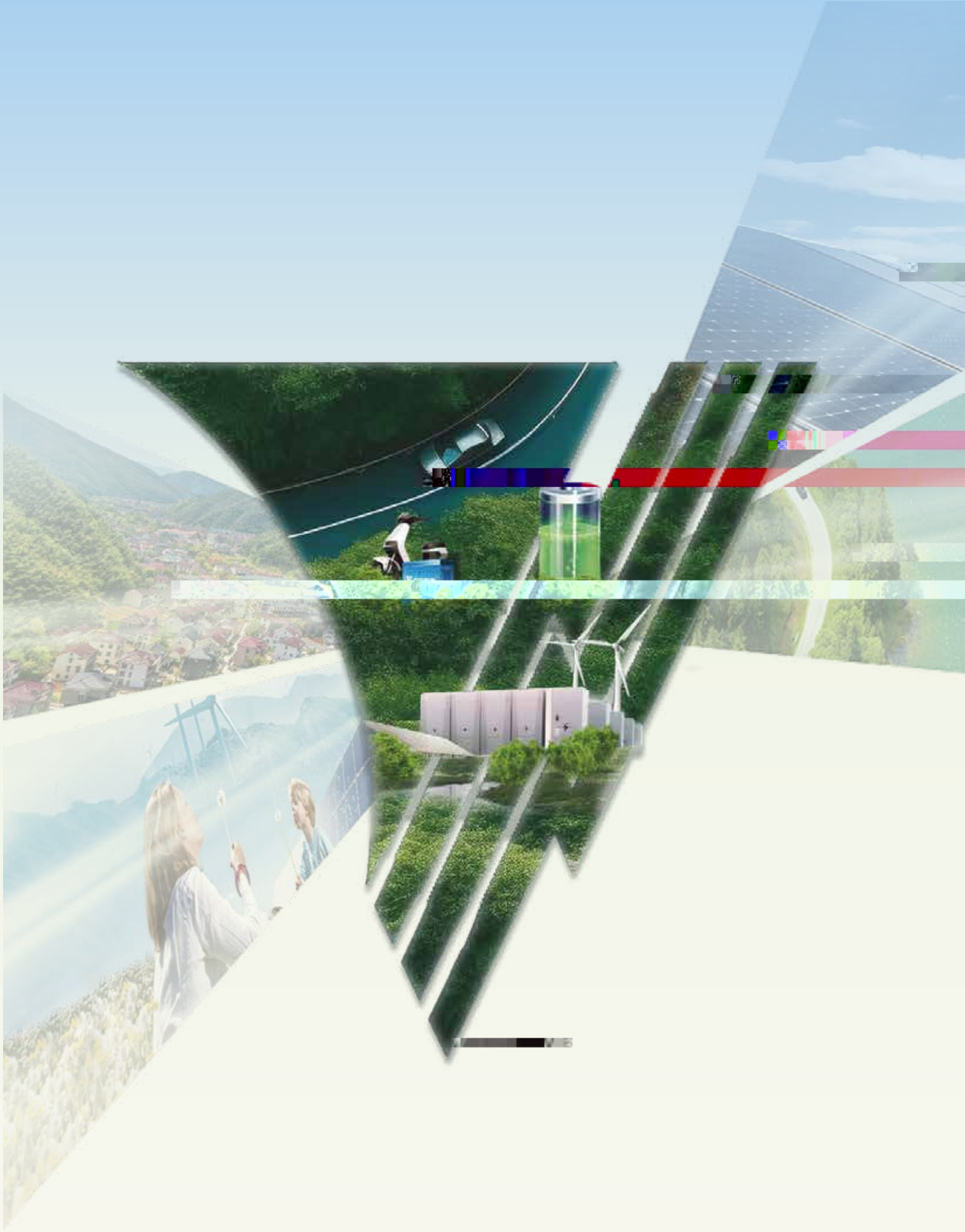


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Report Overview



About the Report

本報告由天能國際有限公司（以下簡稱「天能」）及其附屬公司（以下合稱「本集團」）於2024年12月31日編製，旨在向利益相關者披露本集團在環境、社會及管治（ESG）方面的表現。

Scope of the Report

This report covers the environmental, social, and governance performance of Tianneng Power International Limited (the "Company") and its subsidiaries (collectively referred to as the "Group" or "Tianneng") for the period from January 1, 2024, to December 31, 2024. Certain sections may refer to data from prior years as necessary.

Reporting Principles

This report is the 11th Environmental, Social, and Governance (ESG) report prepared by the Group since 2014. The preparation of this report follows the principles outlined below.

Materiality: The Group values regular communication with internal and external stakeholders to identify and address material topics relevant to its operations. These topics encompass ESG matters that may have a significant impact on investors and other stakeholders, forming the core content of this report. Through this report, the Group demonstrates its strategies, initiatives, and achievements in these areas, helping stakeholders gain a comprehensive understanding of its sustainability practices.

Quantitative: Wherever possible, this report discloses key performance indicators in a quantitative manner to ensure transparency and comparability. The data presented is sourced from the Group's annual reports, official records, and statistical materials, primarily covering the year 2024, with some comparative data from previous years. Unless otherwise stated, all monetary amounts in this report are presented in RMB.

Balance: This report strives to provide an objective and fair reflection of the Group's ESG management performance. It highlights the achievements made in advancing sustainability while also acknowledging the challenges encountered.

Consistency: The report applies consistent disclosure and statistical methodologies to ensure the comparability of ESG information over time. It also provides meaningful analyses of data trends. By employing standardized methodologies and indicator frameworks, the Group systematically presents its long-term sustainability performance and trends.

Report Format

This report is published in both Traditional Chinese and English and is available in



Sustainability Strategy



ESG
2024

Company Overview
ESG Performance Highlights for the Year
2024 Honors Awards

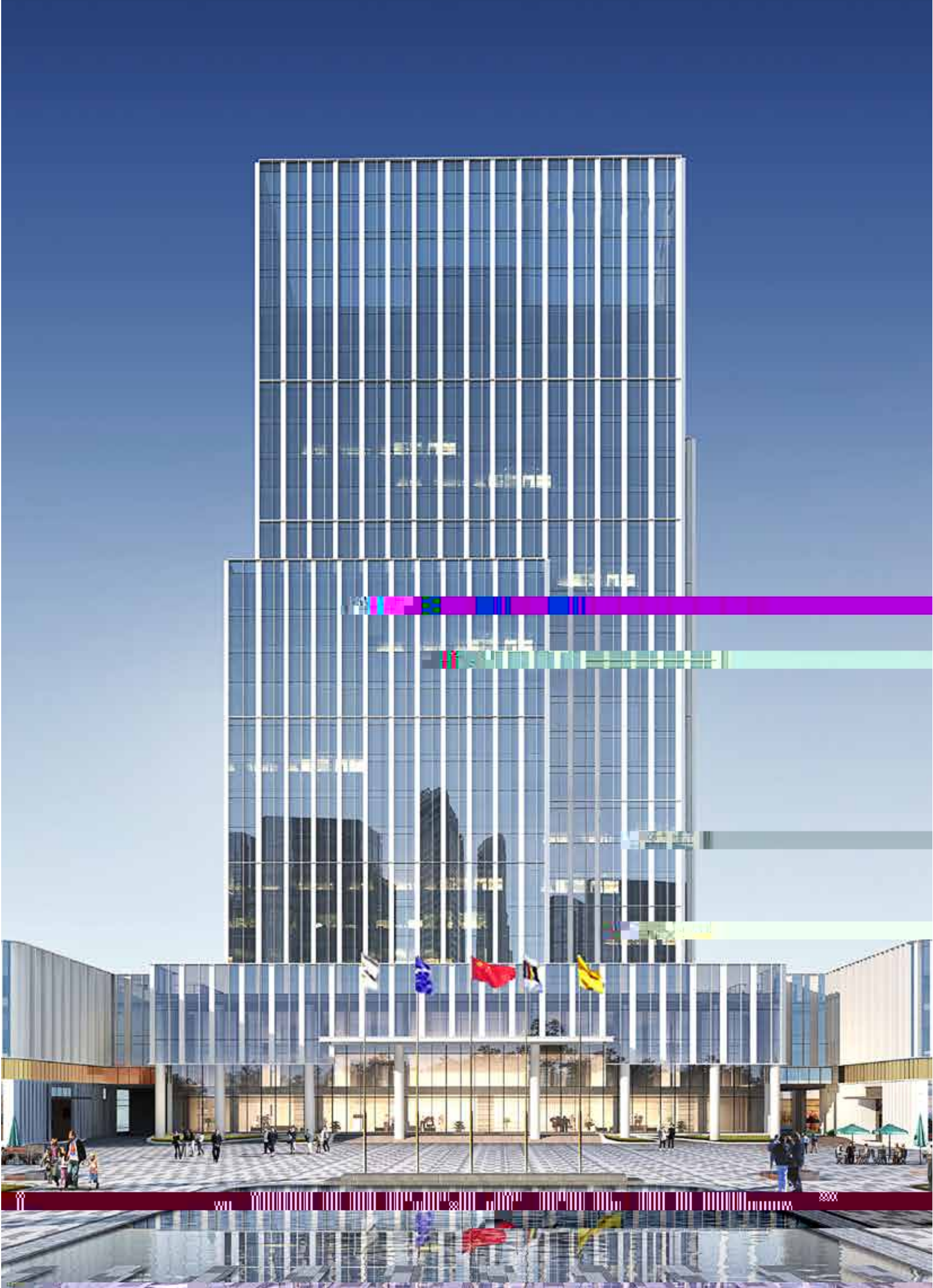
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ESG Philosophy and Vision

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Stakeholder Engagement

Materiality Assessment



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Sustainability Strategy

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Company Overview

Founded in 1986, the Group is a leading company in the new energy battery industry and light electric vehicle battery industry in the People's Republic of China (the "PRC" or "China"). In 2007, the Company was listed on the Main Board of the Hong Kong Stock Exchange (Stock Code: 00819.HK). With nearly 40 years of development, the Group currently focuses on lead-acid batteries as its core business, specifically catering to motive batteries for light electric vehicle market and expanding its application in different fields such as starter and start-stop systems for automobiles and uninterruptible power supply for communication bases. The Group is also committed to conducting research and development ("R&D"), production and sales of lithium-ion ("Li-ion") batteries, hydrogen fuel cells, sodium-ion batteries and solid-state batteries to encompass the application fields of special industrial vehicles and energy storage systems ("ESS") through a diverse range of battery technology products. Meanwhile, the Group reinforces the circular economy by focusing on its core business. By implementing a dual-track system for lead recycling and lithium recycling, it ensures the efficient reuse of resources, thereby establishing a new energy industry ecological matrix.

As a leader in the new energy motive battery industry, the Group's business strategy is centered on "core consolidation, technological innovation, and global expansion," with a focus on two core areas: new energy technology and the circular economy. While consolidating its traditional lead-acid battery business, the Group actively invests in innovative areas such as lithium batteries, hydrogen fuel cells, sodium-ion batteries, energy storage technologies, and resource recycling. It has established a closed-loop industrial chain that covers R&D, production, and recycling, laying a solid foundation to achieve its goal of becoming a global leader in the new energy sector.

Adhering to an operational approach deeply integrated with ESG principles, the Group continues to strengthen its sustainable development practices, promoting green manufacturing, low-carbon operations, and the application of the circular economy model. The Company is committed to providing innovative solutions for global energy transformation, achieving a balance between environmental and social benefits, while creating long-term value for stakeholders through its industry leadership and strong capital market performance.

	Environmental Protection	
	ISO14001 ISO14001 Environmental Management System Certification	
	- 环境事故 0 起	
	99%	
CNAS		
IATF16949 IATF16949 Automotive Quality Management System Certification	Occupational Safety	
100% 100% customer feedback response rate		
ISO45001 ISO 45001 Occupational Health and Safety Management System certification	No production-related serious injuries or fatalities	
		Investors' Equity
		2024 年度 共 16 次 派息 46.78 Accumulated cash dividends of HK\$4,678 million through 16 dividends at the end of 2024

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2024

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Honours and Awards Received by the Group (Including Its Subsidiaries) in 2024

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Stakeholder	Forms of Communication	Expectation
Investor	General meetings of shareholders, Company announcements, emails, phone calls, on-line presentations, off-line seminars, Company website	Corporate Governance Compliance and Legal Operation Operating Performance and Financial Condition
Employees	Labor contracts, internal publications, training	Occupational Health and Safety Equal Employment Employee Training and Development
Customers	Customer service hotline, Company website, Distributor conference	Product Quality and Safety Customer and Consumer Protection Technology Development and Innovation
Government and Regulators	Policy guidelines, Information disclosure, Field visits and monitoring	Business Ethics and Anti-Corruption Risk Management and Internal Control Compliance and Legal Operation
Suppliers	Contractual agreements, Business partnerships, Supply chain system reviews	Sustainable Supply Chain Management Business Ethics and Anti-Corruption
The public and the community	Public welfare activities	Public Welfare Participation Rural Revitalization Environmental Protection Philosophy

Materiality Assessment

In 2024, the Group further enhanced the depth and scope of its materiality assessment by adopting a more scientific approach to identify and evaluate potential ESG issues relevant to its business. Integrating internal and external research, and considering industry trends and stock exchange requirements, we engaged in multi-tiered discussions with employees, shareholders, suppliers, and other stakeholders to assess the impact of market and regulatory environments on our operations.

During the evaluation process, we developed a refined survey incorporating both qualitative and quantitative questions, which was distributed to internal employees, suppliers, customers, community organizations, and regulatory bodies. The survey covered key environmental, social, and governance topics, such as the “dual-carbon” strategy, labor rights, diversity, and innovative governance structures. Through data analysis, we assessed the relevance and significance of each topic, integrating the findings into the ESG report to ensure transparency and provide valuable insights.

This assessment identified 16 “highly material” topics, an increase of 1 compared to the previous year, including 5 business-related, 6 social, and 5 environmental topics. These findings will serve as the foundation for the Group’s 2025 sustainability strategy, reflecting our commitment to a deeper understanding of stakeholder expectations and continuous innovation in ESG management.



Importance	Issues	Scope
Very Important	Business Ethics and Anti-Corruption	Governance topics
	Occupational Health and Safety	Social topics
		Environment topics
Relatively Important	ESG	Governance topics
		Social topics
	Hazardous Chemicals Management	Environment topics

03



Governance



- Corporate Governance and Compliance
- Risk Management and Control
- Information Security and Privacy Protection
- Anti-Corruption and Business Ethics
 - Integrity and Anti-Corruption
 - Anti-Monopoly
 - Intellectual Property
- Cultural Development

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The Group's efforts in information security not only safeguard stable business development but also provide stakeholders with a transparent digital environment. The Group is committed to aligning its information security and privacy protection

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cleanliness education, including party activities, watching of warning films and thematic training, and inviting public security officers to participate in the training programs. Tianneng University has organized 85 training sessions on integrity education in 2024, including party day activities, warning film viewings and thematic training, inviting public security authorities to conduct on-site law enforcement demonstrations, and producing thematic warning films, thus creating a strong atmosphere of a clean culture. Tianneng has also continuously carried out caring and warming measures, such as family reunions, commendations, and visits to and sympathy for its employees, which have given full play to the leading role of Tianneng's culture, reinforced its employees' awareness of clean practices and their self-consciousness of their actions, and provided a firm ideological guarantee and strong spiritual impetus for the Group's sustainable development in terms of both quality and quantity. The Group's high quality and sustainable development has been provided with a strong ideological guarantee and strong spiritual impetus.

2024 Æ ĭ Š ſ ŋ 36
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 98% ỳ ſ "H % 16 Æ ' % 7
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In 2024, the Audit and Supervision Center conducted 36 audits on operation and management, termination of office, and projects, outputting more than 30 audit reports and putting forward more than 200 recommendations for improvement, with the completion rate of rectification reaching 98%. At the same time, the Group conducted 16 comprehensive management inspections and 7 project inspections, issued 17 monitoring recommendations and rectification notices, investigated 101 cases of non-compliance, including 10 criminal cases, and penalized 62 suppliers. The Group actively promoted the development of a clean culture by organizing educational activities, strengthening system construction and optimizing internal control processes to create a cultural atmosphere in which the Group does not dare to corrupt, cannot corrupt and does not want to corrupt. The continuous optimization of the reporting platform and the audit and monitoring mechanism not only enhanced the effectiveness of supervision, but also promoted the joint efforts of all employees and partners in maintaining a clean corporate culture, providing solid protection for the Group's high-quality and sustainable development.

Compliance with laws and regulations is the cornerstone of the Group's sustainable

Intellectual Property

Passed the evaluation of Nationally Recognized Enterprise Technology Center	3	1
National Science and Technology-based Small and Medium-sized Enterprises (SMEs) Certification	1	1
Zhejiang Province Science and Technology Leading Enterprise Certification	2	1
Zhejiang Advanced Future Technology Innovation Achievements	1	
Recognized as the Zhejiang Province High-tech Enterprise Research and Development Center	1	1
Recognized as the Science and Technology-Based Small and Medium-Sized Enterprise in Zhejiang Province	3	1
Recognized as the provincial Innovative Small and Medium-Sized Enterprise	3	1

2024	12	31	Æ	è	W 265	Æ4	As of December 31, 2024, the Group has participated in the formulation of 265 standards, including 4 international standards, 104 national standards, 51 industry standards, and 106 group standards.
	W 104		W 51		W ~ 106		
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文化發展

Cultural Development

Mid-Autumn Festival Gala



In September this year, the Group hosted the "Pursuing Passion · Dreaming Together" Mid-Autumn Festival Gathering, inviting selected employees, their family representatives, and members of the Xinchuan Village Committee to join in the celebration. Together, they appreciated the full moon and shared in the joy of reunion. This event fully showcased Tianneng's family culture, integrating the "small family" into the "big family." Moving forward, Tianneng people will continue to work hand in hand, striving for a better life and achieving common goals.

Labor Day & Youth Day Commendation Conference



In April, the Group held the "Tribute to Strivers, Leading the Way"—Labor Day & Youth Day Commendation Conference, providing a platform for Tianneng's dedicated workforce to drive reform and innovation, talent empowerment, and practical achievements. This event served as a strong cultural and talent foundation to support the Group's high-quality and sustainable development.



04



Environment



Carbon Neutrality and Energy Transition



Resource Conservation and Pollution Control



Circular Economy and Resource Regeneration



Environment

Carbon Neutrality and Energy Transition

The sustainable development goals covered in this chapter:



Climate Risk Management

During the reporting period, the Ministry of Commerce of China, along with five other departments, issued the "Implementation Plan for Promoting the Trade-In of Electric Bicycles." The plan proposes that consumers who return old lithium-ion battery electric bicycles in exchange for lead-acid battery electric bicycles may receive enhanced subsidies. In addition, the Ministry of Industry and Information Technology, along with five other departments, published the newly revised "Safety Technical Specifications for Electric Bicycles," which relaxes the weight limit for lead-acid battery electric bicycle models from 55kg to 63kg. The series of preferential subsidy policies and industry standards introduced by the government not only reflect recognition of the safety and cost-effectiveness of lead-acid battery electric bicycles but also align with the national goal of addressing safety hazards in the electric bicycle sector.

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Lead-acid batteries continue to dominate the electric bicycle battery market due to their higher safety and lower cost, which have made them widely favored by consumers. Encouraging consumers to switch to lead-acid battery electric bicycles meets the practical needs of safety improvements across the entire electric bicycle value chain and reflects the country's principle of promoting green transportation while prioritizing safety.

As an industry leader in the field of lead-acid batteries, Tianneng has always driven the continuous optimization and innovation of its products through technological innovation, product development, and service iteration. The company's accumulation and breakthroughs in lead-acid battery technology steadily lead the development of the industry, striving to provide consumers with safer, more environmentally friendly, and reliable green transportation solutions, while also playing an active role in the development of the green industry.

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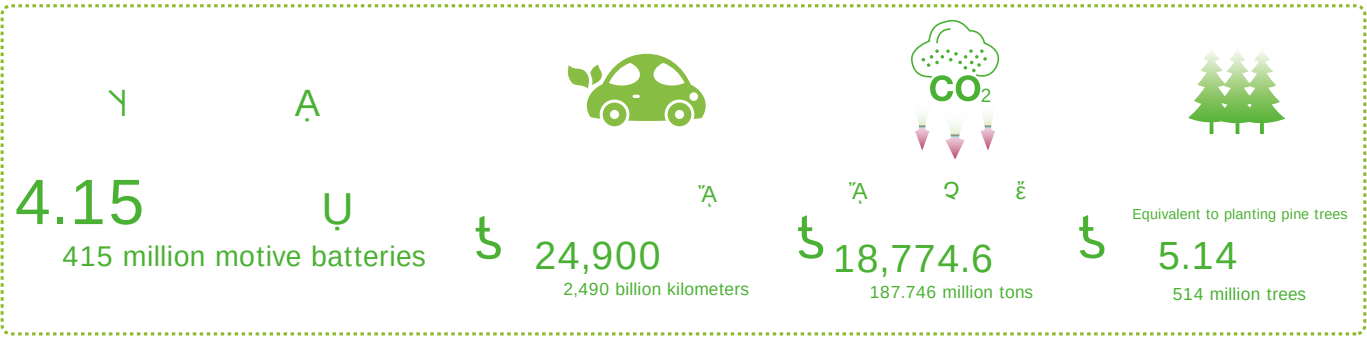
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The Group sold approximately 415 million motive batteries in 2023. Based on the calculation that each battery (4 batteries as a set) can last for 60 kilometers after storing electricity, and each battery can be charged and discharged for 400 times. The cumulative driving mileage of the batteries sold by Tianneng for the whole year can reach 2,490 billion kilometers. Assuming that 80% of motorcycle mileage is replaced and 20% of car mileage is replaced, then for the batteries sold by Tianneng in a year, the portion of motorcycle mileage replaced is 1,992 billion kilometers, the portion of car mileage replaced is 498 billion kilometers.

In the use of motorcycles and traditional cars, the main source of greenhouse gas emissions is the use of gasoline, excluding the greenhouse gases produced by the light electric vehicles themselves in the process of driving, the conversion of the Group's annual sales of motive batteries is equivalent to a reduction of 4.482 million tons of carbon monoxide and 187.746 million tons of carbon dioxide emissions.

Assuming that 1,000 pine trees are planted on each hectare of land, which can absorb 1 ton of carbon dioxide per day and 365 tons of carbon dioxide per year. Then the reduction of carbon dioxide emissions from the motive batteries sold by the Group in a year is equivalent to the amount of carbon dioxide absorbed by planting 514,372.603 hectares of pine forests in a year. Since 1,000 pine trees are planted on each hectare of land, the reduction of carbon dioxide emissions from the motive batteries sold by the Group in a year is equivalent to the planting of approximately 514 million pine trees.



The Group continues to strengthen the management of greenhouse gas emissions and promote low-carbon operations. During the reporting period, the Group carried out a comprehensive greenhouse gas emission assessment for its major subsidiaries to identify and quantify Scope 1 and Scope 2 emissions. Based on the review, the total Scope 1 greenhouse gas emissions of major subsidiaries during the reporting period amounted to 344,636 tonnes of carbon dioxide equivalent, primarily derived from direct emissions generated by fuel combustion and industrial processes. The total Scope 2 greenhouse gas emissions amounted to 1,908,055 tonnes of carbon dioxide equivalent, mainly attributable to indirect emissions from purchased electricity consumed in production and operation activities. Looking ahead, the Company will further enhance carbon emission data management, strengthen monitoring and analysis of key emission units, and lay a solid foundation for promoting energy conservation, carbon reduction, and supporting the Company's sustainable development.

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Energy Management

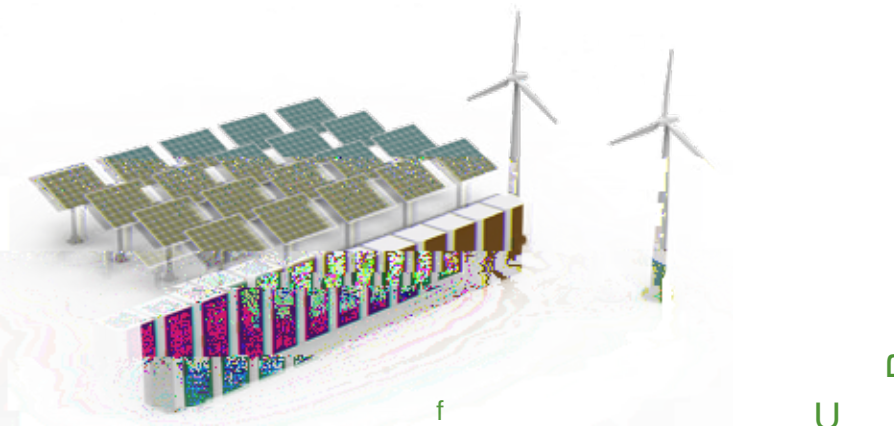
2024, the Group has issued announcements such as the "Notice on Strengthening Energy Conservation and Consumption Reduction Management at the Group Headquarters," the "Initiative to Accelerate the Online Transformation of Processes and Office Paperless Operations," and the "Announcement on Printer Allocation and Recycling at the Group Headquarters," aimed at strengthening electricity management, water conservation, promoting the use of shared printers, reducing disposable item usage, and enhancing supervision and inspection. To better manage and control energy usage, we have established an energy management control program to ensure the efficient use and conservation of energy.

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The Property Center at the Group Headquarters will lead and collaborate with the Group Office, Audit and Supervision Center, Human Resources Center, and other departments to conduct regular energy consumption supervision inspections, and report any non-compliance. The aim is to raise employees' awareness that "saving is efficiency," further reducing operational costs and energy consumption, maximizing energy-saving and consumption-reduction efforts within the company's operational scope. This will firmly grasp new opportunities for the "dual carbon" development, comprehensively build a green development system, drive the high-quality development of the enterprise, and contribute new and greater power to energy transition and green development.

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2024 Year 2024		2024 Year 2024
		3,507,302.28
		3,429,696.52
		77,605.76
		394,489.75
		893,264.74
10 thousand m ³		906.31
		26,400



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

We have successfully developed rooftop photovoltaic projects with a total capacity of approximately 99.23 MW

77,605.76MWh
which can generate 77,605.76 MWh of green electricity annually

Conserve Water Resources and Promote Sustainable Development

In response to the national water conservation policy and in line with the principles of sustainable development, the Group has continuously optimized water resource management in the production process. By improving wastewater treatment processes, the subsidiary companies have significantly enhanced the water quality after treatment, meeting industrial reuse water standards. The treated water is then circulated through water pumps and pipeline systems to the recycling water pool in the charging workshop and the restrooms, fully realizing the reuse of water resources. In 2024, the base achieved a recycled water usage of over 1.8 million tons, which not only effectively reduced improper water extraction and discharge but also significantly lowered production and operational costs, contributing to the construction of a resource-conserving society.



The First Agrivoltaic Energy Storage Project

As the EPC contractor, the Group has launched a 28 MW agrivoltaic energy storage project in Zhejiang Province. The project adopts a "power generation above, farming below" model, integrating photovoltaic power generation with agricultural production to enhance land utilization. With a total installed capacity of 28 MW and a supporting energy storage system of 3 MW/5.6 MWh, the project covers approximately 620 acres and is expected to be connected to the grid in the second half of the year. Upon completion, it will generate an average annual grid-connected electricity of 28.4472 million kWh, save about 3,422.19 tons of standard coal annually, and achieve economic, social, and environmental benefits.



The First Agrivoltaic Energy Storage Project

Energy Storage Project in Pinghu, Jiaxing City

In September 2024, Tianneng's Pinghu Smart Zero-Carbon Integrated Energy Project officially commenced construction. The project integrates local new energy resources to create a green energy system encompassing "green storage, green manufacturing, green energy sources, green valleys, and green networks," serving as a demonstration for nationwide smart zero-carbon energy development. The first phase will invest in the construction of a 120MW/240MWh grid-side independent energy storage station, which will participate in peak-shaving auxiliary services to alleviate grid pressure and support regional sustainable development.



Energy Storage Project in Pinghu, Jiaxing City

Promotion of clean energy

The use of hydrogen energy will have a significant positive environmental impact on a global scale, providing an effective solution for sustainable development and environmental improvement. By advancing hydrogen energy development, we are paving the way for a cleaner and greener future.

The Group actively responds to national initiatives by committing to the establishment of a closed-loop hydrogen energy application ecosystem, accelerating the achievement of the "dual carbon" goals. Our hydrogen fuel cell products are widely applied in transportation, engineering machinery, and energy sectors. The Group has mastered key technologies in fuel cell systems, stacks, bipolar plates, membrane electrodes, and critical materials, driving continuous technological innovation. Over the year, we filed 50 patent applications, including 30 invention patents, and participated in the formulation of seven industry standards, achieving remarkable technological advancements.

Our membrane electrode products have been successfully applied in engineering machinery and power station projects, marking a significant step towards the industrialization of core components beyond system products. The Group has independently developed two hydrogen fuel cell systems and a graphite plate fuel cell stack, all of which are now ready for vehicle integration. Notably, hydrogen fuel cell systems with 80kW capacity were successfully delivered within the year for city buses and loaders in Changxing County, Zhejiang Province, and Shuyang County, Jiangsu Province, contributing actively to local zero-carbon transportation development and urban carbon reduction efforts.



Resource Conservation and Pollution Control

The sustainable development goals covered in this chapter:



Pollutant Management

The Group has passed the ISO14001 Environmental Management System Certification. In order to strengthen environmental protection management and reduce pollutant emissions, we have promulgated and implemented the Compilation of Environmental Safety Management System of Tianneng Holding Group (Version B/0), which includes the following systems: Environmental Safety Equipment and Facility Management System, Pollutant Management System, Environmental Safety Monitoring and Early Warning Management System, Three Simultaneity Management System for Environmental Safety, Environmental Safety Approval and Management System for Investment Projects, Clean Production Management System and Carbon Resource Management System, among others.

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

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

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

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

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

2024 2024 2024 :

The emissions of some of the Group's subsidiaries in 2024 were as follows:

Company Name	Location	Category	mg/m³	tonnes/year	Notes
Tianneng Battery Group Co.,Ltd.	Zhejiang	Production	0.25	0.1459	
		Storage	30	0.24	
		Post-treatment discharge	150	1.98	
		Post-treatment discharge	30	0.1	
Zhejiang Tianneng Power Energy Co.,Ltd.	Zhejiang	Production	0.25	0.6677	
		Storage	300	10.73	
		Discharged to the park's wastewater	0.5	0.0053	
		Discharged to the park's wastewater	150	5.625	
Zhejiang Tianneng Battery (Jiangsu) Co.,Ltd.	Jiangsu	Production	0.35	0.2286	
		Storage	0.5	0.0067	
		Storage	150	41.683	
		Storage	30	3.764	
		Storage	80	0.0527	
Zhejiang Tianneng Battery Jiangsu New Energy Co.,Ltd.	Jiangsu	Production	0.35	0.1819	
		Storage	80	0.02	
		Storage	180	0.787	
Tianneng Battery Group (Anhui) Co.,Ltd.	Anhui	Production	0.5	0.6586	
		Storage	0.5	0.06782	
		Storage	150	/	
		Storage	30	/	

Company Name	Location	Category	mg/m³	tonnes/year	Notes
Materials Co.,Ltd.	Zhejiang	Production	2	0.3432	
		Storage	0.05	/	
		Storage	100	16.418882	
		Storage	1	/	
		Storage	100	31.42	
		Storage	10	5.298	
		Storage	1	0.352	
		Storage	1	0.772	
Materials Co.,Ltd.	Zhejiang	Production	0.4	/	
		Storage	0.4	/	
		Storage	0.4	/	
		Storage	0.4	/	







The Group's customer service system is as follows:

- 天能動力國際有限公司成立專業及熱情的客戶服務團隊，該團隊配備了優秀的溝通技能和業務能力。 Forming a Professional and Enthusiastic Customer Service Team: The team is equipped with excellent communication skills and business capabilities.
 - 天能動力國際有限公司建立了清晰的客戶服務流程，從諮詢和問題解決到跟進，確保了服務的高效性和一致性。 Clear Customer Service Processes: From consultation and problem-solving to follow-up, ensuring the efficiency and consistency of services.
 - 天能動力國際有限公司定期對客戶服務團隊進行培訓，提高團隊的專業素質和服務標準，同時還設立了激勵機制，以表彰優秀員工，激發團隊的熱情和創造力。 Regular Training for the Customer Service Team: Enhancing the professional quality and service standards of the team, while also setting up an incentive system to recognize outstanding employees, stimulating team enthusiasm and creativity.
 - 天能動力國際有限公司建立了全面的客戶關係管理系統，記錄客戶信息、需求和反饋，以更好地滿足客戶需求並維持關係。 Establishing a Comprehensive Customer Relationship Management System: Recording customer information, needs, and feedback to better meet customer demands and maintain relationships.
 - 天能動力國際有限公司實施了服務質量監控機制，定期評估服務質量，以 promptly 識別和改進任何服務不足之處。建立一套全面的客戶服務系統，通過清晰的客戶服務哲學。 Implementing Service Quality Monitoring Mechanisms: Regularly evaluating service quality to promptly identify and improve any service shortcomings. Establish a comprehensive customer service system through a clear customer service philosophy.
- 天能動力國際有限公司持續關注市場變化和客戶需求，不斷優化和改進服務系統。這增強了公司的市場競爭力，並確保了公司在競爭激烈的市場中處於領先地位。

天能動力國際有限公司建立了強大的客戶服務系統，這對於任何企業至關重要。集團非常重視客戶服務，我們建立的客戶服務系統使我們能夠不斷改進客戶體驗。遵循集團的「400平台市場客戶投訴管理措施」，我們專注於保護消費者隱私，同時增強客戶滿意度，提高品牌價值，並提高市場競爭力。這使我們能夠在高度競爭的市場中脫穎而出，並獲得長期發展。

Establishing a strong customer service system is crucial for any business. The Group places great importance on customer service, and the customer service system we have built enables us to continuously improve the customer experience. Following the Group's "400 Platform Market Customer Complaint Management Measures," we focus on protecting consumer privacy while enhancing customer satisfaction, increasing brand value, and improving market competitiveness. This allows us to stand out in the highly competitive market and gain a long-term development



Technological Innovation and Industry Development

The sustainable development goals covered in this chapter:



The Group places great emphasis on technological research and development, assembling an innovation team composed of top international experts from the United States, Japan, South Korea, and other countries. The team covers various fields such as new energy batteries, new energy materials, smart manufacturing, and green recycling. The Group has established several technology innovation platforms, including a national-level technology center and a postdoctoral research station.

In 2024, the Group established a Technology Management Center to coordinate technological innovation activities and integrate them into the Group's strategy. The Group has increased investment, coordinated planning, and strengthened coordination to efficiently advance technological innovation. At the same time, the Group has improved and issued various management systems, including the "R&D Project Management Measures" and the "Major R&D Project Management Measures," to strengthen project management and institutional support.

Additionally, the Group has established the R&D strategic direction of "becoming a global technological leader and value co-creator in the new energy industry." Each business segment has decoded sub-strategies and built two core technological capabilities: leading technology performance and cost leadership. By 2024, the Group has established over 60 related policies, achieving full lifecycle management of projects, covering stages such as project initiation, planning, implementation, and results conversion. The Group also has a Technology Innovation Committee, which regularly holds meetings to review the R&D strategy and annual plans. In 2024, the Group is involved in 11 ongoing industry-academia-research cooperation projects, focusing on high-energy-density battery development and battery recycling technologies.

2024 Examples of Research Innovations in 2024:

- #### Lead-acid Battery

The Group has enhanced the overall performance of lead-acid battery products through the application of micro-nano lead-carbon key technology. In the "Super Car High Energy Edition" battery, in addition to using graphene patented technology, the newly added micro-nano lead-carbon technology effectively solves the issues of poor affinity and aggregation in traditional lead-carbon materials. This technology prepares lead-carbon composite materials through low-temperature decomposition reactions, loading nano-scale PbO particles, which significantly improves the battery's charge and discharge performance and the anode cycle life.
- #### Lithium-ion Battery

The Group has collaborated with Tsinghua University on lithium battery development, lifespan prediction, and failure mechanisms, researching efficient, low-cost, and highly sensitive large-scale energy storage battery cell difference detection technologies. The collaboration aims to establish lithium-ion battery lifespan prediction models and non-discharge battery capacity distribution prediction models.
- #### Solid-State Batteries

The Group has independently developed 300Wh/kg and 400Wh/kg high-safety solid-state battery cells, which have passed safety performance tests such as puncture and overcharge. The battery cell is tested to have better life cycle, positioning it at the leading level in the industry.

2024

The Group, in collaboration with the Yangtze River Delta Research Institute of the University of Electronic Science and Technology of China, has successfully submitted a joint application for the "Vanguard" and "Leader" R&D breakthrough program under Zhejiang Province's 2024 R&D plan. The project focuses on the "Development and Application Demonstration of Core Technology and Equipment for Clean, Efficient, and Safe Recycling of Multi-Type Retired Lithium Batteries."

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The Group has completed batch shipments of its core component membrane electrodes. In July of this year, 10 hydrogen fuel cell systems independently designed and produced by the Group were officially delivered, and they will be installed in buses in Guangde City, Anhui Province.

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In the development of battery cells, the Group has adopted a layered oxide technology route, achieving significant progress in addressing the "gas generation" issue in pouch cells. This breakthrough is expected to find application in the small-power electric two-wheeler market. Additionally, the Group has developed a large-format polycathionic battery cell with comprehensive performance indicators at the forefront of the industry. The expected cycle life exceeds 10,000 cycles, offering a new solution for the Group's energy storage business.

4 Employee Care and Career Development

The sustainable development goals covered in this chapter:



Employment and Labor

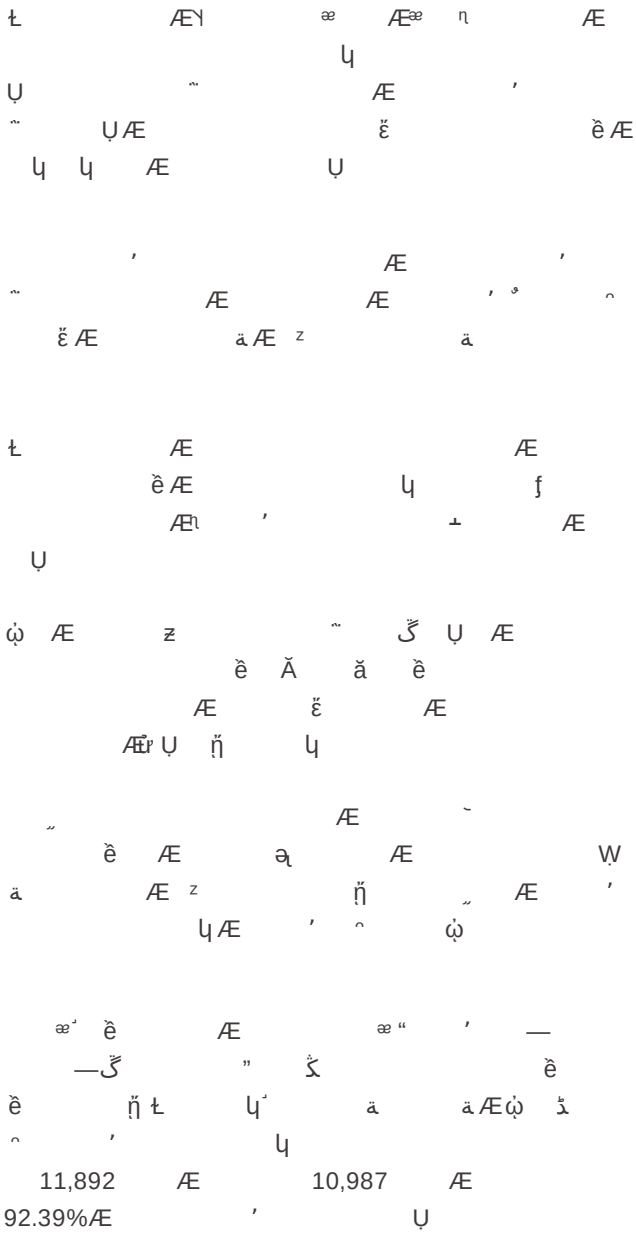
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The Group strictly adheres to the provisions of the Labor Law, ensuring equal employment opportunities and 100% legal and compliant employment practices. All employees must sign a labor contract on their first day of employment, and the Group contributes to the statutory five social insurances and one housing fund. Employees are entitled to various types of leave, including marriage leave and maternity leave. Work hours, overtime pay, statutory holidays, paid leave, and related benefits comply with local labor laws and employment contracts. The Group holds an annual employees' representative meeting to discuss major issues related to employee rights and interests.

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The Company strictly manages compensation and human resources according to the "Employee Onboarding and Probation Management Measures," "Labor Discipline and Employee Behavior Standards," and "Employee Attendance Management System." Relevant management systems have been reviewed and approved at the employees' representative meeting to ensure compliance with legal and regulatory requirements. In terms of compensation, the Company ensures fair and just remuneration and benefits for employees, with transparent and regulated salary distribution. All employees sign a legal labor contract that specifies the conditions for termination of the labor relationship, safeguarding employees' legal rights. Administrative, managerial, and support positions are required to sign integrity agreements to further reinforce management compliance and professional ethics.

Employee Training



Tianneng adopts a "learning by doing, and building through evaluation" strategy to establish a dual-career development system for management and professional talent. Through job rotations, leadership training, mentoring, and benchmark learning, the Company systematically enhances employees' management skills and professional abilities. The full-cycle talent management system is optimized through team-building evaluations, expanding development opportunities and boosting internal growth.

To standardize the onboarding process and probation management for new employees, the Group implements the "Employee Onboarding and Probation Management Measures," which clarify management norms and help new employees quickly integrate into the Company culture, improving management effectiveness and ensuring the scientific matching of people to positions.

Regarding internal training, the Group has established a comprehensive lecturer management mechanism through the "Internal Lecturer Management Measures," supporting the efficient implementation of internal training. Internal lecturers, as transmitters of knowledge and experience, promote skill enhancement and the development of a learning organization, driving continuous growth in capabilities.

To build a management team and reserve talent for key positions, the Group has implemented the "Group Executive Talent Pool Management System (Trial)." This system focuses on identifying and cultivating high-potential managerial talents, using a tiered management model to create a high-quality, stable management team that supports the company's long-term development.

In addition, to further improve training resource management efficiency, the Group revised and published the "Training Fund Management System" this year, standardizing fund usage and management, improving the precision and execution of training plans, ensuring alignment with the company's strategic goals, and fostering employee skill development and career growth, thus achieving mutual progress for employees and the Company.

Through the implementation of these systems, the Group has established a comprehensive talent development mechanism focused on "new employee management—internal training improvement—reserve talent team building." This mechanism reflects the company's systematic and standardized approach to talent development, demonstrating its commitment to employee growth and organizational development. In this year, the Group organized training and assessment for 11,892 employees, with 10,987 passing the assessment, achieving a pass rate of 92.39%, effectively enhancing employee quality and organizational capacity.

2024 Summary of the Group's Key Training Hours in 2024:

Category	Unit	2024 Year 2024
Hours of training per male employee	Hour	32.59
Hours of training per female employee	Hour	35.69
Average training hours for junior staff	Hour	34.81
Internal lecturers	Hour	14.07
Average training hours per employee	Hour	33.96

Sail Plan · Management Trainee Talent Development Program

In 2024, to accelerate the development of Tianneng's future core workforce with professional and managerial capabilities, the Group's Human Resources Center, in collaboration with various business units, launched the Management Trainee Selection and Training Program for graduates from 2021 to 2023.

Through a comprehensive evaluation of the performance, potential, career development direction, and stability of the last three batches of campus recruits, 84 individuals were selected for the management trainee talent pool and began systematic training. The training approach includes intensive training, action learning, and a dual-mentor system, ensuring the effectiveness of the program.



Management Trainee Talent Development Program

The Group has passed the ISO45001 Occupational Health and Safety Management System certification and established the "Tianneng Group EHS Management System," "Emergency Management System," and "Work Injury Handling Management System." Adhering to the principles of "graded management and line responsibility," the Group continuously improves emergency management and enhances its ability to respond to unexpected incidents.

With the advancement of smart manufacturing, the Group strives to reduce work injury risks. Some automated systems have optimized production efficiency while reducing manual involvement, thereby lowering the potential for work-related accidents. During the reporting period, no fatalities occurred due to work-related incidents. Statistical data from the past three years shows that related risks remain at a low level:

	2024 Year 2024	2023 Year 2023	2022 Year 2022
Number of Work -Related Deaths	0	0	0
Number of Work -Related Injuries	0	0	0

The Group has further strengthened the standardized management of its facilities by optimizing processes, enhancing equipment maintenance standards, and promoting digital regulation to ensure business activities run efficiently within the regulatory framework. We use advanced technologies and high-quality craftsmanship to continuously optimize equipment design and manufacturing, improving equipment stability, reducing failure rates, and ensuring the continuity and reliability of the production process. At the same time, we focus on environmental friendliness, adopting advanced environmental protection technologies to reduce emissions, ensuring compliance with strict regulatory requirements, and continually exploring new technologies to reduce carbon emissions.

In terms of safety prevention, the Group has refined and normalized preventive measures, strengthened compliance with safety standards, and improved employees' risk response capabilities through regular training and drills. We have developed a library of warning education cases and videos to reinforce safety awareness through real-life examples, and organized environmental drills such as battery fires and electrolyte leaks to verify the feasibility of emergency plans and make continuous improvements. Training materials are regularly updated to ensure alignment with the latest safety standards and best practices.

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In addition, the Group has established regulations for the management of hazardous chemicals, standardizing their use and storage to reduce operational risks and safeguard employee and environmental safety. We continue to improve occupational health management, enhance occupational health protection facilities and management capabilities, and gradually increase employee health protection levels, demonstrating our high regard for employee health and safety. At the same time, we fulfill our corporate social responsibility, laying a solid foundation for the company's sustainable development.

Supply Chain Management

The sustainable development goals covered in this chapter:



As of December 31, 2024, the Group had more than 3,200 suppliers, all located in Mainland China. The proportion of suppliers that have signed the Supplier Code of Conduct and agreements containing environmental and labor requirements reached 100%. The Group adheres to the principles of "openness and fairness, integrity in operation, long-term cooperation, and shared success," focusing on global high-quality suppliers. We are committed to maintaining the healthy development of the supply chain ecosystem, treating suppliers, business partners, and stakeholders with respect, and achieving mutual benefits for customer value, investor interests, and corporate development. The Company has established nine relevant management systems, including the "Supplier Profile Management System," "Supplier Audit Management Standards," and "Supplier Exit and Elimination System." Through a rigorous supplier admission mechanism, we effectively control supplier quality. Additionally, we have a series of management measures addressing anti-bribery in the supply chain, which has significantly enhanced the sustainability of the supply chain.

To ensure fairness and sustainability in our relationships with suppliers and to avoid corruption incidents, the Group requires suppliers to sign an "Integrity Agreement" before cooperating. This effectively mitigates the risk of bribery in the procurement process and ensures the stable development of the company's supply chain.



At the same time, the Group strictly follows supplier management systems and processes, conducts due diligence on suppliers, identifies and assesses the environmental and social impacts of suppliers, and monitors and identifies supplier risks through the Supplier Relationship Management (SRM) platform. We conduct annual scoring and performance evaluations of suppliers. The Group encourages suppliers to obtain certifications related to environmental protection, quality control, occupational health, and safety management, such as ISO 14001, ISO 9001, and ISO 45001. These certifications will be included in supplier performance evaluations, encouraging suppliers to play a more active role in green procurement.

Internally, we optimize the supply chain business processes, innovate supply chain technologies and models, and focus on building a logistics platform for the supply chain logistics process. This allows for visualized full-process logistics monitoring, enabling customers to better manage their goods rights. For external partners, we have established strategic alliances in the supply chain. While fully drawing from the valuable experiences of suppliers, we regularly carry out qualified supplier evaluations. By examining, researching, and auditing aspects such as product quality, process equipment, program control, technical services, and safety production, we share experiences, offer rational suggestions, and provide technical, financial, and human resources support to help some suppliers improve their management levels and enhance the competitiveness of the value chain system.

In line with the green sustainable development strategy, the environmental, social, and governance (ESG) governance levels of suppliers are increasingly being emphasized. The Group sets environmental protection and compliance standards as the baseline for admitting new suppliers to ensure strict control over their qualifications. New suppliers must adhere to specific ESG-related requirements, and we will also review the ESG compliance of existing suppliers. Through this initiative, we aim to build a more sustainable and responsible supply chain system, jointly promoting environmentally friendly business practices.

Investors' Equity

The sustainable development goals covered in this chapter:



The Group attaches great importance to investor relations management and is committed to safeguarding investors' right to information and promoting investor education and protection. On the basis of strict compliance with information disclosure requirements, the Group maintains close interaction with investors through diversified communication channels, including investor hotlines, regular investor meetings, email communication, reception of visitors, investor relations columns on the Company's website and the official WeChat platform, etc. The Group has actively strengthened the construction of its investor relations platform and enhanced the efficiency and quality of its services.

In the course of communication with investors, the Group not only takes the initiative to share the Company's results and operational achievements, but also pays attention to listening to investors' opinions and suggestions to ensure that their rights and interests are fully respected. As at the end of 2024, Tianneng Power has made a total of 16 cash dividends totalling HK\$ 4.678 billion, reflecting the high importance attached to shareholders' returns. Through the shareholders' meeting, which is a platform for collective decision-making and information sharing, the Group endeavours to ensure that all shareholders are fully informed of the Company's strategic direction, financial position and future plans.

The Group maintains its commitment to the interests of investors and promotes the key role of investors in corporate decision-making through transparent and honest communication. We not only pursue economic benefits, but also endeavour to achieve a win-win situation in our business operations, actively fulfil our social responsibilities and promote sustainable development with our shareholders and other stakeholders.

Awards

Community Engagement and Public Welfare

The sustainable development goals covered in this chapter:



As a leading enterprise in the new energy battery industry, the Group drives high-quality development through technological innovation while actively fulfilling its role as a "corporate citizen," giving back to society through concrete actions. Over the years, Tianneng has donated millions of RMB in materials and cash to support various disaster relief efforts, public welfare, charity, elderly care, and education assistance.

Tianneng Puyang Company Achieves Significant Results in Assisting Disabled Employment

Since its establishment, Tianneng Puyang Company has actively fulfilled its social responsibilities by providing skill training, hardship subsidies, and visitation support, promoting high-quality employment for disabled individuals. Currently, the company has a total of 3,180 employees, with over 50 disabled employees, making it the private enterprise with the most disabled employment positions in Puyang City. The company has been awarded the title of "National Disabled Employment Base According to Proportional Employment."



Veteran Employment

The Group implements a priority recruitment policy for veterans. As of 2024, the Group employs over 400 veterans, among whom 10 serve in senior management positions and over 130 serve in junior and middle management roles.

Tianneng Meishan Company Organizes Voluntary Blood Donation Campaign

Recently, Tianneng Meishan Company organized a voluntary blood donation campaign titled "Voluntary Blood Donation, Great Love from Tianneng," with active participation from employees. The company has been fulfilling its social responsibility by organizing voluntary blood donation events for over 10 years. A total of 112 blood donations have been made, amounting to 33,200 milliliters of blood, demonstrating the company's commitment to social responsibility and corporate accountability through tangible actions.



The Wenchuan Outstanding Youth Research Team Visits Tianneng

On September 5th, 30 outstanding youth from Wenchuan County visited Changxing and conducted research and exchanges at Tianneng and Xinchuan Village. Employees from the State Grid Wenchuan County Power Supply Company shared that they had learned a lot from Tianneng's cultural exhibition hall. They noted that Tianneng's profound understanding of new productive forces, from enterprise transformation and upgrading to the development of smart factories and the pursuit of the "dual-carbon" sustainable development path, is a valuable experience that they can learn from and emulate. This learning journey, they said, had been very rewarding.



The Group endeavours to provide diversified employment opportunities by recruiting professionals in the new energy battery business field while focusing on providing opportunities for talents of different levels, backgrounds and skills. While promoting the diversified development of the society, the Group also provides sustainable employment opportunities for a wider range of people. In addition, the Group has formulated and implemented a fair remuneration and benefits policy to ensure that its employees are treated fairly in terms of remuneration and benefits, thereby creating a fairer and healthier employment environment for the whole society.

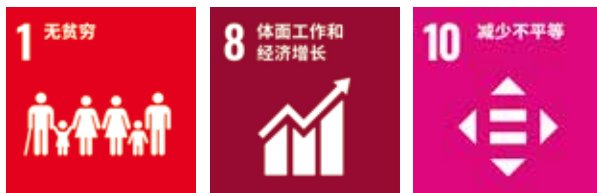
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The Group fulfils its tax obligations in a compliant manner by accurately filing and paying all taxes. The Group complies with national tax laws and regulations and actively co-operates with the tax authorities in their audits and investigations to ensure the transparency and truthfulness of tax returns. Through reasonable and lawful tax planning, the Group has created more job opportunities and wealth for the country's economic development while safeguarding its own development.

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Employment and Taxes

The sustainable development goals covered in this chapter:



Rural Revitalization

The sustainable development goals covered in this chapter:





Proposals and Suggestions

Mr. Zhang Tianren, Chairman of the Board of Tianneng Group, has long been committed to promoting green and sustainable development. During his 12 years as a National People's Congress (NPC) representative, he has diligently fulfilled his duties with great political enthusiasm and responsibility. During the 2024 Two Sessions, Representative Zhang reviewed various reports and resolutions carefully and submitted 4 legislative proposals and over 20 high-quality suggestions to the NPC. These proposals cover critical national strategies and social livelihood issues, including renewable energy, climate change response, elderly care services, industry associations and chambers of commerce, promoting the development of the new energy industry, advancing rural revitalization and common prosperity, supporting the real economy, advocating green development, ensuring electric vehicle safety, and fostering regional economic growth.

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Proposal to Amend the Renewable Energy Law

The Renewable Energy Law, implemented in 2006 and amended by the Standing Committee of the National People's Congress in 2009, has been in effect for 14 years. With the development of the industry, the law has achieved positive results but also contains some constraints and gaps. It is proposed to amend and improve the full-guarantee purchase system, establish a scientific and reasonable assessment mechanism, optimize and adjust the electricity price subsidy, and refine the relevant legal responsibility provisions.

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Proposal to Accelerate the Formulation of the Climate Change Law and Establish a Carbon Emission Reduction Legislative System

The "3060" dual-carbon target is a major strategic decision made by China after careful consideration of both domestic and international dynamics. It reflects China's commitment to actively addressing the global climate crisis and contributing to the building of a community with a shared future for mankind. Climate change is a crisis that affects all of humanity, requiring multi-party participation and coordinated governance. It is recommended to accelerate the formulation of the Climate Change Law to establish a carbon emission reduction legislative framework, which is an urgent need for achieving the dual-carbon goals. This will provide legal support for accelerating the transition to a green, low-carbon development model and help China gain a proactive role in deepening bilateral and multilateral cooperation in climate-related fields.

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Proposal to Formulate the Elderly Care Services Law

As China has entered an aging society, there is currently no comprehensive Elderly Care Services Law. It is proposed to establish such a law to build a multi-party participation framework for elderly care services, encourage innovation in elderly care technologies, improve the family-based elderly care support system, and strengthen regulatory and legal safeguards.

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Proposal to Formulate the Industry Associations and Chambers of Commerce Law

Industry associations and chambers of commerce play an important role in China's economic construction and social development. However, there is currently no specialized legislation for industry associations. It is proposed to draft the Industry Associations and Chambers of Commerce Law, which would define the nature, responsibilities, and rights of these organizations. This law would standardize management, empower services, establish a comprehensive regulatory system, protect the legal rights of members, and further stimulate market vitality, creating a fair, just, and transparent environment for market participants.

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Mr. Zhang Tianren, Deputy to the National People's Congress and Chairman of the Board of Directors of the Group

06



Thematic Section



Topic Ⅰ Smart Manufacturing and Digital Transformation

Topic II Creating a Battery Cycle Ecological Industrial Chain

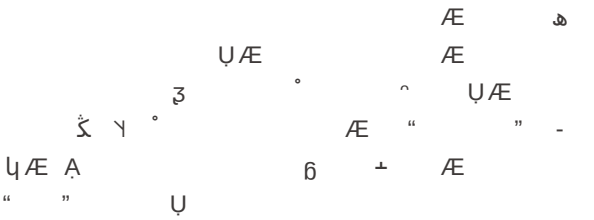


Thematic Section

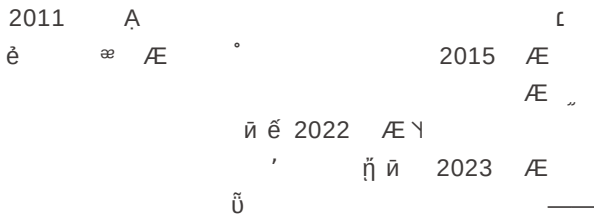
Behind these technological innovations, Tianneng has always insisted on closely



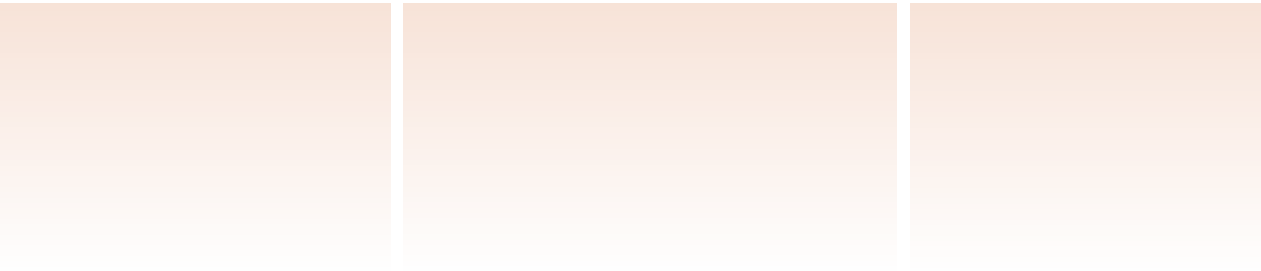
Topic ໑: Smart Manufacturing and Digital Transformation



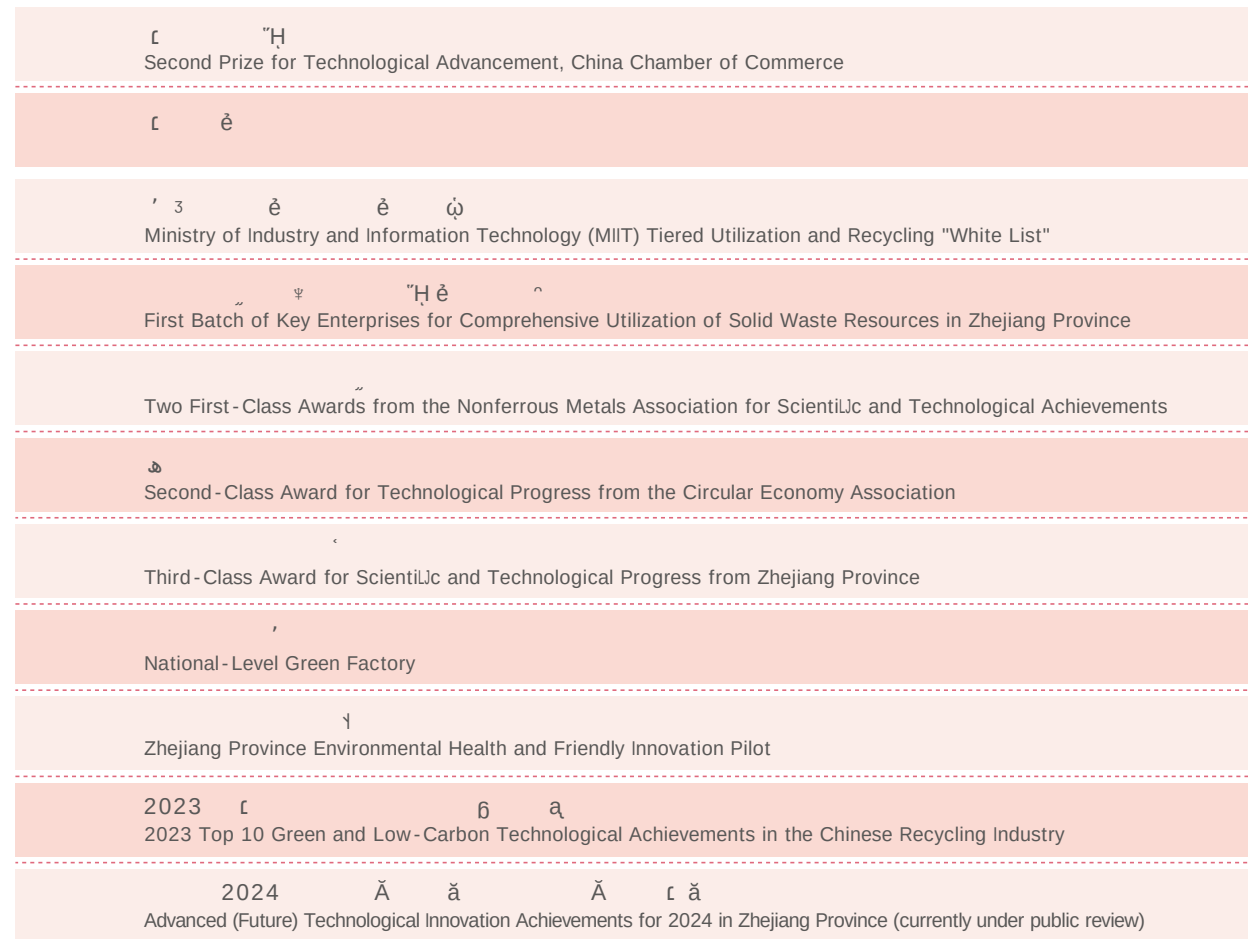
Focusing on technological innovation in areas such as smart energy storage and hydrogen energy, the Group continues to enhance its independent innovation capability in the field of circular economy and promote technological advancement in the industry, accumulating rich technological experience and project cases. The green industry is not only a test of an enterprise's determination, but also the core of technological change. Tianneng continuously promotes scientific and technological innovation, advances the high-quality development of "Green Intelligence", and walks out of the green and low-carbon transformation path with Zhejiang characteristics, actively contributing to the realization of the country's "dual-carbon" goal.



Since the launch of the industry's first fully automated battery assembly production line in 2011, which won the China Patent Excellence Award, the Group has continuously promoted technological innovation. In 2015, we established the country's first fully automated continuous casting, rolling, punching, and coating forging production line, further improving production efficiency and precision. By 2022, Tianneng became the first company in the lead battery industry to operate a full-industry-chain smart factory. In 2023, we launched the industry's first full-lifecycle key technology smart manufacturing platform — the "Quanqing Technology Smart Manufacturing Platform."



- Industry Recognition





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

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A2.1	± ã * Ä ¶ ã Ä æ ä Total direct and/or indirect energy consumption (e.g., electricity, gas or oil) and intensity by type (in thousands of kilowatt-hours)	GRI 302	302-1 302-3 Energy Disclosures 302-1 and 302-3	
A2.2		GRI 303	303-1 Water and ENJents Disclosure 303-1	
A2.3	ä ë Describe the energy e l j c i e n c y targets set and the steps taken to achieve them.	GRI 302	302-4 302-5 Energy Disclosures 302-4 and 302-5	ü
A2.4	Ä ¶ Ä² ë sources, as well as the water e l j c i e n c y targets set and the steps taken to achieve them.	GRI 3	¶ 3-3 Material Topics Disclosure 3-3	
		GRI 303	303-3 Water and ENJents Disclosure 303-3	
A2.5	- Ä Ä æ ä manufactured goods (in tons)	GRI 301	301-1 Materials Disclosure 301-1	
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	ö ¶ ¶ ¶ Policies to minimize the issuer's signi l c a n t	GRI 3	¶ 3-3 Material Topics Disclosure 3-3	þ
A3.1	¶ ¶ ¶ ¶ Describe the signi l c a n t impacts of the business impacts.	GRI 3	¶ 3-3 Material Topics Disclosure 3-3	± b
		GRI 303	303-2 Water and ENJents Disclosure 303-2	
		GRI 304	ä 304-2 Biodiversity Disclosure 304-2	
		GRI 306	306-5 306-3(c) Waste Disclosures 306-3(c) and 306-5	

