-01 hydrogen power 20kW level system, which was successfully equipped with XCMG's 3.5T forklift, making a key breakthrough in the field of heavy pollution loading and unloading and urban operation.



案例:與主流車企聯合開發各領域應用的氫燃料 電池發動機系統

2021年6月,天能自主研發了高性能TNFC-LP2020型 號水冷電堆產品,經過德燃動力不間斷產品測試驗證 後,該產品正式匹配德燃動力的FCV6座版觀光車,在 嘉興基地進行示範運營。

天能股份還與南京金龍等優質公司展開合作,裝載天 能T60-C氫燃料電池系統的南京金龍NJL6106產品型號 燃料電池低入口城市客車入選工信部第345批《道路機 動車輛生產企業及產品》名單。 Case: Tianneng signed a strategic cooperation agreement with XCMG

In June 2021, Tianneng independently developed a high-performance TNFC-LP2020 water-cooled stack product. After the uninterrupted product testing and verification of D.R. Power, the product officially matched D.R. Power's FCV 6-seat sightseeing car and has been put into exemplary operation at the Jiaxing base.

Tianneng has also cooperated with high-quality enterprises such as Nanjing Golden Dragon. Nanjing Golden Dragon NJL6106 fuel cell low-entry city bus equipped with Tianneng T60-C hydrogen fuel cell system was selected into list of the 345th batch of "Road Motor Vehicle Manufacturers and Products" by the Ministry of Industry and Information Technology.

案例:與海全汽車達成戰略合作

2021年8月,以"聚能·共生"為主題的天能鋰電·海全 汽車10001套動力電池系統下線儀式暨天能-海全戰略 合作簽約儀式在天能股份總部隆重舉行。此次簽約標 誌著"天海戰略"邁入新的發展階段,攜手推動新能 源汽車技術向低碳化、資訊化、智能化時代邁進。本 次儀式下線的第10001套動力電池系統,融合了天能 鋰電中法前沿技術,是一款專為海全汽車量身打造的 高安全、高智能、長續航的動力電池系統,是天能產 品力創新的最佳體現之一,在充分保證安全的前提 下,助力海全汽車實現性能上質的飛躍,為持續構建 人類美好生活提供更多更好的天能方案。 Case: Strategic cooperation with Haiquan Automobile

In August 2021, the offline ceremony of 10001st Sets of Power Battery System of Tianneng Lithium Battery and Haiquan Automobile with the theme of "Energy Gathering · Symbiosis" and Tianneng - Haiguan Strategic Cooperation the signing ceremony of were held at the headquarters of Tianneng. This signing marks a new stage of Tian-Hai strategic development. The two enterprises will jointly promote the new energy vehicle technology to move towards the era of low carbonization, informationization, and intelligence. The 10001st sets of power battery system launched at this ceremony integrated the cutting-edge technology of Tianneng lithium battery from China and France. It is a highly safe, highly intelligent, and long-lasting power battery system specially tailored for Haiquan Automobile, and is one of the best manifestations of Tianneng's product innovation. On the premise of fully guaranteeing safety, this battery system will help Haiquan to achieve a qualitative leap in performance and provide better solutions for the continuous construction of a better life for mankind.





天能鋰電·海全汽車10001套動力電池系統下線儀式暨天能-海全戰略合作簽約儀式

Tianneng Lithium Battery and Haiquan Automobile 10001st Set of Power Battery System Launching Ceremony i.e. Tianneng - Haiquan Strategic Cooperation Signing Ceremony

案例:與小牛聯合開發F0款電池

2020年11月,天能帥福得與小牛聯合開發定制了能匹 配小牛CO車型的48V鋰電池。該產品能滿足新國標電 動自行車安裝及應用,安全性高,迴圈壽命長且輕 便,同時能解決目前市面上鋰電池隨意篡改,濫充濫 放,安全事故頻發的關鍵問題,提升鋰電池的安全 值。 Case: Tianneng jointly develop F0 battery with NIU

In November 2020, Tianneng Saft and NIU jointly developed and customized a 48V lithium battery that can match NIU C0 models. This product can meet the installation and application requirements of new national standard electric bicycles, with the ability of high safety, long cycle life and light weight. At the same time, it can cope with the key problems of random tampering, indiscriminate battery charging and discharging, and frequent safety accidents, and improve the performance of lithium batteries.

2021環境、社會及管治報告 2021Environmental, Social and Governance Report



- 5.1 納稅與就業 Taxes and Employment
- 5.2 建言獻策 Proposals Offering
- 5.3 公益慈善 Public Benefit and Charity
- 5.4 村企共建助力共同富裕

Village and Enterprise Cooperation Contributes to Common Prosperity



納稅與就業(財務、人力) Taxes and Employment (Finance, Human Resources)

天能創造就業總量達百萬以上。其中直接創造就業崗 位近3萬,另外40萬家終端門店及產業鏈帶動提供了超 過100萬個就業崗位。先後開辦了天能大學、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,助力員工高質量就業。

2021年,本集團在全國各地共繳納稅收近36.34億 元。2021年2月19日,天能第6次獲得湖州"金象"企 業、納稅大戶,均排湖州市榜首。 The total number of jobs created by Tianneng is more than 1 million. Among them, nearly 30,000 jobs were directly provided by Tianneng, and others are provided by the 400,000 terminal stores and industrial chains. Besides, Tianneng has successively opened Tianneng University, Tianneng Digital& Intelligence Training School, and Tianneng Saft Artisan Academy, providing diversified vocational skills training to help employees perform high-quality work.

In 2021, the Group paid a total of nearly 3634 million Yuan in taxes across the country. On February 19, 2021, Tianneng, for the sixth time, won the titles of "Huzhou Golden Elephant Enterprise" and "Big Taxpayer", ranking No.1 in Huzhou.



天能集團獲湖州金象企業、納稅大戶"雙料冠軍" Tianneng Group won the "Double Champion" of Huzhou Golden Elephant Enterprise and Big Taxpayer.

建言獻策 Proposals Offering

天能集團董事局主席張天任作為全國第十三屆、十四 屆人大代表,積極建言獻策、謀求公眾利益,積極承 擔人民賦予的重大責任。作為全行業唯一的全國人大 代表,張天任董事長經過廣泛深入調研,圍繞鼓勵電 動車綠色出行、發展微型電動車、規範電池迴圈回收 體系、調整電池消費稅等,向全國人大提交一批積極 反映行業呼聲的議案和建議。

這些建議和議案,受到了全國人大和國家部委的高度 重視,推動了相關問題的積極解決。

2021年是張天任第9次參加全國"兩會",他圍繞生 態資源保護、區域經濟發展、鄉村振興以及實體經濟 高質量發展等熱點議題精心準備了28件議案建議,為 經濟民生發展建言獻策。在京期間,張天任受到了央 視《新聞聯播》、《人民日報》、《光明日報》等國 家級主流媒體的廣泛關注和採訪報導。 As a representative of the 13th and 14th National People's Congress, Zhang Tianren, Chairman of the board of directors of Tianneng Group, actively offered advice and suggestions, sought public interests, and actively assumes the great responsibility endowed by the people. As the only representative of the National People's Congress in the industry, President Zhang Tianren, after extensive and in-depth research, submitted to the National People's Congress a number of advices and proposals representing the industry's voices, focusing on encouraging green travel by electric vehicles, developing micro-electric vehicles, regulating battery recycling systems, and adjusting battery consumption tax.

These advices and proposals have been highly valued by the National People's Congress and national ministries and commissions, and have promoted the active solution of related issues.

In 2021, Zhang Tianren participated in the "Two Sessions" of the nation for the 9th time. He elaborately prepared 28 proposals on hot topics such as ecological resource protection, regional economic development, rural revitalization, and high-quality development of the real economy, providing advice on the development of economy and people's livelihood. During his stay in Beijing, Zhang Tianren received extensive attention and interviews from national mainstream media such as CCTV News, People's Daily and Guangming Daily.



天能动力董事局主席張天任参加十三屆全国人大四次会议 Zhang Tianren, chairman of The Board of Directors of Tianneng, attended the fourth session of the 13th National People's Congress



公益慈善 Public Benefit and Charity

同心共築公益夢,砥礪奮進正當時。勇擔社會責任, 永葆赤子初心,這既是承諾更是責任,天能始終相信 回饋社會,與環境、人類共生發展是企業在發展中必 須肩負的使命,也是企業實現可持續發展的基礎和前 提。

天能始終與偉大時代同心同行,以行動踐行使命,把 公益事業作為企業發展的不竭動力,將社會責任融入 到企業自身發展的進程中,以感恩的心踐行愛與擔 當,成為新能源領域的社會責任典範企業,為健康中 國、美麗中國、幸福中國建設添磚加瓦。

2022年1月12日,浙江省工商業聯合會十一屆六次執 委會議在杭州召開,會上發佈了天能集團、娃哈哈集 團、吉利集團等八個助力共同富裕"民企樣本"。

2021年7月,河南省多地遭遇極端強降雨天氣,多趟 列車停運,近3000名旅客滯留站內。洪澇災害還造成 車站長達幾個小時的停電,大部分滯留旅客由於手機 等通訊設備沒電而與家人失去了聯繫。天能智慧能源 公司鄭州區的李金龍從新聞上得知此事後,連夜冒雨 帶著數十臺移動儲能電池奔赴鄭州站,設置多個"充 電點",為滯留旅客提供免費充電服務。天能的這項 免費充電服務受到了大家的熱烈歡迎和好評。 It is the right time to forge ahead together to build a public welfare dream. Undertaking social responsibilities and keeping the original intention is not only a commitment but also a responsibility. Tianneng always believes that giving back to the society and coexisting with the environment and human beings are the missions that an enterprise must undertake in its development, and also the foundation and premise for the enterprise to achieve sustainable development.

Tianneng always walks with the great era, fulfills its mission with actions, and regards public welfare as an inexhaustible driving force for enterprise development. It integrates social responsibilities into the process of enterprise development and practices concern and responsibility with gratitude. As a model enterprise of social responsibility in the field of new energy, Tianneng is making continuous contribution to the construction of a healthy, beautiful, and happy society.

On January 12, 2022, the sixth session of the Eleventh Executive Committee of Zhejiang Federation of Industry and Commerce was held in Hangzhou. At the meeting, eight enterprises including Tianneng Group, Wahaha Group, and Geely Group were announced to become the "private enterprise sample" for assisting common prosperity.

In July 2021, many places in Henan Province encountered extreme heavy rainfall, many trains were suspended, and nearly 3,000 passengers were stranded in the station. The floods also caused power outages at the station for several hours, and most of the stranded passengers lost contact with their families because their communication devices were out of power. Li Jinlong from Tianneng Smart Energy Company located in Zhengzhou Region, after learning about the incident from the news, took dozens of mobile energy storage batteries to Zhengzhou Station overnight in the rain and set up multiple "charging points" to provide free charging services for those stranded passengers. This free charging service provided by Tianneng was warmly welcomed and praised.



天能多功能移動儲能電源可供滯留旅客免費使用 Tianneng's multi-functional mobile energy storage power supply for stranded passengers free of charge

天能鄭州區同事們還專門建立了微信群,方便收集相 關求助信息,更好地為滯留旅客服務。駐守鄭州的李 金龍說"和奔赴前線救災的人們相比,我們做的只是 些微不足道的小事,但我們會堅持把這件小事做下 去,讓大家感受到我們天能與大家相互守望,共同度 過風雨。"

2021年9月27日,天能電池"溫情方始,大愛天能" 公益行慈善活動,旨在通過慈善捐贈切實的幫助到特 殊兒童,讓社會各界關注到特殊教育事業,彙聚各方 力量,讓愛心加倍。 Besides, our colleagues from Tianneng Zhengzhou also established a WeChat group to facilitate the collection of relevant assistance information to better serve the stranded passengers. Li Jinlong, who is stationed in Zhengzhou, said, "Compared with those who went to the front line for disaster relief, what we did was only trivial, but we will insist on doing this small thing, so that everyone can feel that we are able to help each other and get through the difficulty together."



天能電池 "溫情方始,大愛天能"公益行慈善活動 "Warmth Stating from Tianneng" charity event held by Tianneng

On September 27, 2021, Tianneng Battery held a "Warmth Stating from Tianneng" charity event, in order to help children with special needs through charitable donations, draw attention to special education from all sectors of society, and gather forces from all walks of life.



此外,每年中國春運期間,天能都會發起"溫暖回家路"公益服務活動,在全國多條由天能冠名的"天能號"高速動車組列車上與乘客們進行互動、傳遞祝福並由天能吉祥物泰博(Tab)送上寓意平安、團圓的定制"福"字、天能牌充電寶、靠枕等精美禮品。2018年至2021年,天能溫暖回家路活動已連續舉辦四季,公益活動的內容不斷升級、影響逐步擴大。

In addition, during the Chinese Spring Festival every year, Tianneng would launch the "Warm Way Home" public service activity to interact with passengers and convey blessings on a number of "Tianneng" high-speed EMU trains branded by Tianneng across the country. Tab, the mascot of Tianneng, would present exquisite gifts such as the Chinese character "Fu", which means peace and reunion, and Tianneng power banks and pillows to the passengers. From 2018 to 2021, the Tianneng "Warm Way Home" activity has been held for four consecutive years. The content of Tianneng's public welfare activities has been continuously upgraded and its influence has gradually been expanded.

為促進中國東西部協作和落實國家定點幫扶工作。 2021年5月,天能向四川省樂山市馬邊彝族自治縣小 穀溪村捐贈了430多只價值百萬元的湖羊。這批湖羊給 當地老百姓帶去新的增收希望。據瞭解,每只湖羊每 年可產生約5000元的經濟價值,是名副其實的"共富 羊"。



In order to promote the cooperation between the east and west of China and to implement the national designated assistance work, in May 2021, Tianneng donated more than 430 "Hu Sheep" worth one million yuan to Xiaoguxi Village, Mabian Yi Autonomous County, Leshan City, Sichuan Province. These Hu Sheep have brought new hope for local people to increase their income. It is known that each Hu Sheep can generate an economic value of about 5,000 yuan per year, which a veritable "common prosperity sheep".



天能"共富羊",助力中國東西部協作 Tianneng "Common Prosperity Sheep", to assist east-west cooperation in China

2021環境、社會及管治報告 2021Environmental, Social and Governance Report

村企共建助力共同富裕 Village-Enterprise Co-construction to Assist Common Prosperity



位於浙江省長興縣煤山鎮的新川村 Xinchuan Village in Meishan Town, Changxing County, Zhejiang Province

2008年起,天能集團和長興縣煤山鎮新川村結對子, 搭建起村企共建平臺,通過資金支持、技術幫扶、就 業支撐等途徑,引導村民進入企業產供銷和售後服務 鏈條中。眾多電池配套企業如雨後春筍般壯大起來, 圍繞新能源產業富起來的村民越來越多,帶動了全村 發展。目前,新川村百萬戶超600戶、千萬戶30戶, 村民年均收入超15萬元。

村企結對以來,天能幫助村裏搞建設、抓發展、興文 化,建成鄉村振興案例館、初心館、文化禮堂、幸福 之家養老中心、溪澗公園、獅子山景區等,將昔日的 "苦瓜村" 蝶變成遠近聞名的精品村、小康示範村、 3A級景區村莊,吸引了大批在外青年返鄉創業。鄉民 們不僅口袋鼓了,精神也慢慢富足起來了,走出了一 條產業強、生態優、百姓富的道路。 Since 2008, Tianneng Group has paired with Xinchuan Village in Meishan Town, Changxing County to build a village-enterprise co-construction platform. Through financial support, technical assistance, employment support and other channels, Tianneng Group has led the villagers to an enterprise production, supply, marketing and after-sales service chain. Many battery supporting enterprises have sprung up like mushrooms after a rain, and more and more villagers have become rich from the new energy industry, which has driven the development of the whole village. At present, there are more than 600 millionaire households and 30 multimillionaire households in Xinchuan Village, and the average annual income of villagers has exceeded 150,000 yuan.

Since the village-enterprise pairing, Tianneng has helped the village to carry out construction, development, and cultural rejuvenation. So far, the Rural Revitalization Case Hall, Original Intention Hall, Cultural Auditorium, Happy Home Pension Center, Stream Park, and Lion Mountain Scenic Area have been built, to have transformed the former "Bitter Gourd Village" to a well-known boutique village, a well-off model village, and a 3A-level scenic village, attracting a large number of young people from abroad to return to their hometowns to start businesses. The villagers not only have their pockets full, and their spirits are also gradually enriched. They have embarked on a road featuring strong industry, excellent ecology and rich people.



為了探索鄉村振興發展新路徑,2019年,張天任牽頭 成立了新川村鄉賢會並召開首屆鄉賢大會,鄉賢捐款 超1200萬元。天能集團作為村企共建單位,現場捐款 500萬元,助力美麗鄉村建設。在天能集團和張天任的 帶動下,越來越多的共建企業和鄉賢加入美麗鄉村建 設中,鄉賢們成為基層治理的重要參與力量。

在推進共同富裕的進程中,新川村正創新性地引入現 代股權基金模式,建設了三家"共富公司",聚攏村 民資金,用於發展新川的各項產業事業,既解決了新 川在發展過程中遇到的資金來源問題,又確保了村民 獲得實實在在的收益。在2021年舉行的鄉賢大會上, 鄉賢們自發踴躍捐款,共籌得523萬元,其中,天能集 團捐款100萬元,張天任個人捐款50萬元,這些款項 將與股權基金一道用於發展新川村美麗鄉村建設的各 項產業事業,實現了三次分配的存量資金轉化為一次 分配的增量資源,先富帶後富,共做"大蛋糕",讓 村民在共同富裕的道路上更有參與感和獲得感。

天能還將"對子"結到了全國各地,從2005年起,天 能先後與安徽省界首市史爐村、江蘇省沭陽縣合興 村、貴州省臺江縣茅坪村等貧困村"結對子",工廠 建到哪里,扶貧的對子就結到哪里,通過就業扶貧和 消費扶貧,提供上萬個就業崗位,累計解決上萬群眾 的穩定就業和生活問題。 In order to explore a new path for rural revitalization and development, in 2019, Zhang Tianren led the founding of the Xinchuan Village Rural Sages Association and convened the first Rural Sages Conference, on which the sages donated over 12 million yuan. As a village-enterprise joint construction unit, Tianneng Group donated 5 million yuan on site to help the construction of the beautiful village. Under the guidance of Zhang Tianren and Tianneng Group, more and more co-construction enterprises and village sages have joined the mission of constructing the beautiful village and village sages have become an important force in grassroots governance.

In the process of promoting common prosperity, Xinchuan Village has innovatively introduced a modern equity fund model, and has built three "common wealth companies" to gather villagers' funds for the development of various industries in Xinchuan Village. This not only solves the problem of source of funds in the development process of Xinchuan, but also ensures villagers to get real benefits. At the Township Sages Conference held in 2021, the townspeople made donations spontaneously and raised a total of 5.23 million yuan. Among them, Tianneng Group donated 1 million yuan and Zhang Tianren personally donated 500,000 yuan. These funds will be used together with the equity fund to develop various industries for the construction of a beautiful village in Xinchuan, to realize the transformation of the stock funds distributed in three times into the incremental resources distributed once, to let those who get rich first lead others, and to make the "big cake" together, so that the villagers have a deeper sense of participation and gain on the road of common prosperity.

Tianneng has also established "pairs" all over the country. Since 2005, Tianneng has successively "paired" with impoverished villages such as Shilu Village in Jieshou City, Anhui Province, Hexing Village in Shuyang County, Jiangsu Province, and Maoping Village in Taijiang County, Guizhou Province. Wherever a factory is built, a poverty alleviation pair is formed. Through providing employment and stimulating consumptions, Tianneng has supplied tens of thousands of jobs, and provided stable employment and living conditions for tens of thousands of people accumulatively. 2021年11月20日,浙江省長興縣煤山鎮新川村召開 "共同富裕推進大會",現場發佈了《共富同行倡議 書》,並成立了3家村企合辦旨在推進共同富裕的公 司,首次將股權和投資概念引入共同合辦的公司,此 舉被新華社定義為全國推進共同富裕的標杆與典型。 On November 20, 2021, the "Common Prosperity Promotion Conference" was held in Xinchuan Village, Meishan Town, Changxing County, Zhejiang Province. The "Proposal for Common Prosperity" was released on the spot, and 3 village enterprises were established to promote common prosperity. For the first time, the concept of equity and investment was introduced into co-organized companies, which was regarded by Xinhua News Agency as a benchmark and a model for promoting common prosperity across the country.

在當天的共同富裕推進大會上,新川村成立了長興新 川股權投資合夥企業(有限公司),長興新川文化旅 遊發展有限公司,長興新川建設發展有限公司三家 "強村公司"。新川村共有4個自然村,3000多位村 民,其中通過現代化的股權投資合夥企業,在每個自 然村選出一名代表充當GP(即"合夥人"),將村民 的閒置資金聚攏起來,轉投到文化旅遊發展公司和建 設發展公司,用於發展新川村特色優勢產業,壯大村 級集體經濟,豐富鄉村經濟業態,延長富民產業鏈, 投資收益由村民共用,以及用於村養老、救助等公共 服務普及普惠。同時,基金運作和公司運轉採用現代 企業管理模式,高效、透明,接受全體村民的監督。 At the Common Wealth Promotion Conference that day, three "strong village companies" were established in Xinchuan Village, namely, Changxing Xinchuan Equity Investment Partnership (Co., Ltd.), Changxing Xinchuan Cultural Tourism Development Co., Ltd., and Changxing Xinchuan Construction Development Co., Ltd. There are 4 natural villages in Xinchuan Village with more than 3,000 villagers. For the modern equity investment partnership, a representative is elected in each natural village to act as a GP (i.e. "partner"), and the idle funds of the villagers are gathered and transferred to Cultural Tourism Development Company and Construction Development Company to develop the characteristic and advantageous industries of Xinchuan Village, to strengthen the village-level collective economy, enrich the rural economy, and extend the industrial chain of enriching the people. The investment income will be shared with the villagers, as well as for public services such as village pension and assistance. At the same time, the operation of the fund and the operation of the company adopt a modern enterprise management model, which is efficient and transparent, and subject to the supervision of all villagers.





浙江省長興縣煤山鎮新川村"共同富裕推進大會" "Common Prosperity Promotion Conference" held in Xinchuan Village, Meishan Town, Changxing County, Zhejiang Province

未來,天能還將把共同富裕的行動,進一步推向全 國。目前,天能連接著40多萬個終端行銷網點,帶動 就業超過100萬人;同時,通過一些專項扶貧、異地投 資、現代服貿、特色農副產品及養殖專案等,加大對 中西部地區的扶持、投資力度,在更大的範圍推進共 同富裕行動。

中國共產黨成立100周年之際,全國"兩優一先"表彰 大會在北京人民大會堂舉行,張天任被授予"全國優 秀黨務工作者"榮譽稱號,受到了黨中央的隆重表 彰。 In the future, Tianneng will further promote the action of common prosperity to the whole country. So far, Tianneng has connected itself to more than 400,000 terminal marketing outlets, providing more than 1 million jobs. At the same time, through some special poverty alleviation, off-site investment, modern apparel trade, characteristic agricultural and sideline products and breeding projects, Tianneng has enhanced its support and investment efforts in the central and western regions in order to promote common prosperity on a larger scale.

On the occasion of the 100th anniversary of the founding of the Communist Party of China, the National "Two Priorities and One First" Commendation Conference was held in the Great Hall of the People in Beijing. Mr. Zhang Tianren was awarded the honorary title of "National Excellent Party Worker" and was praised by the Party Central Committee.

附錄01: 關於本報告

本報告涵蓋天能動力國際有限公司(「天能」或「本 公司」,涵蓋各子分機構統稱「本集團」),內容涉 及本集團在主要營運點中華人民共和國(「中國」) 的環境、社會及管治表現。

報告時間範圍為2021年1月1日至2021年12月31日, 部分內容根據需要追溯至以前年份。

Appendix 01: About the Report

This Report involves Tianneng Power International Limited ("Tianneng" or "the company", and the various subsidiaries, collectively referred to as the "Group"), and the content relates to the environmental, social and governance performance of the Group in its main operating venue, the People's Republic of China ("China").

The report covers the period from 1 January 2021 to 31 December 2021, and some of the content may date back to previous years as needed.

參考標準 Reference Standard

香港證券交易所《環境、社會及管治報告指引》 "Environmental, Social and Governance Reporting Guide" by The Stock Exchange of Hong Kong Limited 國際標準化組織《社會責任指南(ISO26000)》 International Organization for Standardization "Social Responsibility Guide (ISO26000)" 全球報告倡議組織《可持續發展報告指南(G4)》 International Organization for Standardization "Social Responsibility Guide (ISO26000)" 聯合國全球契約(GC)10項原則 The 10 principles of the United Nations Global Compact (GC) 國家品質監督檢驗檢疫總局、國家標準化管理委員會《社會責任指南》GB/T36000-2015、GB/T36001-2015《社會責 任報告編寫指南》和GB/T36002-2015《社會責任績效分類指引》 National Bureau of Quality Supervision, Inspection and Quarantine, National Standardization Management

Committee "Social Responsibility Guide" GB/T36000-2015, GB/T36001-2015 " Social Responsibility Report Writing Guide" and GB/T36002-2015 "Social Responsibility Performance Classification Guidelines"

報告數據說明

Description of the Report Data

本報告使用數據來自年報、正式檔及統計報告。數據 以2021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。 The data used in this Report comes from annual reports, official documents and statistical reports. The data are mainly for 2021, and some may include data for previous years. The currency amounts involved in this Report are measured in Renminbi, unless otherwise specified.



報告保證 Guarantee of the Report

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。 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.

報告形式 Form of Report 本報告分為中文繁體和英文版兩個版本,以電子版形 式提供。

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

2021環境、社會及管治報告 2021Environmental, Social and Governance Report

附錄02: 《環境、社會及管治報告》指標索引

Appendix 02: Indicator Index of the Environmental, Social and Governance Report

指標索引 Index of Indicators

A. 環境 Environment				
層面Level A1: 排放物 Emissions	一般披露 General disclosure	P29-42		
	關鍵績效指標 A1.1 Key Performance Indicators			
	關鍵績效指標 A1.2 Key Performance Indicators			
	關鍵績效指標 A1.3 Key Performance Indicators			
	關鍵績效指標 A1.4 Key Performance Indicators			
	關鍵績效指標 A1.5 Key Performance Indicators			
	關鍵績效指標 A1.6 Key Performance Indicators			
層面Level A2: 資源使用 Resource using	一般披露 General disclosure			
	關鍵績效指標 A2.1 Key Performance Indicators	P29-42		
	關鍵績效指標 A2.2 Key Performance Indicators			



	關鍵績效指標 A2.3 Key Performance Indicators	
	關鍵績效指標 A2.4 Key Performance Indicators	
	關鍵績效指標 A2.5 Key Performance Indicators	
層面 Level A3: 環境及天然資源 Environment and natural resources	一般披露 General disclosure	
	關鍵績效指標 A3.1 Key Performance Indicators	
層面 Level A4: 氣候變化 Climate Change	一般披露 General disclosure	P29-42
	關鍵績效指標 A4.1 Key Performance Indicators	r 29-42

B. 社會 Society				
僱傭及勞工常規 Employment and Labour Practices				
層面 Level B1: 僱傭 Employment	一般披露 General disclosure	P17-20		
	關鍵績效指標 B1.1 Key Performance Indicators			
	關鍵績效指標 B1.2 Key Performance Indicators			
層面Level B2: 健康與安全 Healthy and safety	一般披露 General disclosure			
	關鍵績效指標 B2.1 Key Performance Indicators			
	關鍵績效指標 B2.2 Key Performance Indicators	P15 P21-24		
	關鍵績效指標 B2.3 Key Performance Indicators			

2021環境、社會及管治報告 2021Environmental, Social and Governance Report

附錄02: 《環境、社會及管治報告》指標索引

Appendix 02: Indicator Index of the Environmental, Social and Governance Report

一般披露 General disclosure	P18-25
關鍵績效指標 B3.1 Key Performance Indicators	
關鍵績效指標 B3.2 Key Performance Indicators	
一般披露 General disclosure	P18-19
關鍵績效指標 B4.1 Key Performance Indicators	
關鍵績效指標 B4.2 Key Performance Indicators	
一般披露 General disclosure	
關鍵績效指標 B5.1 Key Performance Indicators	
關鍵績效指標 B5.2 Key Performance Indicators	P16
關鍵績效指標 B5.3 Key Performance Indicators	
關鍵績效指標 B5.4 Key Performance Indicators	
	General disclosure關鍵績效指標 B3.1 Key Performance Indicators關鍵績效指標 B3.2 Key Performance Indicators一般披露 General disclosure關鍵績效指標 B4.1 Key Performance Indicators關鍵績效指標 B4.2 Key Performance Indicators關鍵績效指標 B5.1 Key Performance Indicators關鍵績效指標 B5.1 Key Performance Indicators關鍵績效指標 B5.2 Key Performance Indicators關鍵績效指標 B5.3 Key Performance Indicators關鍵績效指標 B5.3 Key Performance Indicators關鍵績效指標 B5.3 Key Performance Indicators關鍵績效指標 B5.3 Key Performance Indicators



營運慣例 Operation Convention				
層面LevelB6: 產品責任 Product liability	一般披露 General disclosure			
	關鍵績效指標 B6.1 Key Performance Indicators			
	關鍵績效指標 B6.2 Key Performance Indicators	P25-28		
	關鍵績效指標 B6.3 Key Performance Indicators			
	關鍵績效指標 B6.4 Key Performance Indicators			
	關鍵績效指標 B6.5 Key Performance Indicators			
層面LevelB7: 反貪污 Anti-corruption	一般披露 General disclosure	• P11-14		
	關鍵績效指標 B7.1 Key Performance Indicators			
	關鍵績效指標 B7.2 Key Performance Indicators			
	關鍵績效指標 B7.3 Key Performance Indicators			
社區 Comm	unity			
層面LevelB8: 社區投資 Community investment	一般披露 General disclosure			
	關鍵績效指標 B8.1 Key Performance Indicators	P48-54		
	關鍵績效指標 B8.2 Key Performance Indicators			





TIANNENG POWER INTERNATIONAL LIMITED 天能動力國際有限公司

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