

Construction

Corporation of China

Environmental

Social and Governance Report







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POWER CONSTRUCTION CORPORATION OF CHINA

2024 Environmental, Social and Governance Report

Report Descriptions

This is the 13th Environmental, Social and Governance Report issued by Power Construction Corporation of China Ltd. (stock code: 601669, abbreviation: POWERCHINA) since 2012. This report is an annual report which covers the period from January 1, 2024 to December 31, 2024 unless otherwise specified. The last annual report was issued in April 2024.

Reporting Criteria

This report draws principally on the following standards:

- Guidelines to the Central State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibility, issued by the Stateowned Assets Supervision and Administration Commission of the State Council (SASAC)
- Guidelines on corporate social responsibility reporting for Chinese enterprises (CASS-ESG6.0), jointly published by the China Enterprise Reform and Development Society (CERDS) and Responsibility Cloud Research Institute
- Self-regulatory Guidelines for Listed Companies No. 1 - Standardized Operation and Guidelines, No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies - Sustainability Report (Trial), issued by the Shanghai Stock Exchange (SSE)
- Environmental, Social and Governance Reporting Code *Guide*, issued by The Stock Exchange of Hong Kong Ltd. (SEHK)
- UN 2030 Agenda for Sustainable Development
- GRI Sustainable Development Reporting Standards (GRI Standards) released by Global Sustainability Standards Board (GSSB)
- Ten Principles of the United Nations Global Compact
- Guidelines on Social Responsibilities (ISO 26000) released by International Organization for Standardization (ISO)

Scope of Organizations

Power Construction Corporation of China Ltd. and its whollyowned and holding companies, covering relevant indicators of enterprises under management entrusted by Power Construction Corporation of China Ltd., the controlling shareholder.

Title Description

For ease of expression and reading, Power Construction Corporation of China Ltd. is described as "POWERCHI-NA", "the company" and "we" in the report, according to the specific contexts.

Reporting Principles

Principle of importance: This report focuses on matters that may have an significant impact on stakeholders and the Company, in line with the assessment results of ESG importance issues.

Principle of quantification: The data in this report are derived from the official documents, statistical statements and financial reports of the Company, as well as the ESG information enclosed, summarized and reviewed by the Company.

Principle of balance: The contents of this report reflect objective facts and disclose the indicators involving both positive and negative information.

Principle of consistency: Unless otherwise stated, this report maintains consistency with the scope of disclosure presented in the company's previous ESG reports, with no material adjustments. The same statistical methodologies have been applied, and a three-year comparative analysis of key quantitative ESG indicators is included to illustrate performance trends.

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Report acquisition

The report is issued in both Chinese and English as PDF versions. Stakeholders and the public may download and read it from the Shanghai Stock Exchange website (www.sse.com.cn) and the POWERCHINA official website (www.powerchina.cn)

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Company Profile

The controlling shareholder of the company is Power Construction Corporation of China Ltd. (POWERCHINA Group), a Fortune Global 500 enterprise. The company was founded on the basis of Sinohydro Group Ltd. and was jointly established in Beijing on November 30, 2009, by Sinohydro Corporation and HydroChina Corporation. On October 18, 2011, the company was listed on the Shanghai Stock Exchange. In January 2014, the company changed its name from Sinohydro Group Ltd. to Power Construction Corporation of China Ltd., with its stock abbreviation updated from "Sinohydro" to "POWERCHINA".

Currently, the company has 63 wholly-owned or controlled level-two subsidiaries, including 7 hydropower design companies, 18 hydropower engineering companies, 9 power design companies, 9 power engineering companies, 4 specialized platform companies, 4 investment and operation companies, 5 financial service companies, 6 regional investment companies, and 1 company of other type.

The company's controlling shareholder, Power Construction Corporation of China Ltd., ranked 108th in the 2024 Fortune Global 500; ranked 1st in the 2024 ENR Top 150 Global Design Firms for the fifth consecutive year; and ranked 7th and 8th respectively in the 2024 ENR Top 250 Global Contractors and ENR Top 250 International Contractors.

iil Benchmarking · 2024	
No.108 of the Global Top 500 in the Fortune	No. 1 in the ENR Top 150 Global Engineering Design Firms for the fifth consecutive year
China Top 100 Large-Enterprise Innovation Index 32nd	ENR Top 250 Global Contractors (2024) Ranked 7 th
China Top 100 Strategic Emerging Industry Leaders 7th	ENR Top 250 International Contractors (2024) Ranked 8th



Business Scope

The company operates in more than 130 countries and regions worldwide, positioning itself as a global leader in clean and lowcarbon energy, water resources, and environmental construction. It serves as a key force in promoting global infrastructure connectivity and stands as a flagship enterprise supporting the joint development of the "Belt and Road Initiative". In the engineering sector, the company provides global clients with fully integrated, end-to-end solutions across the entire industry chain—including investment and financing, planning and design, construction contracting, equipment manufacturing, and operational management.In accordance with assignments from relevant national ministries and commissions, the company also undertakes responsibilities such as strategic planning, policy research, and standards development in related fields. Over the years, it has delivered a series of landmark projects that exemplify industry-leading standards and have garnered widespread international recognition.

Organizational structure



Strategic orientation

Aiming to become a world-class enterprise, the Company coordinates both domestic and international markets, integrates the three core segments of investment, construction, and operation, and focuses on the key sectors of water, energy, urban development, and digitalization. It is committed to enhancing seven core capabilities: comprehensive innovation, market expansion, high-quality project execution, lean management, resource integration, asset operation, and risk control. It systematically advances eight strategic initiatives: Party building, scientific and technological innovation, deepening reform, management enhancement, international expansion, talent-driven development, integrity and compliance, and digital transformation. These efforts aim to better serve national strategies and comprehensively promote high-quality development, ensuring greater achievements, stronger impact, and more significant contributions during the 14th Five-Year Plan period.

Corporate culture

Party building

Corpo

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The company's corporate philosophy has been shaped through sustained operations and longterm development. It inherits fine traditions, aligns with the demands of the times, and actively promotes conscious practice among all employees, thereby creating a team spirit and code of conduct that represent POWERCHINA's convictions, inspire vitality, and drive production and operations. It embodies POWERCHINA's ideals, philosophy and beliefs, and serves as the soul guiding and influencing the company's strategic pursuits.

Development Strategy

Strategic positioning

The Company plays a leading role in the global clean and low-carbon energy, water resources, and environmental construction sectors. It serves as a key pillar of global infrastructure connectivity and a flagship enterprise in advancing the "Belt and Road Initiative", providing integrated, full-industry-chain solutions, including engineering, construction, and investment services both domestically and internationally.

Strategic objectives

Build a world-class enterprise with global competitiveness.





rate n	Build a world-class enterprise and create a globally renowned brand
rate on	Develope clean energy, create a green environment and serve smart cities
rise it	Perseverance and the courage to excel
lues	Responsibility, Innovation, Integrity and Win-win Cooperation
ment ophy	Innovation, Coordination, Green Development, Openness, and Shared Growth
ess ophy	Integrity and commitment, transformative innovation, technological leadership, and mutually beneficial cooperation
yee oral oles	Loyalty & Responsibility; Compliance & Discipline; Unity & Inclusiveness; Civility & Kindness; Initiative & Progress; Diligence & Dedication

ESG Management

Statements of the Board

POWERCHINA fully recognizes the importance of ESG to the company's sustainable development. The Board of Directors exercises comprehensive oversight of all ESG matters, participates in the deliberation and decision-making of major ESG issues, assumes ultimate responsibility for ESG work, including overseeing the company's ESG development direction and strategy, identifying, assessing and managing significant ESG risks related to the company's business, regularly reviewing the ESG work, approving information disclosure materials on ESG reports, and assessing the applicability and validity of the company's ESG-level risk management and internal control systems.

ESG Governance

Decision-making

level

ÎŬ

Management

level

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ESG governance is a vital component in proactively responding to changes in the global economic landscape and advancing the Company's high-quality development. POWERCHINA has elevated ESG matters to a core element of corporate governance, integrating ESG principles into all aspects of strategic planning, management, and operations. The Company has developed an ESG work plan, continuously improved its ESG management mechanisms and organizational structure, and enhanced its ESG governance capabilities. Drawing on internationally accepted standards and best practices in ESG management, and taking into account the Company's operational realities and stakeholder expectations, POWERCHINA has established a clearly defined, multilevel ESG governance framework that spans the decision-making, managerial, and operational levels. This structure ensures clear roles and responsibilities at each level and embeds ESG considerations into all layers of accountability, thereby advancing sustainable development through responsible governance.

The Board of Directors serves as the highest authority and decision-making body for ESG matters at POWERCHINA, bearing ultimate responsibility for ESG governance. It drives the integration of ESG principles into the Company's development strategy, major decisions, and business operations.

The Company's ESG Leadership Group acts as the leading body for ESG management. It is responsible for coordinating the implementation of ESG initiatives, providing relevant information and recommendations to the Board, and regularly reporting on the progress of ESG-related work.

Execution level

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All departments at headquarters actively carry out ESG tasks to ensure effective implementation and continuous improvement. Wholly owned and majority-owned subsidiaries have established corresponding functional units to carry out ESG management and practices tailored to their specific contexts. In parallel, it has developed a goal-setting system, assessment methods, and reward-and-penalty mechanisms based on the prioritization of environmental, social, and governance values, ensuring ESG governance is embedded across all aspects of corporate operations.

Communication with stakeholders

The company places great emphasis on stakeholder communication. It continuously refines communication mechanisms and diversifies formats to meet varied stakeholder needs, striving to disclose information of interest accurately, promptly and comprehensively, respond to key stakeholder concerns, foster close relationships, build consensus on sustainable development, and advance together with stakeholders.



Three-level governance structure of POWERCHINA ESG

Communication mechanism	Our response
 Policy guidance Special meeting reporting Information submission Work objectives and evaluation Strategic cooperation 	 Compliance with laws and regulations Serve the national strategy Law-based integrity management Clean practice Develop clean energy Construct Green Projects Undertake social responsibility
 Periodic or interim reporting General Meeting of Shareholders Board of Directors Daily communication Company's official website 	 Maintain stable profit Safeguard shareholders' equities Timely disclosure of information
 Customer-service hotline Satisfaction Survey Company's official website Customer visit 	 Implement quality management Improvement of project quality Strengthen scientific and technological innovation Protect customer privacy Lead common growth
 Regular communication Business communication and cooperation Industry forums and exhibitions 	 Insist on honesty and trustworthiness Mutual benefit and equal consultation Maintain good cooperation
 Employees' congress Daily communication Various business training Staff recreational activities 	 Stable salary incentive Protect employees' rights and interests Carry out democratic management Strengthen staff development Enrich employees' life Guard the health of employees
 Community visits Consolation and communication Open day Public charity Environmental protection 	 Participate in community activities Contribute to public charity Rush to rescue and relief Practice green production Carry out environmental public welfare

Identification of substantive topics

POWERCHINA conducts a scientifically rigorous and efficient process for identifying and analyzing substantive topics. Through a structured approach involving topic identification, stakeholder engagement, and topic analysis, it ultimately develops a materiality matrix to effectively respond to stakeholder concerns and expectations.

The analysis result of substantive issues serves as an important reference for the future management of the Company's sustainable development. To identify and refine the company's core topics, the company deeply analyzes national macro-policy orientations, industry market trends and regulatory requirements; benchmarks against mainstream ESG standards and leading industry peers; and invites internal and external stakeholders via online questionnaires to evaluate the importance of various ESG issues from their perspectives. It assigns weights to each issue based on risk level and then develops a materiality matrix across two dimensions, "Impact Importance" and "Financial Importance", to guide accurate and comprehensive disclosure of environmental, social and governance information.

Governance topics	Socia	l topics	Environmental topics
 01. Strengthen Party Building 02. Enhance Corporate Governance 03. Operate in Compliance with Laws and Regulations 04. Comply with business ethics 05. Investor relations management 06. ESG management 	 07. Optimize industrial distribution 08. Project quality and safety 09. Optimize customer service 10. Scientific and technological innovation 11. Supply chain management 12. Industry cooperation and progress 13. Overseas execution of duties 14. Digital transformation 	 Data Security & Customer Privacy Safe production Employee Rights Protection Employee Development Occupational health Rural revitalization Public charity 	 22. Tackle climate change 23. Environmental management 24. Green Production 25. Pollution Control & Emissions Management 26. Develop the circular economy 27. Waste Management 28. Energy & Resource Utilization

POWERCHINA Dual-Materiality Issue Analysis Matrix



ESG honors

The company's Board of Directors received the "Best Board of Directors" award at the 19th Golden Roundtable Awards and the 2024 Listed Company Reputation Rankings

The company was awarded the A-Class Information Disclosure rating by the Shanghai Stock Exchange for 2023-2024, the 26th "Golden Information Disclosure Award," the 2024 Excellence in Investor Relations Award, and other capital market honors including the China Association for Public Companies' 2023 Annual Report Best Practices



Selected into the "Central Enterprises Responsibility Management · Pioneer 30 and Administration Commission (SASAC) of the State Council in 2024

Index" by the State-owned Assets Supervision

Ranked 19th in CASS's "2024 Top 300 Chinese Enterprises Social Responsibility Development Index"





Case Study Bridging the "Electricity Chasm" Building the "Road to Happin,ess"—Lighting Up the Qam-e-Jam Plateau was selected as an Outstanding Case in SASAC's Blue Book on Social Responsibility of the **Central SOEs** (2024)

Case Study Innovating "Dual-Carbon" Management to Forge New Quality Productivity in International Engineering was selected as an Outstanding Case in SASAC's Blue Book on ESG for the **Central SOE Listed Companies** (2024)

Our Achievements · 2024 — Honors



"Responsibility Brand Award"

at the 2024 Responsibility Night & Jingniu Awards



in the construction industry under CASS's "2024 Key-Industry Social Responsibility Development Index"

2024 — Case

中央企业 2024

Case Study Continuing China-Laos Friendship, Writing a New Chapter of Development was selected as an Outstanding Case in the Blue Book on Overseas ESG of the Central **SOEs** (2024)

"POWER" Illuminates a New Journey "Build" a Model of Scientific Governance

Embrace the mission; advance steadfastly. As a pillar in driving global energy transition and fostering sustainable development, and as a vanguard of domestic infrastructure construction and green growth, POWERCHINA always places strengthening Party leadership and Party building at its core to solidify its foundation, continuously improves its governance system, deepens reforms to stimulate internal motivation, enhances precision management to increase efficiency, and steadily consolidates the basis for growth. Through diligent action, it strives to write a new chapter of strategic transformation and High-quality development, forging ahead toward its goal of becoming a world-class enterprise.

Uphold Party-led Guidance

15 Enhance Corporate Governance

POWERCHINA's first offshore wind turbine installation vessel,



19 Deepen Corporate Reform



G1 Uphold Party-led Guidance

With Party building as the driving wind, we hoist the banner and stride forward powerfully. POWERCHINA always adheres to Xi's "Thought on Socialism with Chinese Characteristics for a New Era" as its guide, puts political development first, uses high-quality Party building to safeguard High-quality development, steadily advances the "Dual-Lead & Dual-Build" Party building project, implements the "Ten-Hundreds-Thousands" Youth Innovation & Value-Creation Program, promotes Comprehensive and Strict Governance of the Party in depth, continuously enhances its Party building capacity to provide a solid guarantee for High-quality development.

G1.1 Strengthen **Political** Guidance

POWERCHINA earnestly studies and implements Xi's "Thought on Socialism with Chinese Characteristics for a New Era", fully carries out the spirit of the 20th Party Congress and the second and third plenary sessions of the 20th Central Committee, deeply comprehends the decisive significance of the "Two Establishes," strengthens the "Four Consciousnesses," firms up the "Four Confidences," and practices the "Two Upholds." Fully leverage the Party Committee's leadership in setting direction, managing the overall situation, and ensuring implementation; build a "Great Party Building" framework, improve the "Great Supervision" mechanism, refine the "Great Evaluation" system; embed Party leadership into every aspect of corporate governance and to use high-quality Party building to safeguard High-quality development.



Convene Party Building Work Conferences

Our Honors · 2024

Implement the "First Agenda" System

95 important instructions and directives from General Secretary Xi Jinping have been followed up and studied as the "No.1 Agenda", with 268 implementation measures formulated. Regular tracking and supervision of implementation progress have been carried out, achieving a **100%** completion rate.

A comprehensive evaluation mechanism has been established to assess the implementation of General Secretary Xi's important instructions. Supervision and inspection efforts have been strengthened to ensure that all directives and the decisions of the Party Central Committee are implemented throughout the company, ensuring every instruction is followed and every matter is settled.

G1.2 **Consolidate** Ideological Foundation

Study, Publicize and Implement the Spirit of the Third Plenary Session of the 20th Central Committee

POWERCHINA insists on high positioning, high standards and high requirements in deepening political theory study, effectively promoting all Party members and cadres to arm their minds, guide practice and drive work with the Party's innovative theory. Conduct multi-level, comprehensive study and promotion of the spirit of the Third Plenary Session of the 20th Central Committee, consolidate and expand the achievements of thematic education, and carry out solid and powerful Party discipline education; all Party members and cadres further strengthen their political, ideological and action-oriented consciousness in firmly upholding the "Two Establishes" and ensuring the "Two Upholds." The company's experiences and research achievements in Party building and ideological political work were shared and promoted at the Excellent Achievements Exchange Conference of the Chinese Electric Power Ideological and Political Work Research Association.

- implementation measures across five areas Draft and issue the Work Plan for Earnestly Studying, Publicizing and Implementing the Plenary Session Spirit, clarifying **16** work arrangements across seven areas including Concentrated study and discussion, concentrated publicity and training, etc
- Utilize **11** media platforms, including the company website, WeChat, and video accounts, to open special columns and carry out in-depth coverage such as "Learn, Think, Act on the Plenary Session Spirit"



Hold a reporting session on the spirit of the Third Plenary Session of the 20th Party Congress

iil Data Reading • 2024

Economic Thought Research



11

Rated A for three

consecutive years in

the Central SOE Party Building Responsibility

System Assessment

Organize 7,770 Party members and cadres across the company to participate in the central lecture group's report meeting on learning and implementing the plenary session's spirit for centrally administered SOEs

Hold special meetings of the Company Party Committee to study and formulate 22

theoretical study sessions have been held 1.664



Within the company, research projects were completed. It was the highest number, best quality, and richest achievement in company's history

G1.3 **Strengthen the Combat Fortress**

to fortifying its development base. Through multidimensional efforts, it advances comprehensive progress and robustness of basic level Party organizations, fully leveraging their combat-fortress role. Strictly follows the "Three Reports, Three Approvals, Two Communications" process to standardize Party organization establishment, supervise subsidiary Party committee reshuffles, and ensure stability and combat effectiveness of Party leadership teams; Conduct high-quality Party-building assessments for subsidiaries and performance evaluations for Party secretaries to cement responsibilities layer by layer and implement every task, thereby forming an effective co-governance Party-building pattern; Host model training workshops for company Party affairs officers and grassroots branch secretaries, and, for the first time, provide Party building business training for full-time deputy secretaries of subsidiaries to enhance Party affairs practitioners' capabilities; Deepen the application of Smart Party Building at the grassroots: over 5,000 Party organizations conducted 315,000 online Party building activities, with visualization, specialization and intelligent features increasingly apparent.

> 中国电力建设集团(股份)有限公司 党务工作者暨基层党支部书记示范培训班

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POWERCHINA regards solidifying the grassroots Party-building foundation as the key



Host model training workshops for Party affairs officers and grassroots branch secretaries

G1.4 **Advance Party-Business Integration**

POWERCHINA promotes deep integration of Party building with governance systems, production and operations, and key initiatives. It issued the Notice on Deepening 'Dual-Lead & Dual-Build' for a Year of Enhanced Guidance and Support for grass-roots Project Value Creation and Development, to ensure Party building fully penetrates projects, embeds in reform and development, and integrates into production and operations, effectively reaching the "last mile" of grassroots projects. Formulate the Youth Innovation & Value-Creation Implementation Plan to guide POWERCHINA youth in strengthening innovation awareness, enhancing innovation capabilities, and engaging in innovative practice.

Our Honors · 2024

POWERCHINA's Party Committee, as the sole central SOE representative, delivered a typical example sharing at the national "Qingma Project" opening ceremony. POWERCHINA's Youth League Committee was honored as a "National May 4th Red-Flag Youth League Committee." The Baihetan Survey & Design Team received the "China Youth May 4th Medal" collective award.

461 vouth innovation competitions were held across all levels

Deeply implement the "Ten-Hundreds-Thousands" Youth Innovation & Value-Creation Program across all levels: over 460 youth innovation competitions were held; at the 18th "Revitalization Cup" National Youth Innovation & Value-Creation Competition, the team won 18 awards including Gold; and at the 7th National Youth Volunteer Service Project Competition, they won Gold. an all-time best result.

G1.5 Lead Cultural **Development**

Innovate Promotional Formats Promote Corporate Spirit

Focusing on key areas of enterprise development, it conducts special subject promotions on SOE reform and landmark project construction, leveraging an integrated media matrix to showcase corporate achievements.

G1.6 **Comprehensive and** Strict Governance of the Party

Maintain a Sustained

High-pressure Stance to

Ensure "Don't Dare to

Deepen the "Cannot

Mechanisms

Consolidate and

Want to Corrupt"

Enhance the "Don't

Ideological Recognition

Corrupt" Institutional

Corrupt"

On the journey of enterprise development guided by Party building, cultural development is key to concentrating strength and shaping the brand. POWERCHINA actively explores new paths for cultural development, deeply integrating the Party's innovative theory with corporate culture. From ideological guidance and promotional campaigns to international communication, it continuously enriches cultural connotations, enhances cultural soft power, and lays a solid spiritual foundation for sustainable development.

Strengthen International Communication to Shape Corporate Image

Actively integrate into the national external publicity strategy, improve the external communication system, innovate external publicity carriers, build the POWERCHINA brand, disseminate China's voice, and use a strong corporate image to reflect the national image and enhance international influence.

POWERCHINA carries forward the spirit of thorough self-revolution, continuously advancing rectification, discipline enforcement and anti-corruption; strengthens disciplinary construction; conducts Party discipline education; convenes warning education conferences; holds disciplinary education exhibitions; produces warning education films; uses real-life cases to educate; and strives to Comprehensive and Strict Governance of the Party to build a clean and healthy atmosphere for political ecology.

Always uphold a main theme of "strict", reinforce high-pressure measures, eliminate existing cases and curb new cases;

Focus on key issues, fields and targets; rigorously investigate and punish abuses of power, rent-seeking, rule-breaking and other misconduct; and crack down on unhealthy practices and corruption across all business areas.

Thoroughly analyze recent oversight and discipline enforcement cases to identify institutional loopholes, weak oversight links, and integrity risk points; and normalize improvements to "Cannot Corrupt" mechanisms;

Issue the Implementation Opinions of the Company Party Committee on Thoroughly Implementing the Spirit of the Eight-Point Regulation and Further Strengthening Work Style Construction, the Implementation Measures of the Company Discipline Inspection Commission on Strengthening Education, Management and Supervision of Young Cadres, and the Guiding Opinions on Conducting Integrity Assessments for Participants in Major Engineering Projects (Trial), further improve the system for young cadre education, management and supervision, as well as integrity assessments for major project participants.

Emphasize the role of cases in solving the root causes handling to drive punishment, deterrence, institutional constraints and awareness-raising in an integrated manner. Issue 40 Discipline Inspection Recommendation Letters, conduct three warning education activities, and circulate 52 typical cases to guide Party members and cadres in cultivating reverence, vigilance, and adherence to base line;

Deepen integrity education by delivering integrity courses in every cadre training session, promoting Party members and cadres at all levels to solidify integrity awareness and keep the bottom line of integrity, thus building a more perfect POWERCHINA integrity culture system.



Received 10 honors at the 7th Central SOE Excellent Storytelling Exhibition and the 1st AIGC Creative Communication Works Collection

Advance the "Three No-Corruption" Integrated Initiative

Our Communication • 2024

4 periodic reports and 84 interim announcements were disclosed, realizing zero correction and supplement throughout the year

Created the "Read and Understand in One Picture" visualizing periodic reports to vividly and intuitively publicize the company's business highlights

Awarded the highest rating of "A" for the **11th** consecutive year in the evaluation of information disclosure by Shanghai Stock Exchange

On the 10th of May, 2024, POWERCHINA held its 2023 performance and cash dividend briefing at the Shanghai Stock Exchange via "onsite meeting + livestream + online interaction." Ding Yanzhang, Party Secretary and Chairman, attended and spoke. During the investor communion session, the company engaged in in-depth discussions with investors on key topics such as market value management, business layout, cash dividend policy, and future development plans, further enhancing investors' recognition of the company's value and ensuring they "can see, hear and engage" with the company.

金分红说明会

Optimize Risk Management & Control 0-

"Be vigilant in times of peace" is the way for enterprise survival. POWERCHINA coordinates development and safety, strengthens the sense of responsibility and bottom-line thinking, and improves the risk prevention and control systems to ensure early risk identification, early warning and early handling, firmly safeguarding against systemic risks. The company continuously improves the risk management organizational structure and workflows with a focus on risk prevention. It has established a normalized supervision and inspection mechanism for risk control, formulated the Risk Assessment Work Management Measures to clarify risk assessment responsibilities and frequencies, and standardized risk information collection, identification, analysis, evaluation and response, laying the foundation for a major risk assessment mechanism. No major risk events occurred during the reporting period.

Annual Assessment	In accordance with the <i>Risk Asse</i> strategic development and annual o management information at the beg annual risks, resulting in the <i>Compar</i>
Periodic Tracking	Conduct quarterly tracking and monit
Focus on Special Topics	Before making major business decis guarantees, the company identifies, objectives, proposes scientifically s assessment reports as essential suppo

G2 Enhance Corporate Governance

POWERCHINA strictly complies with laws and regulations, continuously optimizes corporate governance, steadily enhances governance capabilities, rigorously advances the compliance system, and effectively promotes efficient and stable operations of all governance bodies, aiding High-quality development.

G2.1 Governance

The company has established a governance structure composed of the Shareholders' Meeting, Board of Directors, Board of Supervisors, and Management Team. During the reporting period, the company revised the Implementation Measures for the "Three Majors and One Big" Decision-Making System of Power Construction Corporation of China (Group) Co., Ltd. (2024 Edition), the Measures for the Board of Directors of Power Construction Corporation of China Co., Ltd. to Authorize the Chairman and General Manager (2024 Edition), and the Implementation Measures for the "Three Majors and One Big" Decision-Making System of Domestic Regional Headquarters of Power Construction Corporation of China (Group) Co., Ltd. (2024 Edition). It issued the Opinions on Properly Handling the Interrelationships among Governance Bodies in the Course of Improving Corporate Governance and compiled the Work Ledger for Continuously Perfecting Modern Enterprise System Construction and Enhancing Corporate Governance Capability. By perfecting various governance regulations and procedural rules, it established a more sound, standardized and scientific decision-making mechanism to ensure the effective operation of organizational bodies.

G2.2 Strategy

Standardize the Operations of the Three Sessions

POWERCHINA rigorously follows the Company Law of the PRC, Securities Law of the PRC, and Guidelines for Articles of Association of Listed Companies, among other laws and regulations. By perfecting an effective checks-and-balances governance structure and decision-making mechanism, it clarified the boundaries of powers and responsibilities among governance bodies; ensured clear, coordinated and mutually constraining roles among major institutions; secured high-quality, efficient decisions on major tasks and businesses; steadily enhanced governance capabilities; and effectively safeguarded healthy corporate operations.

III Data Reading • 2024

Held 4 Shareholders' Meetings Reviewed

L proposals

Held **J** Board of Directors meetings

Reviewed 59 proposals



Held **J** special meetings of Independent Directors

meetings of

Held **7** Board of Supervisors meetings Reviewed

Strengthen Investor Relations Management

Based on actual operations, the company perfects its information disclosure management system and regulates external disclosures. Within the premise of legal compliance, it expanded voluntary disclosure coverage, maintained smooth two-way communication channels, further improved disclosure efficiency and accuracy, and used various means to establish and maintain positive relationships with investors, protect investor rights, and build a strong corporate image in the capital market.

0



Organized **3** regular performance briefing sessions

Answered over **500** investor hotline calls, with a 100% response rate on SSE E-Interaction

Hosted 69 investor research visits and participated in **30** institutional investor strategy exchanges

A total of **18** institutions issued **51** research reports on the company



essment Work Management Measures, and based on operational goals, the company extensively collected risk ginning of the year, then identified, analyzed, and assessed ny Annual Major Risk Assessment Report.

toring of major risks and manage them appropriately.

sions such as M&A, reform and restructuring, and external analyzes and assesses risks based on established control sound risk mitigation measures, and prepares special risk ort materials for decision-making.

G2.3 Impact, Risk & **Opportunity** Management

The Board of Directors plays a critical role in corporate governance. At present, the governance structure of the Company's Board demonstrates a high degree of independence and diversity, with no material risks arising from a lack of independence or homogeneity. To further strengthen this advantage, the Company will continue to optimize the composition of the Board, ensuring a balanced mix of internal and external backgrounds among its members. Meanwhile, the Company will rigorously assess the independence of independent directors and further enhance the system of checks and balances. In the director nomination and election process, the Company will give full consideration to factors such as age and professional background to improve decision-making efficiency and broaden strategic perspectives. These efforts will not only help enhance the Company's governance capabilities on a continuous basis, but also better balance the interests of all stakeholders and provide a solid institutional foundation for sustainable development.

Legal Compliance & Commercial Corruption Risk 0-

Compliance is the base line of operations and the premise for high-quality, healthy development. Internal corruption not only damages corporate image but also leads to poor business performance. The company attaches great importance to lawful and compliant operations, continuously improves its compliance management system, maintains a zero-tolerance stance on corruption and breaches of business ethics, and promotes legal and compliant operations.

Strengthen Leadership Accountability

Implement a "penetrative" approach to ensure that the enterprise's principal leaders fulfill their primary responsibility for legal-governance construction. Organize the 2024 Legal Compliance and Risk & Internal Control Work Conference, the General Counsel's Report and Performance Training, the Legal-Zone Coordination Meeting, and other related sessions to systematically review, plan, and deploy the company's legal-governance work. Reinforce the accountability among the "critical few" at every leadership level, and effectively enhance the legal literacy of all cadres and staff as well as their ability to resolve issues through legal means.

Set Standards and Clarify Boundaries

Deepen Education to **Embody Principles**

Formulate the Provisions on Compliance Operation's "Three Prohibitions" and "Eight Strict Bans", the Compliance Management Measures, the Legal Review Measures for Business Conduct, and other legal-compliance review regulations, requiring the company and its subsidiaries to strictly implement the "Three Prohibitions" and "Eight Strict Bans" in their operational and management activities.

000

Three

Prohibitions

Eight Strict

Bans

Conduct regular compliance training, adhere to the principle that "every training session must cover compliance," comprehensively elevate all employees' compliance awareness and capabilities, and cultivate a cultural atmosphere of "everyone speaks compliance, everything must comply," ensuring every employee strictly abides by relevant laws, regulations, and company rules in daily work.

Strictly prohibit engaging in financing-style trade

Strictly prohibit loss of control over branch units Strictly prohibit unlawful acquisition of projects or operation via affiliation Strictly prohibit advance-financing and contracting projects in violation of regulations Strictly prohibit illegal subcontracting and re-subcontracting Strictly prohibit "contract in lieu of management" arrangements Strictly prohibit over-settlement and over-payment Strictly prohibit unauthorized guarantees and fund borrowings



Host the "Strengthen Compliance Management, Solidify Development Foundation" Compliance Knowledge Contest



Convene the 2024 Legal Compliance and Risk & Internal Control Work Conference

G2.4 **Metrics & Targets**







No signing of economic contracts without legal-compliance review

legal-compliance review

No issuance of rules or regulations

No approval of major decisions without

without legal-compliance review



G3 Deepen Corporate Reform

Reform is the key move to drive corporate development. POWERCHINA continues to consolidate the achievements of its three-year SOE reform campaign, steadily implements value-creation actions benchmarking world-class enterprises, and advances the high-quality deepening of SOE reform. The company remains steadfast in pushing forward comprehensive reform, categorically executes mission-driven reforms, institutional-mechanism reforms, and targeted action reforms. It firmly anchors on "driving reform, promoting development," using reform thinking to stimulate vitality and accelerate the aggregation of endogenous advantages for High-quality development.

🔁 Our Actions · 2024

Prioritize Optimization, Leverage Market Forces

• Actively leverage market coordination, advance the "Three-One-Batch" subsidiary construction, accelerate the disposal of existing intra-industry competition projects, promote the restructuring of hydropower assets, complete the trusteeship of Chongging Investment Company by Western Investment Company, reorganize Shandong Pipeline Company under POWERCHINA Municipal Company, and drive the closure and deregistration of POWERCHINA Trading & Services Company.

Expand Boundaries, Effectively Apply the Three Systems

- Implement flexible employment mechanism, with a preliminary internal HR optimization mechanism taking shape. A total of **1.940** long-term inactive employees were reassigned or cleared, reducing salary and social-security costs by RMB 208 million;
- Enable cadres to be promoted or demoted. Throughout the year, **216** cadre adjustments and appointments were made, and the first batch of 27 cadre completed secondments. Among newly promoted Party-committee management cadres, **51.79%** are aged 45 or below, maintaining over 50% for three consecutive years. Nine Party-committee management cadres (including six external directors) exited due to unfitness assessments, and 11 cadres received "yellow-card" warnings.
- Allow salary increases and decreases, link compensation to performance; total wages of 44 subsidiaries were increased, 16 decreased; wage pools prioritized emergingindustry units and compensation tilted toward key core talent.

Emphasize Pragmatic Work, Advance Targeted Actions

- Issue the Opinions on Supporting the Company's "Science-Reform Enterprises" and "Dual-Hundred Enterprises" for High-Quality Development;
- Integrate loss remediation with targeted risk-asset rectification and continuously promote overseas project loss reduction and revival;
- Vigorously reduce legal entities, achieving a net decrease in total entity count and compressing equity-hierarchy levels to within six for the first time;
- ◆ Focus on exerting the "Three Functions," achieve the "Three Centralizations," and successfully complete the reform of headquarters' institutions and responsibilities.



考核结果为标杆 贵阳院、西北院、成都院、中南院 考核结果为优秀 水电十一局、北京院、水电三局 考核结果为良好

- 6家"双百企业"— 水电六局 考核结果为标杆 贵州工程公司、电建建筑公司、江西院 考核结果为优秀 水电十四局、市政院 考核结果为良好

In the SASAC assessment: The company was honored as a Central SOE with Outstanding Overall Results in the "Science-Reform Action" and "Dual-Hundred Action' Overall ranked **17th** among central SOEs Second among central SOEs in construction

14 specialized engineering enterprises achieved "2 Benchmarks," "7 Excellent,' and "5 Good" ratings

G4 Focus on Improving Quality and Efficiency

Management is soft power and also the core strength. POWERCHINA vigorously strengthens in-depth control, builds a foundational management system driven by management enhancement, cost reduction and efficiency gains, and guided by performance appraisal. The company is accelerating the transition to scientific and lean management, continuously boosting profitability and corporate value.

Strengthen Project Management

Seven Key Focus Areas

Firmly uphold "legal compliance" as the prerequisite, maintain comp operations and integrity in execution, implement meticulous manage and deliver more high-quality projects;

Firmly grasp "meticulous control" as the core principle, adhere to standardized management, systematic operations and centralized co effectively improve project execution efficiency;

Firmly embrace "penetrative management" as a key approach, achiev full penetrative accountability, real-time management penetrability and dynamic regulatory transparency;

Firmly manage "subcontracting" as a critical link by selecting high-qu subcontractors at source, strengthening oversight during implement tion, and ensuring win-win value distribution;

Strengthen Cost Management

Adhere to the principle that "all costs are controllable," strictly implement the Guiding Opinions on Building a Comprehensive Cost Management System and the Target Cost Management Measures, refine the cost-and-expense control mechanism covering all employees, factors, value chains and life cycles, and focus on cost forecasting, control, analysis and appraisal to continuously enhance cost management.

Asset Management

Strengthen "Three Assets" Management

Fund Management

Develop detailed rules for centralized fund assessment to continuously improve capital utilization efficiency;

Utilize dual-headquarters fund-allocation functions to further optimize overall financing-term structures;

Steadily leverage the cross-border function of integrated onshore/ offshore currency pools to support the company's international operations.

Refine the asset management system, issue Asset Loss Write-off Work Standards to bridge a critical institutional gap, standardize asset-loss write-off management, support asset operations, and consolidate asset quality;

Capital Management

Deepen awareness of "capital scarcity," optimize resource-allocation mechanisms shift management from broad "scale-orientation" to refined "value-orientation," improve capital returns, and create greater value for shareholders.



liant ment,	Firmly target "value creation and profitability" by insisting on micro-profit analysis, clear reward and penalty, and accurate data; unwaveringly make economic returns the starting and ending point of project management;
ntrol to ve	Firmly focus on "talent team" as a key element, recruit and develop project talent, build an outstanding project-manager team, and maintain a smooth talent-circulation channel;
nd Iality enta-	Firmly regard "Party building" as the fundamental guarantee, strengthen political leadership, build a steadfast fortress, enforce integrity and discipline, provide humanistic care, and ensure high-quality project delivery through high-quality Party building.

Improve the cost management system for projects under construction, strengthen meticulous control, regularly conduct operational and cost analysis meetings, establish solid cost-accounting foundations, and dynamically evaluate project economic efficiency.

Strengthen Performance & Compensation Management

- Improve the "precise, flexible, standardized and efficient" income distribution mechanism; emphasize positive incentives, "performance up, compensation up; performance down, compensation down."
- Issue the Guiding Opinions on Employee Compensation Management at All Levels to elevate the refinement of compensation distribution management and resolutely address illegal, non-compliant or unreasonably high incomes.



Project Management Conference

"POWER" Illuminates Rivers and Mountains "Build" an Eco-friendly Environment

"Lucid waters and lush mountains are invaluable assets; improving the ecological environment is developing productivity." POWERCHINA always stays true to its original aspiration and acts with dedication, continually deepening the green foundation of High-quality development, enhancing the environmental dimension of business growth, and through every bit of effort and technology-driven innovation, tangibly creating a Beautiful China of "bluer skies, greener land, clearer water," embodying the vitality of Chinese path to modernization!

Forge

Exemplary Projects

32

Aerial Photo of the Dongzhuang Project Site



Innovate to Empower the Future

41 Promote Allround Green Development

55 Tackle Climate Change

E1 Deepen Strategic Transformation

POWERCHINA always upholds a high-level strategic stance in serving national strategies. Centered on the overall tone of "strengthening and optimizing core businesses," it fully drives strategic transformation and High-quality development, spares no effort to expand "Water," fortify "Energy," refine "City," and solidify "Digital," to vigorously develop new quality productivity, to cultivate strategic emerging industries, and to promote synergy and integration across all sectors.

2024 New Contract Value by Business Segment

Business area	New contract amount	Domestic business	International business
Water resources and environment	RMB 164.374 billion	RMB 153.784 billion	RMB 10.590 billion
Energy and electricity	RMB 762.817 billion	RMB 651.776 billion	RMB 111.041 billion
Urban construction and infrastructure	RMB 289.880 billion	RMB 187.554 billion	RMB 102.326 billion
Others	RMB 53.620 billion	RMB 53.620 billion	-

E1.1 Scale Up the "Water" Business



As a global leader in water resources and environmental infrastructure, POWERCHINA adopts an integrated concept of "Water Resources, Water Security, Water Environment, Water Ecology and Water Culture" to guide its water business development. The Company focused on the construction of major national water conservancy infrastructure, seizing the strategic opportunities presented by national initiatives such as ecological conservation and High-quality development of the Yellow River Basin and the Yangtze River Protection. It actively advanced the development of the National Water Network, provincial-level water networks, major water diversion projects, and basin-wide water management. At the same time, the Company made comprehensive efforts to expand its business in integrated urban-rural water supply, wastewater treatment, seawater desalination, and direct drinking water. It continues to enhance its capabilities in water operations, strengthen its engineering expertise, refine its investment strategies, and improve its core competitiveness in water-related businesses, with the goal of building a first-class domestic water services enterprise.

The company's water-resource operation capacity: **11606** million tons/day

Wins & Bids • 2024

- ("National Water Network Backbone" Beibu Gulf Guangxi Water Allocation Project and other network projects
- Major projects such as the Guxian Water Conservancy Hub on the Yellow River
- (Water projects including the Saudi Rass Tanura Industrial Wastewater Treatment Plant



Panoramic view of dam filling at Lianghekou Hydropower Station

E1.2 **Strengthen the** "Energy" Business



POWERCHINA's energy business has evolved from traditional hydropower, onshore wind, solar PV, thermal power and grid operations to a new power system centered on renewables. It vigorously expands into new fields such as deep-sea offshore wind, hydrogen energy, advanced energy storage, geothermal energy, and actively advances integrated "water-wind-solar-storage" power supplies and "source-grid-load-storage" integrated systems. The company fully leverages advantages of traditional hydropower and new-energy, increases investment in and operation of renewables and pumped storage, supports a strategic shift to "contracting + investment, construction and operation," becomes one of China's major new-energy investors/operators, drives clean, low-carbon energy transition, and serves as a leading force in reaching carbon peak and neutrality.

kilowatts, up **22%** year-on-year

Wins & Bids • 2024

- Inner Mongolia New-Energy Base Project



Shandong Yimeng Pumped Storage Power Station



Ecological restoration of the central Lhasa urban water system



- (Al-Shinafiyah 1400 MW Fuel Power Plant, Iraq
- O Cangnan No. 3 Wind Farm Project, Zhejiang



Fujian Xiamen Pumped Storage Power Station



E1.3 **Refine the** "City" Business



POWERCHINA is a key player in global infrastructure services. It actively participates in the Sichuan-Xizang Railway, the national integrated transport network and new infrastructure builds, positioning urban and infrastructure development as key growth engines. The company resolutely enters, integrates with and revitalizes cities; following the strategy of "deepening presence, enhancing operations, and providing services in cities", it innovates business thinking and models, strengthens systematic and forward-looking planning and vigorously expands quality infrastructure businesses. Vigorously enhance infrastructure specialization in urban rail, municipal, roads & bridges, housing and airports; expand professional scale, deepen chains, develop products, build brands and create core competitiveness.

Wins & Bids • 2024

- Jinan Changqing Urban-Village Renovation Project & Yantai Jinshan Bay Infrastructure & Emergency EPC Project
- Longtan New-City Affordable Housing & other "Three Major Projects"
- Shifang General-Aviation Park, Tianjin ZTE Equipment Park & other large projects
- (Nation's first maglev intercity maglev line (Changliu Line Phase I), Chongqing Lines 17 & 18 and other key projects
- (Baihe Nanyang-Henan/Hubei Border Navigation EPC Project









At the 7th Digital China Construction Summit, POWERCHINA's digital achievements were listed among the "Top 10 Solutions" for the third time, setting a digital benchmark for the water-conservancy industry.

In the digital-intelligence economy wave, digital transformation is a compulsory course for long-term corporate development. From a strategic perspective, POWERCHINA plans high-end, intelligent growth; accelerates industrial digitalization, digital industrialization and management intelligence; expands "Digital POWERCHINA"; and applies self-developed Smart Water, Smart Energy, Smart Mining, Smart City solutions in hundreds of projects, leading sector digital transformation. Digitalization has become a powerful engine for accelerating and deepening strategic transformation and achieving high-quality development. In 2024, the company's new digital-business contract value



E2 Forge Exemplary Projects

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With the nation's grand aspirations in our hearts, we are committed to shaping the landscape through engineering excellence. Engineering projects are the foundation of the company's survival and growth; high-level project delivery and value-creation management capabilities are essential for healthy and sustainable development. POWERCHINA strengthens a strong sense of ownership and responsibility, balancing short-term and long-term goals, quality and speed, and visible and latent achievements, making high-quality engineering products and services the "golden key" to its growth.

F2.1 Governance

The company has established an Engineering Management Department, which is responsible for the supervision of project performance and investment project construction. It adheres to high standards and strict requirements, and upholds transparency, integrity, anti-corruption, HSE (Health, Safety & Environment) management, and safety-first principles, the company has developed a comprehensive system of regulations and issued documents such as the Domestic Project Joint Inspection Handbook, Investment Project Construction Supervision Measures, and Company Quality Inspection & Assessment Measures to comprehensively optimize and enhance project delivery.

E2.2 **Strategy**

Emphasizing Quality Control

The company regards project quality as its lifeblood. From design, procurement, and construction through to acceptance, it has established a series of quality supervision management systems and implements end-to-end quality management to ensure every stage meets standards.



Quality Control Measures

Engage third-party testing agencies for independent inspections at critical stages

Implement a quality-traceability system with lifetime accountability for quality issues

Reward high-quality projects and enforce accountability for quality issues, thereby creating effective incentives and constraints



Specialized Project Quality Inspections

Forge Craftsmanship Quality

POWERCHINA focuses on refining its traditional brand and consolidating its status as a builder of "grand national infrastructure." As a global leader in clean energy and infrastructure construction, it empowers every power station, bridge, and park with a spirit of craftsmanship. Having participated in landmark projects such as the Three Gorges and Baihetan, the company uses rigorous construction techniques to deliver enduring flagship projects.

Our Honors · 2024

Six projects honored with the Tien-yow Jeme Civil Engineering Prize

Major Projects • 2024

- Full-capacity grid connection of the Huangjinxia Water Conservancy Hub in the National Han-Wei Diversion Project
- Full-scale commissioning of the Pearl River Delta Water Allocation of National Water Network Backbone Project
- Early river diversion took place at the Yalong River Kala Hydropower Station, the first domestic million-kW station constructed entirely under an EPC model
- Commercial operation of the Deyang Economic Development Zone Distributed Gas Power Station, the first domestic demonstration project of the G50 gas-turbine unit
- Simultaneous topping-out of the receiver tower and main plant building at Qinghai Delingha, the largest standalone tower-type solar-thermal power station in China
- Grid-connected operation of the Qinghai Hongliu Electrochemical Storage Station, the largest grid-side storage station in China
- Official opening of the WeiYan High Speed Railway
- Full opening of the Zhaotong Daguang-Yongshan Expressway in Yunnan
- Completion of the National Northwest Regional Emergency Rescue Center



Grid-connected generation at the world's highest-altitude solar-plus-storage project—the Xizang Caipeng Plant



Full-capacity commissioning of the world's highest-altitude wind farm—the Xizang Basu Wind Project



Initial impoundment of the upper reservoir at the Jurong Pumped Storage Station—home to the world's largest reservoir-basin fill



Normal impoundment achieved at the Lianghekou Dam-the highest rock-fill dam in the world

Projects honored with the Tien-yow Jeme Civil Engineering Prize -

Jiayuguan Liyuan Dam

A key project under the China Western Development program, which achieved full-cycle digital quality control in dam compaction, breakthrough spillway energy-dissipation technologies, and combined sand-flushing and penstock design innovations



One of the 172 major water conservation projects designated by the State Council

O3 Goupitan Dam, Wujiang River, Guizhou

A key "Tenth Five-Year Plan" project under the China Western Development initiative

A landmark project in Guizhou's implementation of the West-to-East Power Transmission strategy

04 Liyang 6×250 MW Pumped Storage Station, Jiangsu

The most geologically challenging and technically complex pumped storage station to date

First comprehensive R&D and deployment of "Digital Dam" technology

05 Hangzhou Second Water Source Qiandao Lake Supply Project

A major water-diversion project and the largest water-livelihood project in Zhejiang Province

Core project for Hangzhou's "Five-Water Co-governance" and "Ensuring Water Supply" initiatives











Committed to Customer Satisfaction

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Our Measures	
Improve Mechanisms	Customer-centric at all times, we have established a robust feedback management and complaint-response mechanism to promptly and effectively address customer objections, protests, or claims related to project execution, product quality or services.
Timely Rectification	Collect feedback via phone, email, the official website, and customer hotlines. Upon receiving a complaint, promptly verify the situation, ensure responsible parties investigate causes and implement corrections, liaise with customers, and provide timely feedback on resolutions.
Incorporate into Appraisals	Establish a tiered complaint-handling mechanism based on issue severity and contractual relationships; use complaint resolutions as a key factor in annual performance appraisals for responsible parties.
Periodic Analysis	Regularly analyze customer feedback issues to optimize product and service quality management systems and processes.
On-Time Delivery	Strengthen schedule management around project timelines, track and supervise the entire project lifecycle, rigorously enforce standardized processes before, during, and after delivery, and enhance the core competitiveness of on-time delivery.

E2.3 Impact, Risk & Opportunity Management

Risk of Unfair Competition

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Healthy competition drives market growth. In today's fiercely competitive market environment, the company faces risks of unfair competition. To mitigate this risk, the company actively helps build a standardized, orderly market environment and promotes healthy industry development; issues internal policies such as the *Engineering EPC Business Guidance*, the *Domestic Project Management Measures* and the *Major Construction Project Management Measures* to ensure rule-based execution; participates in industry associations and standards bodies to drive self-regulation; and strictly enforces antitrust and anti-unfair competition policies to safeguard fair market competition.

International Business Risks

In its international operations, POWERCHINA faces challenges including geopolitical conflicts, legal and regulatory differences, and cultural clashes. To address these, the company has established a robust international risk management system with risk assessments, early-warning mechanisms and contingency plans to enhance risk control. Meanwhile, it cultivates construction-management professionals with cross-cultural communication skills and an international perspective to ensure efficient project delivery. In addition, by flexibly adjusting business strategies and tailoring market entry and operational plans to local conditions, the company reduces international business risks and ensures the safe, sustainable development of overseas operations.

Indicator name	Metrics & Units	2022	2023	2024
First-time acceptance qualification rate of project quality	%	99.79	99.69	99.80
Customer satisfaction	%	95.03	94.11	95.50

E3 Innovate to Empower the Future

Guided by national strategic needs, POWERCHINA strengthens its core role in technological innovation, establishes national innovation centers and overseas R&D platforms at high standards, builds leading innovation teams, constructs a high-standard technology transfer and industry-coordination system, actively fosters new productive forces and continuously cultivates new growth drivers.

Honors · 2024

and first among central SOEs in construction

E3.1 Governance

E3.2

Strategy

POWERCHINA continuously strengthens its innovation system, consciously fulfills its mission of high-level technological self-reliance, deeply integrates into the national innovation system, further solidifies its core role in corporate innovation, and vigorously develops newquality productive forces. It comprehensively deepens reforms in science & technology systems and mechanisms, and optimizes resource allocation, with efforts to establish and improve science-centered, efficacy-oriented technology management and operation mechanisms; flexibly implement various mid-to long-term incentives; and holistically enhance the company's innovation effectiveness. It continuously optimizes the innovation arrangement, identifies and focuses on prime innovation directions, strengthens R&D of key core technologies, accelerates the integration of technological and industrial innovation; adheres to a "dual-drive" of technology and institutional innovation; promotes industryacademia-research-application collaboration and upstream-downstream integration; produces pioneering and leading results; and fully drives technology transfer. It strengthens the Party's overall leadership over science and technology work, unites powerful forces to drive innovation, builds robust tech talent teams, reinforces resource-element support, vigorously fosters an innovation ecosystem, and makes greater contributions to High-quality development and the building of a world-class enterprise.

Increase Resource Support O

Leveraging its integrated EPCI full-value-chain advantages and long-standing technology in water conservancy and power energy, POWERCHINA mobilizes innovation resources through demand-side traction and application-driven technology supply. The company works closely with universities, research institutes, and leading upstream-downstream enterprises, tackling key industry bottlenecks, major national projects and urgent construction-technology needs via joint R&D projects.

Build Innovation Platforms o

The company is establishing high-level innovation centers and R&D platforms to overcome core technology bottlenecks, concentrate advantage resources, lead the creation of original water-energies technology hubs (approved as SASAC's second batch of key support hubs), spearhead the Central SOE BIM Software Innovation Consortium, and form a collaborative digital-transformation platform for central construction SOEs, demonstrating vibrant tech-innovation momentum across fields.

E2.4 Metrics & Targets

Ranked 7th among the "Top 100 Leading Strategic Emerging Enterprises in China"







POWERCHINA led the formation of the Central SOE BIM Software Innovation Consortium, conducted major R&D on domestically developed BIM software, published the 2024 BIM Software Landscape and nine key annual achievements, and collaboratively forged a new BIM and digital-industry ecosystem.

POWERCHINA Jiangxi Electric Power Construction formed a "2+7+1+1" innovation carrier portfolio; its "Smart-Trust-Energy-Science Innovation Studio" was named a High-Value Innovation Platform for Technology Incubation by the China Energy Society for 2024-2025.



The center for Efficient Green-Energy Construction, Utilization and Industry Support in Yunnan, led by POWERCHINA Kunming Engineering Corporation, was successfully approved.



Hosted the TBM Exchange Conference

Incentivize Innovation Talent

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The company focuses on attracting and cultivating innovative talent, driven by major technological initiatives, aiming to spark creative vitality, and builds R&D teams with strong independent innovation capabilities, high initiative, and robust innovation culture. Systematically implement the "Leaders + Youth + Teams" echelon and tech-leader talent development plans; establish and improve innovation-assessment systems; fully leverage incentive policies to maximize the vitality of all innovative talent.



Enhance Technology Transfer

POWERCHINA regards innovation as the foremost driver of development, vigorously advances key-technology breakthroughs, continuously promotes new technologies and processes, and as innovation achievements proliferate, their driving power grows, making crucial contributions to new-quality productive forces.

Innovation Achievements · 2024

Record-breaking continuous coring technology and equipment for ultra-deep, high-curvature directional drilling, plus ultra-deep hydraulic milling and vibratorydriven pile equipment, supporting 2,000 m deep rock exploration and 600 m ultra-deep cover treatment in hydropower projects.

Continually enhancing core capabilities in water-network planning, deep urban water conveyance/drainage, and floodemergency response; pioneering a "Water Network+Energy, Food, Transport, City" integrated development model **POWERCHINA Kunming Engineering** Corporation, POWERCHINA Huadong Engineering Corporation and POWERCHINA Beijing Engineering Corporation respectively advanced Yunnan's provincial water-network planning implementation, integrated water-resource allocation in central and southern Zhejiang, and floodcontrol services in the Beijing-Tianjin-Hebei region.

Developed key technologies for railway/urban rail, road bridges, seaports and airports; expanded deep-space and green aggregate-industry core capabilities; ensured smooth execution of major projects like Jakarta-Bandung HSR, King Abdullah Port; provided robust tech support for gravel-investment projects in Qichun and Yanshi New high-stress soft-rock large-deformation excavation and support technologies and equipment by SINOHYDRO Bureau 7, has successfully applied.

The Planning & Design Institute, leading SINOHYDRO Bureau 8 and SINOHYDRO Bureau 9, co-developed high-quality aggregate-quality control innovations, flexible process control, full-process crushing, shaping, and grading, achieving nearly 100% qualified product rates.

Continuously deepen integration of next-gen IT (5G, BeiDou, IoT) with management and business development; create a suite of in-house digital-tech planning, design and construction software applied in Baihetan Station (the national strategic project) and Jakarta-Bandung HSR (the Belt and Road Initiative flagship project), setting multiple demonstration benchmarks.

Unmanned compaction, TBM intelligent tunneling, and fully automated CNC machining for metal structures have been deeply applied in multiple large-scale projects, improving operational efficiency by over 10%; an intelligent mine production management and control system integrating extraction, processing, storage, transport, logistics, and security has increased overall efficiency by 10-15% while reducing energy consumption by over 50%.



On January 25, The first batch of 94 wind turbines at the Huaneng Qingyang Integrated Wind-Solar Renewable Energy Demonstration Project, constructed by POWERCHINA, achieved full-capacity grid connection.



On February 1, POWERCHINA released a complete set of corporate standards for clean energy quotas, becoming the first enterprise in the clean energy sector to do so.



Mar.

On March 14, China's first domestically developed port-fixed tubular-truss 1,200-ton mast crane independently developed by POWERCHINA was launched and shipped from Zhangqiu Port.



On March 20, The Linguan 150 MW wind project—the tallest tower-type wind power project in Asia, built by POWERCHINArecorded its first successful grid-connected generation.



On April 30, The Shandong Feicheng 300 MW salt-cavern advanced compressed-air energy-storage demonstration plantthe world's largest, highest-performance single-unit CAES station built by POWERCHINA—officially commenced grid-connected operation.



On July 20, China's first set of 1,000 MW ultra-supercritical thermal-power unit boiler feed pumps, developed by POWERCHINA, successfully passed a full-load trial operation, with all performance indicators meeting operational requirements.



On July 16, The first validation unit of COAP technology (integrated low-temperature pollutant removal) built by POWERCHINA at the Huaneng Linyi Power Plant completed a 168-hour trial operation, marking the startup of the world's first near-zero-emission, integrated low-temperature pollutant-removal project.

Auq.



On July 2, The Yantai Zhaoyuan 400 MW offshore PV project— China's first large-scale, near-shore pile-foundation fixed offshore solar farm under EPC by POWERCHINA—was connected to the grid.



On July 1, The Jiaowan offshore mining and aggregate processing plant—the world's first offshore mine-sand processing facility invested and built by POWERCHINA—successfully commenced trial operation, marking a key step toward green and low-carbon development in China's mining sector.

Sep.



On June 7, The Xuzhou Chacheng 200 MW storage station—Jiangsu's largest energystorage power station built by POWERCHINAachieved full-capacity grid integration.



On July 31, The Fukang pumped storage power station—the Northwest region's first grid-connected pumped-storage plant built by POWERCHINA—entered full-capacity commercial operation.



On August 2, SASAC published the first pilot list for SOE-technology-rights reform. Two of POWERCHINA's achievements—"Structu ral-Dynamic-Performance-Sensing Series" and "Low-Carbon-Eco-Material Series" were selected, opening new avenues for transformation of scientific and technological achievements.



On August 28, The expansion of Units 5 & 6 (2×1,000 MW) at Haimen Power Plant-China's first coal-fired project to use opposed-firing tower-type boiler technology—officially broke ground, constructed by POWERCHINA.



On September 1, "Zhumeng," China's first domestically built variable-diameter vertical-shaft TBM for pumped storage power stations, led by POWERCHINA, was successfully rolled off the line in Zhengzhou. It will be first used in ultra-deep, large-diameter vertical shafts of domestic pumped storage water-conveyance systems.



On September 20, Unit 1 of the Jurong Pumped Storage Power Station in Jiangsua project that set multiple world recordsbuilt with POWERCHINA's participation, was commissioned, marking a new generation of power generation.



Jun



On May 20, POWERCHINA's investment-designed, domestically most advanced digitalized and fully integrated 75 m-water-depth mobile offshore comprehensive engineering survey and R&D platform was delivered and began operations.



On May 20, The Xiaoyuba siphon-arch bridge constructed by POWERCHINA,-China's first upward-supported concrete filled steel tube (CFST) inverted siphon arch bridge, part of the Central Yunnan Water Diversion Project—was successfully closed.





On October 23, The first unit at Yanggu Hydropower Station—China's first concrete-faced rockfill dam station—built by POWERCHINA, successfully generated power.



On October 25, The Wuhan–Nanchang 1,000 kV UHV AC transmission line, in which POWERCHINA participated, was commissioned, completing the "日 -shaped" UHV AC ring grid in Central China.



On October 27, At the Saga 220 kV substation in Shigatse, Xizang, China's first grid-side, ultra-capacitance-configured SVG (Static Var Generator), designed by POWERCHINA, was commissioned, achieving world-leading technical performance.



Nov.

On November 11, Construction began on China's first medium-low-speed maglev urban express line—the Changsha–Liuyang Maglev Express—built with POWERCHINA's participation.



On November 13, The first PV units of the Shandong Kenli 1,000 MW offshore solar project-China's first megawatt-scale offshore PV farm, surveyed and designed by POWERCHINA—were successfully grid-connected.







On December 31, The Yinjiang Hydropower Station—China's first large-scale hydropower plant built in an urban center, constructed by POWERCHINA—officially commissioned its first generating unit.



On December 29, The first unit at the Dadu River Yingliangbao Hydropower Station-China'slargest - diameter diversion - type plant, designed and built by POWERCHINAwas ceremonially commissioned.



On December 27, The Sichuan-Chongqing 1,000 kV UHV AC project, built with POWERCHINA's involvement, was officially commissioned—raising the grid's backbone voltage to 1,000 kV in Southwest China and realizing the UHV AC interconnection vision for Sichuan and Chongqing.



On December 16, "Jianghan Navigator," an open-type TBM jointly developed by POWERCHINA and China Railway Group, rolled off the line in Deyang.



On December 14, The Bazhou-Tieganlik-Ruoqiang 750 kV power transmission project, in which POWERCHINA participated, was commissioned—China's largest single-investment 750 kV transmission power scheme of the 14th Five-Year Plan period.



Hono<u>rs · 2024</u>

The National Energy Administration released the Top 10 Energy-Industry Sci-Tech Innovation Achievements of 2024 and the Top 10 National Energy R&D Innovation Platform Achievements of 2024, with two POWERCHINA achievements selected.



The "80 m - water-depth offshore self-elevating integrated survey platform" is currently China's deepest-applicable, fastest-elevating, and most accurately positioned integrated offshore-wind survey/test platform; it is crucial for ensuring survey, design, construction, and O&M of deep-sea wind projects.



On November 22, The No. 1 downward inclined shaft tunnel of the Pingjiang Pumped Storage Power Station—constructed by POWERCHINA-was successfully completed, marking the first-stage success of "Tianyue", the world's first hard-rock TBM with large gradient and variable diameter.



On December 12, The Huaneng Binzhou New Energy 850 MW offshore PV project—the State Council's first approved three-dimensional sea-use PV scheme, predominantly built by POWERCHINA-achieved grid connection of its initial 600 MW.



The "Hydropower - Dam BeiDou Safety Monitoring and Emergency Remote Control System" developed a BeiDou-integrated static high-precision solution algorithm suited for high-head dams, achieving optimal positioning accuracy up to 1 mm. It meets high-head dam deformation monitoring requirements and is vital for ensuring safe, stable operation of China's hydropower dams.

Building Digital POWERCHINA

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POWERCHINA is scaling up and specializing its "Digital" business, proactively integrating technologies such as 5G, BeiDou, and artificial intelligence with corporate operations, management, and industrial transformation. We have developed a suite of homegrown digital-intelligence products for engineering survey, design, and construction, substantially enhancing our industry capabilities through digital intelligence.

Digital POWERCHINA · 2024



POWERCHINA Zhongnan Engineering Corporation's visual-inspection system fills a domestic gap in AI-based, full-life cycle turbine inspection. It was selected as a winner in the MIIT's AI Industry Innovation Tasks pilot program.

POWERCHINA Northwest Engineering Corporation's project on "Digital-Twin Key Technologies for Reservoir-Flood Control 'Four-Pre' Applications" was named one of the "Top 10 Solutions" at the 7th Digital China Summit.





SINOHYDRO Bureau 12's in-house "Vertical-Shaft Intelligent Construction Platform" is applied to manage the construction of 700m ultra-deep hard-rock shafts, providing robust intelligent-construction support for major infrastructure in challenging geologies.

POWERCHINA Hubei Engineering developed the "Anyuan Digital Platform," China's first public-benefit learning platform in the power-sector safety and environmental protection field, enhancing digital-intelligence management across the power industry.

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E3.3 Impact, Risk & **Opportunity** Management

Market Competition Risks 0-

With rapid technological iterations in the industry, any delay in adopting emerging technologies—such as intelligent construction or green-material applications—could erode our products' and services' market competitiveness. Moreover, fierce competition in new energy, digitalization, and green construction, along with the rapid rise of cross-sector players, further challenges our market position. Accordingly, POWERCHINA has built a comprehensive risk management framework: Establishing a dynamic technology evaluation mechanism to optimize R&D focus and resource allocation; Deepening industry-academia-research collaboration to accelerate technology incubation with universities and research institutes; Strengthening market-demand orientation and driving deep integration of the innovation chain with the industrial chain; Concentrating on strategic emerging fields—energy storage, renewables, etc.—to cultivate differentiated competitive advantages. Through forward-looking risk control and an innovation-driven strategy, we continuously enhance our technology leadership, injecting new momentum into sustainable development.

E3.4 **Metrics & Targets**

Indicator name

Technology R&D input Technology R&D persor

Annual patent applicati

Annual patent licenses



	Metrics & Units	2022	2023	2024
	RMB 100 Million	208.11	232.30	242.68
nnel	Person	21,862	22,356	22,895
ions	Item	6,591	9,099	10,608
	Item	7,454	7,092	8,629



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E4 Promote All-round Green Development

Green development is a pivotal concept for China's overall development, essential for overcoming resource-environment constraints, transforming growth method, and achieving high-quality sustainable development. POWERCHINA deeply studies and implements Xi Jinping's ecological-civilization thought and the Third Plenary Session of the 20th Central Committee spirit. We earnestly carry out CPC Central Committee, State Council, and SASAC directives, fully integrate "Dual-Carbon" initiatives into reform and development, lead green-low-carbon energy transitions, continuously advance carbon reduction, pollution control, afforestation, and growth, extend the green-development value chain, and support ecological-civilization construction.

E4.1 **Promote** Low-Carbon **Operations**

Enhance Environmental Management

POWERCHINA continuously deepens its low-carbon business philosophy in operations, strictly complies with the PRC Environmental Protection Law and local regulations, and places high importance on environmental management. We have issued multiple management regulations, continuously improved our environmental-management organizational structure, and actively established an effective environmental-management system. During the reporting period, environmental performance remained stable with no major environmental incidents. Penalties for issues such as inadequate water-pollution controls have all been rectified, and our green-low-carbon efforts were rated "Excellent" among central SOEs (State-Owned Enterprises).

Promote Green Office

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The company fosters a green, low-carbon office environment, promotes eco-friendly work practices, continually expands green-office initiatives, and reduces daily office carbon emissions.



technologies, creating a safe, green, low-carbon, IoT-enabled, comprehensive energy utilization demo office park.

2024				
Organizational Safeguards & ଲ සි සි	directs ESG efforts. The Safety, Quality & Environmental Super Department manages day-to-day ESG work. All departments une "dual responsibilities" for energy savings and environmental prot At subsidiary level: Key regulated entities must establish dedicat oversight units under the Supervision Department with at lea	rvision dertake ection. ed ESG ast one	Standard System	Measures for Supervision & Management of Energy Conservation & Environmental Pro Assessment Measures for Energy Conserva Environmental Protection Statistical & Monitoring Measures for Energy Conservation & Environmental Protection
Emergency Measures २ जि			Monitoring & Assessment	Published <i>Statistical & Monitoring Measure</i> Published <i>Assessment Measures</i> to de incentives/penalties.
	Safeguards	Organizational SafeguardsThe Energy Conservation & Environmental Protection Leading directs ESG efforts. The Safety, Quality & Environmental Super Department manages day-to-day ESG work. All departments und "dual responsibilities" for energy savings and environmental protection At subsidiary level: Key regulated entities must establish dedicate oversight units under the Supervision Department with at lead specialized full-time ESG officer; general entities require one for ESG officer.Emergency MeasuresIssued the Emergency Response Plan for Environmental Incident Edition), detailing emergency organization, prevention & was	Organizational SafeguardsThe Energy Conservation & Environmental Protection Leading Group directs ESG efforts. The Safety, Quality & Environmental Supervision Department manages day-to-day ESG work. All departments undertake "dual responsibilities" for energy savings and environmental protection.At subsidiary level: Key regulated entities must establish dedicated ESG oversight units under the Supervision Department with at least one specialized full-time ESG officer; general entities require one full-time ESG officer.Emergency MeasuresIssued the Emergency Response Plan for Environmental Incidents (2024 Edition), detailing emergency organization, prevention & warning,	Organizational Safeguards The Energy Conservation & Environmental Protection Leading Group directs ESG efforts. The Safety, Quality & Environmental Supervision Department manages day-to-day ESG work. All departments undertake "dual responsibilities" for energy savings and environmental protection. Standard System A Image: A Safe The Energy Conservation & Environmental Protection Leading Group directs ESG efforts. The Safety, Quality & Environmental Supervision Department windertake "dual responsibilities" for energy savings and environmental protection. Standard System A subsidiary level: Key regulated entities must establish dedicated ESG oversight units under the Supervision Department with at least one specialized full-time ESG officer; general entities require one full-time ESG officer. Monitoring & Assessment Emergency Measures Issued the Emergency Response Plan for Environmental Incidents (2024 Edition), detailing emergency organization, prevention & warning, response, support, publicity, training, and drills. Monitoring & Assessment

Hebei Engineering Company piloted a "Green, Low-Carbon, Smart" campus leveraging existing resources and viable advanced

nt of	Reporting & Investigation Measures for
Protection	Environmental Protection Incidents
ervation &	Selection Measures for Green - Construction Demonstration Projects
nergy	Expenditure Management Measures for
on	Environmental Protection

Monitoring Measures to specify principles, data content, report formats, and KPIs;

nt Measures to define evaluation methods, scope, procedures, ratings, and

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E4.2 **Practice Green** Construction

Construct Green Projects

Establish clean-energy hubs to drive green growth. As a global leader in clean-low-carbon energy infrastructure, POWERCHINA leverages integrated planning, design, EPCI, and operations to advance hydropwer-wind-solar-storage integration and deep-sea wind projects. We actively explore synergies between green finance and green industry to accelerate the pace of the energy transition.

III Data Reading · 2024



609 million kW of new-energy capacity commissioned in the year

Photovoltaic Projects of New PV Installed Capacity

Sunlight Shines, Illuminating Brightness. The PV projects built by POWERCHINA are like a glittering Milky Way across the country, from the world's highest-altitude Nagu Photovoltaic Power Station to Southeast Asia's largest 1,050 MW solar farm in Tera, Philippines, and Asia's largest agro-solar complementary "Coke Dala" ultra-large agrivoltaic super-farm by CERC Each solar panel, perched atop hills, along desert fringes, or floating on water, captures and follows the light, transforming it into the most vibrant energy between heaven and Earth.

Case: Nation's Largest Agrivoltaic "Floating+Fishery" Project Grid-Connected

Power on Water, Aquaculture Below. In 2024, the Cangzhou "Green Port Hydrogen City" New Energy Project-China's largest agrivoltaic scheme surveyed, designed, and constructed by POWERCHINA—was grid-connected. Capitalizing on

Cangzhou's rich natural resources and thriving aquaculture sector, the project pioneers key technologies for seawater-pond PV integration, forging a new path for combining photovoltaic power generation with marine aquaculture.

Upon commissioning, the project will generate approximately 1.86 billion kWh annually—enough for 2.79 million residents—save about 561,000 tons of standard coal per year, cut CO₂ emissions by about 1.4 million tons, and deliver substantial economic, environmental, and social benefits.



Cangzhou "Green Port Hydrogen City" New Energy Project

Wind Power Projects



2.04 million kilowatts

Case: 185 m! Asia's Tallest Hybrid-Tower Wind Turbine Project Commissioned

In 2024, the 300 MW Fuyang South Wind-Solar-Storage Base in Anhui Province achieved full-capacity grid connection— China's first onshore wind farm to demonstrate a 66 kV on-site boost and power collection system—selected as a 2024 Green-Tech Innovation Case.

The project's total installed capacity is 300 MW, with 60 turbines at a 160 m hub height, including one 185 m hub-height research unit—the tallest hybrid-tower turbine in Asia.

Once operational, it will generate about 650 million kWh annually, save approximately 199,600 tons of standard coal and cut CO₂ emissions by 549,000 tons per year, easing local environmental pressure and fostering low-carbon economic growth.



Anhui Fuyang South Wind-Solar-Storage Base Funan 300 MW Wind Project

Powerful Winds Drive and Illuminate the Night. The wind farms invested, developed, built, and operated by POWERCHINA stand like steel giants between mountains and sea. From the world's highest-altitude Datang Basu Wind Farm to the world's largest single-unit floating wind platform "Wind Twins". Each turbine, erected in vast sea, rolling hills, and expansive grasslands, captures the mighty wind, converting it into surging power that propels the world forward.

Energy Storage Projects

POWERCHINA is deeply expanding into geothermal, biomass, hydrogen, storage, and integrated energy markets; actively participating in smart-energy and smart-grid construction; continuously increasing investments in clean energy; driving energy-structure transformation; and supporting the carbon peaking and carbon neutrality goals.

Case: Record-Breaking! World's Largest Compressed-Air Energy-Storage Station Under Construction

The Huaneng Jintan Salt-Cavern CAES Phase II project—co-built by POWERCHINA Shandong No. 1—is currently the world's largest single-unit CAES station by capacity, total capacity, and overall efficiency.

The project plans two 350 MW non-reheat CAES units, offering 8 hours of storage and 4 hours of generation, with energy-conversion efficiency over 70% and 2.8 million kWh per cycle—enough for 100,000 EVs. It overcame critical-technology bottlenecks by developing the world's most advanced air turbines and compressors, achieving 100% domestic manufacturing for core equipment.

Upon completion, it will generate 924 million kWh/year, save over 270,000 tons of standard coal, reduce CO₂ emissions by over 520,000 tons, and fill China's gap in large-scale CAES commercialization.



Huaneng Jintan Salt-Cavern CAES Phase II Project

Green Finance Projects



The company emphasizes industry linkage and strategic synergy, exploring integration of Water, Energy, and City sectors with finance and digital industries to create a new engine for green-low-carbon, high-quality growth and financing revenue; issues green funds and bonds; secures green loans for pumped storage, PV/solar-thermal investments; employs financial leasing to support new-energy chemical storage; and actively registers and trades carbon assets and green certificates—building a "Finance+Industry+Ecology" model. By issuing China's first public hydropower REIT and Sichuan's first public REIT—the POWERCHINA Clean Energy REIT the company has expanded China's infra-REIT market into the hydropower sector, providing an innovative model for financing transformation under the "Dual-Carbon" strategy.

On March 28, 2024, the POWERCHINA Clean Energy Closed-End Infrastructure Securities Investment Fund ("POWERCHINA Qingyuan REIT") successfully listed on the SSE—China's first public hydropower REIT—further expanding the public REIT market.

The underlying asset of POWERCHINA Qingyuan REIT is the Wu Yi Bridge Hydropower Station (Units 1–5) in Jiulong County, Ganzi Prefecture, with 137,000 kW capacity, operating safely and stably for 16 years, offering stable returns and clean-energy advantages—highly recognized by investors.



Since its listing, POWERCHINA Qingyuan REIT has actively supported the development of clean energy and infrastructure, contributing to the optimization of China's energy mix and advancing sustainable development.







Green Projects, Forge a New Ecological Landscape =

The Padma Bridge River Training Project undertaken by POWERCHINA is the world's largest river-training program, located approximately 40 km southwest of Dhaka, Bangladesh. Spanning 7.8 km with 40 in-water piers, it is locally celebrated as the "Bridge of Dreams."

The Padma River carries an annual discharge of 1.31 trillion m³ and is known as one of the world's most volatile and unpredictable rivers. Year-round sediment loads are immense: from low-water to flood season. water levels can rise by over 5 m and surface currents exceed 4 m/s. During floods, most of the riverbed is scoured to depths beyond 45 m, only to refill completely in the dry season. Upon completion, the project ensures the Padma Bridge's structural safety and guards the livelihoods of communities on both banks.

The Jiujiang Duchang Cailing Town Sewage Treatment Plant—part of POWERCHINA's Yangtze River Protection Initiative—entered operation in 2024. It provides critical support for the Poyang Lake ecological barrier and drives green-low-carbon, high-quality development along the Yangtze Economic Belt. Since commissioning, its treatment facilities have operated smoothly; treated effluent, undergoing multiple purification stages, flows continuously into Poyang Lake, sustaining the ecological vitality of China's "Mother River."



The American State



Chaohu, located in central Anhui Province, is one of China's five largest freshwater lakes. The Shiba Lianwei Wetlands on its northern shore is the premier wetland among ten around the lake and a vital ecological shield. Since late 2019, POWERCHINA has carried out Phases II and III of the Shiba Lianwei Wetlands Restoration Project, achieving notable results: 320 ha of wetland restoration, 268 ha of vegetation cover, and 410 ha of biodiversity conservation work. With all ten lakeside wetlands now fully restored, Shiba Lianwei Wetlands has become the world's second-largest, and Asia's largest, near-natural constructed wetland. In 2024, Shiba Lianwei Wetlands received multiple honors. In March, it was Anhui's exclusive representative in the Ministry of Natural Resources' "China Landscape Engineering" case studies; in April, it was selected as an outstanding example in the UN Decade on Ecosystem Restoration and showcased globally—the first such Chinese landscape engineering project of the 14 FYP period.

In 2024, the Fenshan Nabeing and Bulaoshan wind farms in Guangxi successfully connected 16 turbines to the grid. As the county's first new energy generation venture, these projects have played a pivotal role in optimizing the local energy structure and ecological environment. POWERCHINA also implemented three-dimensional ecological restoration—planting trees, shrubs, grasses, and vines. By replacing galvanized wire mesh with natural coir rope in slope seeding, seed germination exceeded 91%, vegetation cover surpassed 95% after six months, and annual substrate erosion fell below 1%, illuminating Fenshan County's green transformation path.

Implement Green Construction

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Water

Resource

Management

Harmony between humanity and nature is the essence of high-quality development. In project development and construction, POWERCHINA continuously promotes green building materials and energy recycling technologies to reduce construction and operational energy use, cut waste emissions, and achieve coordinated economic growth and ecological protection.

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Construction Drawings of the Gaoming Water Conservancy Project

Adopt advanced water-saving construction techniques and strictly control water usage; utilize non-conventional sources (rainwater and reclaimed water) by installing collection and reuse systems, by installing collection and reuse systems.

Install water-efficient fixtures and post clear signage at water points.

Promote integrated wastewater treatment, closed-loop dewatering systems, and advanced water reuse technologies.

Meter water usage separately in production, office, and living areas and maintain detailed usage records.



In the Changchun Hi-Tech Optoelectronics Industrial Park Phase III, employ PP-module water tanks to collect rooftop and pavement runoff, filter and store via inter-module gaps and perforations, and reuse for surface cleaning, landscape features, and irrigation substantially improving water use efficiency.



Energy

Management

Develop the Circular Economy In adherence to the principle of local sourcing, priority is given to green, eco-friendly, recyclable, and reusable materials. Material usage plans are developed based on construction schedules and inventory status, with systems for controlled issuance, material conservation, and strengthened on-site management. New materials such as fly ash, slag, and admixtures are utilized to lower cement consumption, while flash-butt welding and coupler connections are adopted to reduce rebar usage.

Prohibit use of equipment explicitly prohibited by national regulations; prioritize state- and industry-recommended energy-efficient, high-performance, eco-friendly machinery, favoring variable-frequency drive systems.

Keep ledgers for all major energy-consuming equipment; conduct regular maintenance to ensure optimal operating conditions.

Conduct periodic monitoring per national standards for scope, metrics, and conversion factors; establish energy-consumption records and reinforce quota, metering, and statistical management.

Leverage local re energy needs.

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Leverage local renewable resources—solar, geothermal, wind—to supplement

At the POWERCHINA Research and Development Tower project, we developed and applied a BIM-based integrated design and construction method for photovoltaics and wind power in supertall buildings. By refining the integration of PV modules and wind turbines into the building structure and fully utilizing rooftop space, we established a unified rooftop solar and wind generation system. This approach reduced construction costs by nearly six percent and saved 300,000 kWh of purchased electricity annually, enabling comprehensive use of clean energy and lowering the building's energy consumption.

Reusable materials are promoted, solid waste is sorted and recycled, and technologies are applied to reduce and recover construction waste.

Pollution Prevention and Control



We control oil pollution during machinery operation and maintenance, and prevent direct discharge of wash water and waste oil.

At construction sites, drainage ditches and sedimentation pits are installed. Temporary kitchens are equipped with grease traps and temporary toilets with septic tanks. All wastewater treatment facilities are lined with impermeable materials to prevent groundwater contamination.

- We employ integrated water reuse technologies to reduce wastewater discharge.
- We test water quality when using non-conventional or on-site recycled water.
- We maintain detailed records of all wastewater volumes discharged.









Solid waste is categorized, collected, and stored in enclosed areas in compliance with relevant regulations; Waste We advocate for the reuse and recycling of surplus We record and categorize all solid waste volumes and closed refuse stations are used and domestic and construction waste are segregated and removed materials and construction waste. store them centrally as required. promptly. Construction layout shall be made Sound insulation screen shall be installed on the Noise online monitoring, early warning and alerts shall Noise reasonably, construction time shall be construction site, low-noise equipment shall be used be performed in combination with big data and Internet arranged reasonably, and the noise shall and no-sound sign shall be set up during construction. of Things technologies. be controlled from the source. construction shall be carried out in an all-round way. Light The site lighting shall be uniformly and reasonably arranged for night construction. Energy-saving Electric welding operation shall be handled in a centralized manner. Necessary shielding measures shall be taken for welding on Pollution lamps shall be selected, and the shaped lampshade shall be installed for the lighting lamps. The the construction site to avoid strong light pollution during construction to the maximum extent. direction and range of lighting shall be adjusted timely to avoid pollution of light source.

To meet the needs of sand and gravel plant wastewater treatment in hydropower construction, we developed a new technology centered on dewatering using plateframe or box-type filter presses. This process significantly enhances treatment efficiency and delivers results exceeding industry standards.

At the Guanyinshan granite quarry in Yunfu, we use large-span inflatable eco-membrane warehouses with fully enclosed design to isolate aggregates from the environment, effectively minimizing dust, noise and pollutant emissions at the source.

For the Fukang pumped storage project in Xinjiang, we balanced cut-and-fill earthworks in advance, using spoil to build downstream berms that meet compaction and stability requirements-fully reusing all excavated material, eliminating the need for a spoil disposal site and minimizing land use.

The construction workers shall be equipped with noise reduction protection tools such as earplugs and earmuffs, and noise pollution prevention and control during



E4.3 Wholeheartedly **Safeguard Ecology**

Protect Biological Diversity

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During construction we optimize methods to minimize ecological impact, implement biodiversity offset programs, monitor and maintain ecological flow, and take various measures to protect watershed environments, thereby contributing to a thriving planet through concrete action.



On World Environment Day 2024 the hydropower industry jointly released 16.72 million juvenile fish to joyful homeward journeys.



Biodiversity survey at the Laos Monsoon Project



Kenya geothermal plant staff rescue a buffalo calf from an abandoned well.

Case: Success! The fully captive breeding of the first-class national protected Sichuan-Shaanxi golden trout

At the May 6, 2024 technical appraisal meeting in Chengdu experts declared the POWERCHINA-led "Golden Trout Captive Breeding Technology Research" a success, marking China's global first in breeding this endangered flagship species of the Upper Yangtze.

The Sichuan–Shaanxi golden trout is the flagship species of the Upper Yangtze and a first-class national protected animal. At the launch of the Bala Hydropower Station project in Aba Tibetan and Qiang Autonomous Prefecture, Sichuan, POWERCHINA enforced strict ecological protection. In 2016, it led research institutes to pioneer captive breeding of the wild Sichuan-Shaanxi golden trout in the Dadu River basin, raising several generations and establishing China's only captive population—critical for species conservation and the restoration of aquatic biodiversity.



Promote Environmental Awareness 0

The company strengthens its foundation through publicity. Leveraging World Environment Day, Energy-Saving Publicity Week, National Low-Carbon Day and National Ecology Day as opportunities, it carries out a wide range of learning and outreach activities in diverse formats to promote green low-carbon concepts, disseminate green low-carbon knowledge and raise awareness among all employees. It also upholds targeted training by organizing specialized sessions for energy-saving and environmental-protection managers to instill relevant management systems, explain key annual initiatives and enhance project leaders' environmental awareness and control capabilities. A series of public interest environmental campaigns further contribute POWERCHINA colleagues' efforts to ecological improvement.



SINOHYDRO Bureau 11 organized voluntary tree-planting



First-generation adult Sichuan-Shaanxi taimen

Data Reading · 2024





China Electrical Construction Group Guizhou Engineering held Environment Day events

E5 Tackle Climate Change

In recent years climate change has become a focus worldwide. To meet the goals of the Paris Agreement, the blueprint for global carbon neutrality is steadily unfolding. POWERCHINA actively responds to the national call, attaches great importance to "Dual Carbon" work, conducts research on pathways to achieve the carbon peaking and carbon neutrality goals, continuously strengthens climate-related risk management, enhances carbon emissions management and carbon asset management, identifies and assesses the practical challenges and potential impacts of climate change on the company, and incorporates them into strategic planning and operational practice, making POWERCHINA's contribution to the global governance framework for addressing climate change.

F5.1 Governance

POWERCHINA will help ensure that "Dual Carbon" is fully integrated into corporate governance, strengthening top-level design to drive implementation of "Dual Carbon" work and realization of its targets. The company has established a governance framework composed of the board of directors, management and execution levels, clarifying management and oversight responsibilities at each level, and under this framework is gradually exploring and improving an effective governance system to address climate change risks and challenges. At the same time, the company has set up a Leading Group for Carbon Peaking and Carbon Neutrality Work, chaired by Party Committee Secretary and Chairman Ding Yanzhang, with Party Committee Deputy Secretary and General Manager Ren Wangbin as Executive Leader and other members of the management team as Deputy Leaders, strategically promoting the company's response to climate change and the realization of green, low-carbon, sustainable development.

Board of Directors

The highest leading and decision-making body for climate-related issues, is responsible for approving the Company's climate change management strategy to ensure that it is consistent with the Company's long-term development objectives; is responsible for approving the medium and long-term plan and annual plan of the Company's climate change management to ensure that the plan is feasible and effective and can adapt to the changing climate risks and challenges; is responsible for supervising the process and results of climate change risk and opportunity identification, examining and reviewing the climate change-related objectives, and regularly hear reports from management level on climate change issues and making suggestions.

Management Level

The management layer is responsible for planning and implementing the Company's climate change risk management work, formulating major policies and strategic plans, identifying climate change risks and opportunities, coordinating, deploying and supervising the risk management work in all relevant fields, and ensuring the strong promotion of action plans to achieve carbon peaking and carbon neutrality.

Execution Level

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The executive layer is responsible for undertaking the Company's low-carbon development goal, implementing the Company's relevant decisions on climate change, refining the task objectives, planning key tasks in line with standards and goals and effectively implementing the work plan.

E5.2 Strategy

In the context of achieving the carbon peaking and carbon neutrality goals, POWERCHINA actively analyzes policy trends, proactively formulates response strategies, follows the "2-4-3-12-6" carbon peaking strategic route to deepen low-carbon transformation, timely issues Guidelines on Practicing Carbon Peaking and Carbon Neutrality Goals, conducts climate change scenario identification and risk and opportunity analysis, assesses impacts on the company's business model, value chain, finances and strategy, clarifies its development resilience under different climate scenarios, and explores practical paths to achieve carbon peaking targets and the carbon neutrality vision.





POWERCHINA conducts comprehensive risk assessments, identifies major uncertainties, and takes corresponding measures in the short term, medium term and long term to enhance climate adaptability, reduce risks posed by climate change, seize development opportunities in the low-carbon economy and promote the company's green, low-carbon development.

Strategic route of "2-4-3-12-6" for carbon peaking

Target two main goals: general purpose and industry characteristics

Focus on the main business of "water, energy, urban development and digitalization"

Integrate the three key phases of "investment, construction and operation"

Promote 12 key tasks including green and low-carbon

Leverage the supporting role of six major projects including energy saving and carbon reduction

Risk Identification and Response Strategies

Transitior **N1**

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Identification process: Track domestic and international climate change policy developments; Assess the competitiveness of existing technologies and equipment; Understand consumer demand for low-carbon products through market research.

Policies and regulations

The entry into force of the Paris Agreement has significantly accelerated the global response to climate change. In 2022 the European Union reached agreement on carbon emissions-trading reform and will impose carbon tariffs from 2026; The national voluntary greenhouse-gas emission-reduction trading market was officially launched in Beijing on January 22, 2024,; Politburo Standing Committee member and Vice Premier Ding Xuexiang attended and announced the market's start; In August 2024, the CPC Central Committee and the State Council issued Opinions on Accelerating the Comprehensive Green Transformation of Economic and Social Development, proposing measures to accelerate a full green transition. Domestic and international policies and requirements are constantly evolving, placing higher demands on corporate low-carbon development.

Coping strategies

- Strategic adjustment: Incorporate response to climate change into corporate strategic planning and develop specific action plans and targets. Policies Internations
- Green transformation: Implement the CPC Central Committee and State Council's Opinions on Accelerating the Comprehensive Green Transformation of Economic and Social Development, focus on "water, energy, urban development, digitalization" industries to build a spatial pattern for green, low-carbon, high-quality development, accelerate upgrading of traditional industries, develop strategic emerging industries and lay out future industries; Leverage green development evaluation as opportunities to continuously advance comprehensive green transformation of subsidiaries.
- Monitor market changes: Closely follow national carbon-market and carbon-asset trading policy updates, strengthen engagement with the National Energy Administration, Ministry of Ecology and Environment, Beijing Green Exchange, Shanghai Environment and Energy Exchange and other agencies, reinforce green-certificate and green-electricity trading, carbon trading, innovate business models and explore new avenues for profitability.

Technical risk

As the world is experiencing a new round of scientific and technological revolution and industrial transformation, enterprises are faced with the uncertainty brought by technological transformation. Future markets placed higher requirements for technological accumulation and technological innovation capability of enterprises, and enterprises need to strengthen the effective connection and organic integration between basic research and applied research based on market demand. Enterprises also need to construct an innovation ecology of efficient and coordinated supply and demand of science and technology, and assist the "carbon peaking and carbon neutrality" process with scientific and technological innovation.

Coping strategies

• Strengthen technological innovation and R&D: Guided by national strategic needs, we will reinforce the leading role of scientific and technological innovation, establish national innovation centers and overseas R&D platforms at high standards, build a robust system for technology commercialization and industry collaboration, continuously invest R&D funds and advance innovation and R&D in integrated water-wind-solar-storage, deep-sea wind power, solar power, hydrogen energy and other new technologies.

Technicalrist

Engineering construction companies play an important role in tackling the climate change challenges in the world, and naturally face even more severe pressure of carbon emission reduction. Stakeholders are increasingly concerned about the impacts of global warming and climate change. If no appropriate actions are taken, this will damage brand reputation. Therefore the company must transparently disclose planning schemes and implementation paths under the carbon peaking and carbon neutrality goals to minimize reputation risk.

• Promote green and low-carbon development:

competitiveness.

Reputational risk

The adjustment of energy structure is a key way to realize carbon neutrality in China. In recent years, there has been a surge of policies on new energy, new energy storage, hydrogen energy and other clean energy. This has propelled China's clean energy industry into a phase of explosive growth, presenting broad prospects and unlimited opportunities.

and models:

We shall accelerate the development of water environment and water ecological business, vigorously develop green sand business, undertake renovation of high energy consumption equipment, lowcarbon sludge treatment, and photovoltaic power generation; We shall also upgrade to high-efficiency energy-saving water pump, maglev fan, high-voltage frequency converter, high-precision metering and dosing equipment, etc.

Reputational risk

Coping strategies

The Company has undertaken energy-saving retrofits, upgraded construction equipment, and replaced fuel-powered heavy-duty trucks with electric vehicles to reduce carbon emissions. It invests in renewable energy projects to optimize the energy structure, develops low-carbon products and expands the green market. In addition, the Company promotes joint emission reductions among upstream and downstream enterprises in the supply chain and strives to establish a green brand to enhance market

Market opportunity

Coping strategies

• Explore new industries, business formats • Optimize the layout of green and low-carbon industries:

We shall strategically focus on the development of the main businesses of "water, energy, urban development and digitalization", and shift the focus of investment to the development and construction of new energy projects, and establish a negative investment list and divest from the inefficient and ineffective high-carbon asset enterprises.

Physical

Identification process: Historical climate data and future predictive models are collected. Geographic Information Systems (GIS) are utilized to assess asset exposure risks. Collaboration with local meteorological departments and research institutions is established to obtain professional support.

Impacts on Extreme weather events

Climate change has led to an increased frequency of extreme weather events, such as wildfires, heatwaves, hurricanes, and floods. These events may cause construction delays and delivery difficulties, increasing risks to business operations and product maintenance.

Coping strategies

- () Improve product, engineering and service quality: We shall prepare for the establishment of highend platforms such as National Technology Innovation Center and effectively foster the development of original technologies in strategic emerging industries. Furthermore, we have, for the first time, included certain electric equipment in our annual framework procurement catalog. We continue to promote independent innovation of manufacturers, and boost the R&D of new energy equipment.
- () Promote smart management for "carbon peaking and carbon neutrality": We shall complete the role change of "POWERCHINA Cloud" from operation and maintenance to operation, integrate multiinfrastructure construction experience by using Internet, 5G+Internet of Things, big data and other technologies, we will integrate our extensive multi-infrastructure construction experience to strengthen digital technical support for the full lifecycle management of complex, cross-domain projects.
- Promote the development of "carbon peaking and carbon neutrality" management platform: We shall carry out the informatization demand analysis of carbon peaking and carbon neutrality and carbon asset management, promote the development of the Group's "carbon peaking and carbon neutrality" management platform, and improve the "carbon peaking and carbon neutrality" management capability.
- Overlop contingency plans for extreme weather events.

Chronic climate change

The continuous rise in global temperatures is anticipated to trigger long-term, gradual "chronic" physical risks, such as droughts, which pose significant threats to human socio-economic activities, livelihoods, and ecological environments. These risks may impact the operation of offshore wind turbines and lead to supply shortages from vendors.

Coping strategies

- (Exploring life-cycle carbon management. POWERCHINA INTL released the Working Standard for Carbon Footprint/Carbon Neutrality of International Engineering Projects, and POWERCHINA Beijing Engineering Corporation Limited conducted the research on life-cycle carbon footprint accounting and carbon emission reduction benefit assessment for pumped storage power stations.
- (Controlling Total Carbon Emissions and Intensity: The total carbon emission shall be managed according to the three businesses of "power generation, building construction and equipment manufacturing"; For coal-fired power station, we shall implement the measures such as circulating fluidized bed and threetransformation linkage to reduce carbon emission; The "five new" technologies of survey and design and the "ten new technologies" of construction industry shall be applied.
- Optimization of Supplier Layout: Establish a comprehensive material procurement and allocation mechanism based on business needs.

Assessment of Strategic and Business Model Impacts



E5.4

Under the carbon peaking and carbon neutrality goals, the company closely follows national industrial policies to identify better opportunities and focal points for strategic transformation, vigorously developing wind power, photovoltaics, solar thermal, pumped storage, and new power systems. The state provides favorable low-interest loan support to enhance project payment guarantees

As consumer demand for lowcarbon products rises, it is imperative to build a green and low-carbon supply chain to reduce carbon emissions throughout the entire process

Utilize technologies such as big data and artificial intelligence to improve project management efficiency and

"POWER" Illuminates Life "Build" a Happy and Beautiful Society

With our eyes on the stars and our feet on the ground, we unite our hearts and persevere with resolve. As a pioneer of advancing global connectivity and a committed practitioner in sharing development outcomes, POWERCHINA always puts people first and acts with heartfelt dedication. We ground ourselves in the people, draw strength from the people, undertake great endeavors together with the people and spare no effort to fulfill the people's aspiration for a better

Build Overseas Connectivity with Sincerity

Partner

for Shared



73 Ensure Safe Production

Care for Employee Development

81 Enhance People's Livelihood and Well-being

S1 Build Overseas Connectivity with Sincerity

POWERCHINA adheres to the principles of "extensive consultation, joint contribution and shared benefits," leverages its core strengths and actively implements the "Belt and Road" Initiative. We align with the development needs of host countries and undertake numerous landmark and innovative projects around the world. We actively fulfill our social responsibilities, improve local living conditions and nurture the blossoms of friendship through international cooperation.



S1.1 Infrastructure Interconnection

As one of the backbones serving global infrastructure connectivity, POWERCHINA actively participates in infrastructure interconnection in countries along the "Belt and Road Initiative" route. In municipal infrastructure, urban rail transit, expressway, railway, airport, port and waterway sectors, it seizes opportunities to deliver exemplary, high-quality projects built to the highest standards, with sustainability and public's well-being at the core, bringing tangible improvements to local communities.

Data Reading · 2024

New contract value signed in "the Belt and Road Initiative" partner countries reached RMB 180_868 billion a year-on-year increase of **5**_**95** percent

contracts under execution with a work in progress contract value of RMB 500 990 billion a year-on-year increase of 8_56 percent

Harness Water Power to Embark on a New Journey

POWERCHINA leverages its expertise in water resources, deepens cooperation with countries along the "Belt and Road Initiative" route, and steadily advances the implementation and construction of hydropower projects. The Gesibo-Bobori Hydropower Station Project achieved grid-connected power generation ahead of schedule; the Uganda Karuma Hydropower Station, a flagship "the Belt and Road" project, was completed and handed over; the Ulogoe Hydropower Station, the first Chinese-built hydropower plant in Bosnia and Herzegovina, saw its first generating unit connected to the grid. The steady flow of hydropower as a renewable clean energy is converging into a powerful force that propels world development forward.

Case: "POWER" illuminates Ivory Coast! POWERCHINA Intelligence opens a bright future

The city glitters with lights, factories roar with machinery, and households glow as dusk falls. The largest hydropower station under construction in Côte d'Ivoire, the Gesibo Bobori Hydropower Station, built under EPC general contract by POWERCHINA, was commissioned and began generating electricity three years ahead of schedule, making the" Pearl of West Africa" shine. With a total installed capacity of 112.9 MW, a reservoir capacity of 82 million m³ and a designed annual generation of 554 GWh, it has effectively alleviated domestic power shortages in Côte d'Ivoire, given a strong boost to the West African Power Pool and played a significant role in promoting the country's economic and social development.

Bath in Light, Forge a New Future

Amid the global wave of green energy growth, POWERCHINA uses "light" as its pen to sketch magnificent green energy landscapes in countries along the "Belt and Road Initiative" route. The Central Myanmar Photovoltaic Project Group surpassed 100 million kWh of cumulative generation in 2024; the largest single photovoltaic project in Chile was commissioned and started generating electricity; contracts were signed for Southeast Asia's largest photovoltaic project, the 1050 MW Tala PV Project in the Philippines, and the 1 500 MW Al Jazban PV Project in Abu Dhabi, UAE. Each PV panel converts sunlight into green energy, continuously delivering power to every corner of the host country.

Case: The Central Myanmar Photovoltaic Project Group cumulative generation in 2024 surpassed 100 million kWh

The Central Myanmar Photovoltaic Project Group is POWERCHINA's first PV project cluster invested and operated in Southeast Asia. As of June 24, 2024, its cumulative generation in 2024 exceeded 100 million kWh, reaching 100.55 million kWh

The Central Myanmar Photovoltaic Project Group continues to uphold an efficient, lean operation philosophy, providing Myanmar with clean and stable power supply, effectively easing the country's electricity shortage, significantly promoting local economic development, and further deepening China-Myanmar economic and trade cooperation.



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The Central Myanmar Photovoltaic Project Group

Chase the wind, Pursue green, Write a new chapter

With its outstanding wind power core technologies and consistent commitment to high-quality delivery, POWERCHINA continually creates remarkable achievements in the wind power sector across the "Belt and Road Initiative" landscape. In Bosnia and Herzegovina on the Balkan Peninsula, the Ivovik Wind Power Project was successfully connected to the grid; at the Sherek Wind Farm in Kazakhstan, the annual generation target was achieved; in Bangladesh, the country's first large-scale wind farm, the Koba Wind Power Project, was officially handed over. POWERCHINA's wind power projects are like green seeds taking root, sprouting and flourishing in foreign lands.

Case: Ride the wind — Ivovik Wind Power Project grid-connected generation in Bosnia and Herzegovina

The First Snow Melts, the Morning Mist Disperses. On the high mountains of Ivovik in the Tenth Canton of Bosnia and Herzegovina, wind turbines dot the peaks, swaying gracefully in the breeze between heaven and earth. On October 1, 2024 Ivovik 84 MW Wind Power Project in Bosnia and Herzegovina, co-invested and built by POWERCHINA Resources and China General Technology Group International, was successfully connected to the grid, delivering continuous clean energy to thousands of households.

The project is a major national initiative of Bosnia and Herzegovina and the first energy project by a Chinese enterprise in the country. With an annual generation of approximately 260 million kWh and a reduction of 240,000 tonnes of CO 🛛 emissions, it is currently the largest wind farm in Bosnia and Herzegovina in both single-unit and total installed capacity. It effectively supports the country's energy-structure transformation and deepens the China-Europe clean-energy partnership.

Željka Cvijanović, rotating Chair of the Bosnia and Herzegovina Presidency, noted in a CCTV High-end Interview that the Ivovik Wind Farm and other China-Bosnia cooperation projects have tightened the bonds between the two countries. She expressed pride in the joint implementation of these projects.



Bosnia and Herzegovina Ivovik 84 MW Wind Power Project

Unimpeded Roads, Expansive Prospects

POWERCHINA has laid broad highways to prosperity and development in countries along the "Belt and Road Initiative" route, turning natural barriers into open passages. In Georgia the F0 Highway project achieved full breakthrough of all five tunnels, in Armenia, the LG27 Highway project was opened to full traffic, and in Tanzania, the Iringa Urban Ring Road project was signed. These roads closely connect different regions, promote trade and cultural exchange, drive local industry growth and create numerous jobs.

Case: Roads Unite Hearts and Build Shared Prosperity

Roads lead to riches. During the 2024 National Day holiday the Upper Mladenovac Bypass in Serbia, built by POWERCHINA, was successfully opened to traffic. Serbian President Aleksandar Vučić expressed high praise and sincere appreciation.

The Upper Mladenovac Bypass Project, located in Upper Mladenovac City in central Serbia, spans 9.4 kilometres. Its completion not only greatly improved local transportation but also significantly stimulated economic development and increased the local employment. This road is not only Serbia's path to prosperity but also a bond connecting the peoples of China and Serbia, laying a shared road of prosperity and friendship.



Upper Mladenovac Bypass Project, Serbia

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S1.2 Soft Connectivity through Rules and Standards

POWERCHINA is committed to applying international rules in construction, operation and procurement, actively integrating into the global standards system. We participate in drafting and revising international standards for energy, power, transport and waterconservancy infrastructure, have developed or translated 1483 standards, produced 135 comparative research reports and applied Chinese standards in over 130 overseas projects, significantly enhancing China's influence in international and regional standardization.

Honors · 2024

The company's subsidiary, POWERCHINA International Group, was the first among Chinese international contractors to release an ESG report in accordance with international standards.

Case: A milestone achieved in the "Land of a Thousand Islands"! Indonesia's "Three Gorges Project" officially enters commercial operation

In the beautiful "Land of a Thousand Islands" of Indonesia, the Jatigede Hydropower Station, built under EPC general contract by POWERCHINA, officially entered commercial operation. The dam and power station combine power generation, irrigation, flood control, water supply and tourism functions. They can protect 750 km² downstream from a once-in-a-century flood and provide stable irrigation water to 109,000 hectares of farmland, greatly improving local livelihoods.

The Jatigede Dam is an engineering feat built with Chinese technology, Chinese capital, Chinese equipment and a Chinese design. The project began in the 1960s and 70s and underwent feasibility studies by French, Australian and other firms without realization. Over 50 years later, this national project long awaited by the Indonesian people was finally brought to fruition by Chinese expertise.



Jatigede Dam

S1.3 Connectivity through Exchange and Integration

POWERCHINA actively embraces the vision of "building a community with a shared future for mankind." We prioritize overseas responsibility practices and deeply engage with local societies by driving local employment, improving living conditions and supporting public-welfare initiatives. We build bridges of friendship with people of all countries to foster mutual bonds and jointly create harmonious communities.



In 2024 severe flooding, heavy rainfall and mudslides struck many parts of Thailand, causing prolonged disaster and seriously affecting tens of thousands of households. The POWERCHINA Thailand Representative Office organized member companies and staff to donate a total of THB 209 500 to flood-affected areas in Thailand.



The Pljevlja Power Plant Environmental Retrofit Project team in Montenegro fully respected local laws, regulations and customs during construction, working hand in hand with local staff. At work we provided technical training for Chinese and Montenegrin young employees, showcased Chinese construction equipment and shared Chinese corporate values and inspired students' interest in engineering and construction. In life we hosted birthday celebrations for local staff, fostering closer personal bonds and deepening friendship between Chinese and Montenegrin employees.



Scan the QR code to watch our the "Belt and Road Initiative" story — at the other end of the globe

As a member of the CSR Alliance of Chinese Enterprises in Africa, POWERCHINA responded to the Alliance's "100 Enterprises, 1,000 Villages" campaign by launching a photovoltaic green-energy donation initiative in Mauritania, the regional headquarters for Central and West Africa. We donated 600 solar lighting kits across multiple locations in the Nouakchott Region and the city of Ayoun al-Atrous, making full use of abundant local solar resources to benefit residents. The case was reported in the International Edition of People's Daily in 2024.



The Vava Dam Project in the Philippines is large in scale and involves multiple specialties, requiring substantial labor. During 2024 the project directly provided over 50 local jobs and indirectly supported more than 1,000 related positions, greatly easing local employment challenges, increasing residents' incomes and cultivating a group of technical professionals, achieving a win-win between project delivery and local socio-economic development.


S2 Partner for Shared Success

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POWERCHINA always adheres to the principles of legality and compliance, fairness and integrity, consultation and mutual benefit, and complementary strengths. We regard strategic cooperation as a key driver for serving national strategies, driving industry transformation and strengthening industrial chains. The company actively engages in comprehensive, in-depth strategic cooperation with governments, universities and enterprises to promote resource sharing, strengthen supply-chain development and collaborate with partners for High-quality development.

S2.1 Strengthen Cooperation and Exchange

Government-enterprise Cooperation

The company is dedicated to building strong government-enterprise relations. We maintain ongoing exchanges with governments at all levels in the Xizang Autonomous Region, Guangdong Province and institutions such as the China Meteorological Administration and Shanghai Stock Exchange, with a focus on business development, deepen strategic cooperation in water resources and environment, rail transit and urban development quality improvement.



Ding Yanzhang, Party Secretary and Chairman of the company, held talks with Chen Zhenlin, Party Committee Secretary and Director of the China Meteorological Administration



Ding Yanzhang, Party Secretary and Chairman of the company, held discussions with Ms. Shi Xiaolin, Deputy Secretary of the CPC Sichuan Provincial Committee and Governor of Sichuan Province

Enterprise-enterprise Cooperation

The company actively conducts comprehensive, multi-level and broad-based strategic cooperation with industry partners such as China Datang and China Huadian, exploring more efficient, pragmatic and innovative cooperation models to jointly contribute to national energy security and promote market synergy and win-win development.



Ding Yanzhang, Party Secretary and Chairman of the company, held talks with Zou Lei, Party Committee Secretary and Chairman of China Datang Corporation



Ding Yanzhang, Party Secretary and Chairman of the company, held talks with Jiang Yi, Party Committee Secretary and Chairman of China Huadian Corporation

College-enterprise Cooperation

The company and partner universities and research institutes actively advance integration of industry, academia and research, further intensify scientific research and talent development in clean energy, green building, watershed management and ecological protection, achieving complementary strengths, shared value and win-win development.



Ding Yanzhang, Party Secretary and Chairman of the company, held talks with He Weijun, Party Committee Secretary of China Three Gorges University, and Huang Yan, President of Three Gorges University

Global Cooperation

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Adhering to the concept of "openness, cooperation and win-win", POWERCHINA engages in close cooperation and exchange with leading enterprises worldwide, actively participates in international industrial capacity cooperation, promotes global economic development and contributes to building a community with a shared future for mankind.

USD **3.2** million

At the 7th CIIE POWERCHINA set a record high in contracted value





Signed a cooperation agreement with Siemens Energy

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Signed a framework agreement on industry-academia-research cooperation with Kazakhstan National University



Signed a cooperation agreement with Metso



Signed a cooperation agreement with Hitachi Energy

S2.2 **Promote Industry** Development **Together**

Openness and cooperation are vital pathways for the company's innovation and development. POWERCHINA pays close attention to high-quality industrial development, fully leveraging its influence and appeal in the value and industrial chains to continuously strengthen cooperation and exchanges with industry organizations and jointly promote healthy and sustainable industry development.



POWERCHINA hosted the New Energy Storage Development Conference for the Power Industry

Ren Wangbin, Deputy Party Secretary and General Manager, attended the 2nd Energy Cooperation Project Promotion Conference under the China-Africa Energy Partnership Framework to exchange experiences on renewable-energy policies, technologies and management

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S2.3 **Build a Chain of Responsibility**

Strengthen Supply-chain Management

POWERCHINA adheres to the principle of mutual benefit and win-win cooperation, complies with laws and regulations, continuously improves the supply-chain management system and maintains stable cooperation with high-standard suppliers to jointly promote sustainable industry and social development.

Revised the company's Measures for Supply-Chain Management and Measures for Supply-Chain Compliance and Risk Management.

Established a compliance and risk management system covering the entire supply chain, clarifying responsibilities and processes at each stage.

Conducted risk mapping across the entire supply chain, established a risk-information database and regularly updated the risk register.

Carry out supervision and inspection of critical, weak and high-risk points in the supply chain to ensure compliance with management standards. Conduct special inspections of each unit's supply-chain management work from time to time. Rectify any issues found in a timely manner, and hold units or individuals accountable in accordance with laws and regulations if their failure to discharge duties causes losses.



Establish strategic partnerships with leading domestic and international enterprises and research institutions to form a supply-chain alliance. Enhance overall supply-chain competitiveness through shared resources, technologies and market information.

supply-chain agility and efficiency.

Implement tiered management of suppliers based on their sustainability performance. Penalize and require corrective action from suppliers that breach environmental regulations or social-responsibility standards, and restrict those with serious violations from company procurement activities.

Communicate national and international environmental policies, regulations and standards to suppliers online or offline to help them understand and ensure compliance.

Prioritize low-carbon, energy-efficient and recyclable products and equipment in procurement, encouraging suppliers to continuously improve equipment quality and performance, extend product lifespans and reduce resource consumption.

Responsible Procurement 0-

The company continuously strengthens regulation of procurement practices. In tender and bidding management it strictly adheres to principles of openness, fairness and impartiality, enforces anti-monopoly and anti-unfair-competition policies, ensures transparency and standardization in the tender process and maintains fair market competition. Suppliers found engaging in commercial bribery, fraud or bid rigging will be notified, required to take corrective action and subject to penalties such as warnings, restrictions or blacklisting.

🖬 Data Reading • 2024



Leverage big data, Internet of Things and artificial intelligence to optimize supply-chain workflows and achieve end-to-end digital management from procurement through production to logistics. The company can monitor each stage of supply-chain in real time, respond swiftly to market changes and improve



S3 Ensure Safe Production

Safety is the prerequisite for development, and development is the guarantee of safety. POWERCHINA has launched a three-year campaign for fundamental improvement of safe production, targeting weak links and frontline sites, continuously implementing safety responsibilities, improving the Management-Control system, conducting comprehensive risk and hazard inspections and rectifications, and resolutely preventing major safety incidents. No major or superior safety accidents or disasters occurred during the reporting period.

Honors · 2024

The Nam Ou River Project in Laos was honored as a "2024 National Demonstration Proiect for Power-Safety Culture Construction", which is the only overseas project to receive this recognition

S3.1 Governance

In terms of organizational system, the company has established a Safety Production Committee, under which an office is responsible for appointing a Safety Director. The company has also set up an independent functional department for safety supervision and management, staffed with full-time safety managers holding either a Registered Safety Engineer Certificate or a Safety Production Assessment Certificate issued by the competent industry authority.

In accordance with national laws, industry standards, and regulations issued by relevant ministries and commissions, and taking into consideration the core business activities and risk characteristics of company, the company has formulated 16 occupational health and safety management systems, including the Safety Production Management Regulations, Safety Production Responsibility System, Safety Production Assessment and Management Measures, Safety Incident Management Measures, Management Measures for the "Three Letters and Two Notices" on Safety Production, Safety Director Management Measures, Safety Training Management Measures, Hidden Safety Hazards Investigation and Governance Management Measures, Safety Risk Control Management Measures, Occupational Health Management Measures, Self-Assessment Measures for Safety Production Standardization, Construction Measures for Safety Production Standardization, Safety Production Expense Management Measures, Subcontractor Safety Management Measures for Construction Projects, Geological Disaster Prevention and Control Management Measures, and Emergency Management Measures for Production Safety Accidents and Natural Disasters. In addition, the company has formulated four emergency response plans, issued ten mandatory regulations, developed two sets of guiding opinions, and compiled nine standardization evaluation criteria, two management procedures, one emergency response capability evaluation standard, and one practical guide, thus establishing a relatively complete occupational health and safety management system and standard framework. At the same time, the company promptly revises and improves the relevant occupational health and safety management systems according to latest policy requirements and operational realities of the company.

The 600 MW Monsoon Mountainous Wind Power Project in Laos received the ISA International Safety Award

S3.2 Strategy

Ensure Accountability

The company introduced rigid standards such as the Safe Production "Three Concessions" Principle and "Seven Red Lines" for project management, organized specialized safety education, conducted special interviews and accountability notices for responsible subsidiary leaders, and carried out warning-education campaigns. The company implemented the requirements of State Council Work Safety Commission's, "more notices, frequent remind letters and more talks", establishing a Safe Production "Three Letters and Two Notices" mechanism to drive effective implementation.



Held a specialized video conference on safe production

Enhance Safety Training

We organized three Safety-Production Training Courses in 2024, including leadership training, safety-management personnel training and safety-assessment-certificate (renewal) training, effectively enhancing safety awareness and capabilities of key positions at all levels. We carried out "Safety Production Month" and "Fire Safety Month" activities, hosted over 2 200 online guizzes on safety regulations with more than 54 900 participants, and held over 2 600 safety pledges and initiatives with over 82 000 participants, creating a strong atmosphere of safety production to ensure that the concept of safety production is in the mind and heart, and truly implemented in action.

Held over 21000

Data Reading · 2024

Coverage rate of Safety-

Production Training

100%

"Safety Production Forum" and other safety-themed events with more than

558000 attendees



POWERCHINA Northwest Engineering Corporation Safety Officer Skill Competition

Implement "Tech-Driven Safety" Strategy

The development of science and technology is the greatest enabler of inherent safety level. The company vigorously implements the "Tech-Driven Safety" strategy by conducting safety-technology research, promoting achievements, widely applying smart solutions, replacing human labor with machinery, reducing labor through automation and pursuing unmanned intelligence, and innovating technologies to improve inherent safety level. We have iteratively upgraded the HSE management system, continuously advanced research on safety technology topics and promoted achievements, winning 2 first prizes, 6 second prizes and 4 third prizes from the China Association of Work Safety for Safety-Technology Progress, steadily enhancing our safety-technology supporting capabilities.

Ensure Data Security

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The company places great emphasis on data security and privacy protection, continuously updates information-security policies and issues the documents *Measures for Data Security and Personal Information Protection, the User Agreement and Privacy Policy for the Cloud Identity and Single-Sign-On System, and Company Measures for Data Security and Personal Information Protection,* establishing a complete institutional system. Through the deployment of internal instant messaging systems, the implementation of data security technology safeguards, and the organization of internal and external security teams to address data security vulnerabilities, the Company ensures the security of information assets and business operations.

S3.3 Impact, Risk & Opportunity Management

Risk of Potential Hazards in Projects

POWERCHINA has made strong efforts to address weaknesses in working safety by launching targeted campaigns to prevent collapses, high falling, and to inspect and rectify concrete tower wind power projects. During critical periods such as the National Day holiday, the Company conducted cross-regional inspections of key projects in various provinces and cities, adopting the method of unannounced and non-announced visits. The results of these inspections were compiled and reported daily, with follow-up supervision of corrective actions. A reward mechanism for internal reporting of potential hazards was established to facilitate timely remediation through the reporting platform. Throughout the year, various levels of the Company identified and rectification measures. In total, the headquarters of the Company organized nine leadership supervision teams, twenty-one inspection and evaluation teams, and seven professional inspection teams to inspect and assess 174 projects under construction. These efforts led to the identification and rectification of 3,631 hazards. More than 680,000 potential risks were identified and addressed by affiliated units at all levels.

Our Safety Philosophy







Party Secretary and Chairman of Powerchina Corporation Ding Yanzhang conducted on-site safety supervision of projects

Emergency Response Capacity

In the course of global operations, POWERCHINA may encounter sudden risks such as natural disasters, safety accidents, and public health emergencies. To enhance emergency management capacity, POWERCHINA established an emergency command agency led by the Party Secretary and Chairman, with the Deputy Party Secretary, General Manager, and Deputy General Manager in charge of safety as deputy leaders, and other executives, senior managers, deputy chief engineers, and heads of departments as members to provide organizational support. The Company revised and issued four emergency response plans, including the Comprehensive Emergency Response Plan for Production Safety Accidents and Natural Disasters (2024 Edition) to further standardize emergency management procedures. By leveraging its professional strengths and expert resources, the Company actively participated in the construction of the State-owned Assets Supervision and Administration Commission's integrated emergency rescue platform for state-owned enterprises and provided timely, scientific, and accurate analysis of flood conditions to the national emergency office. In 2024, POWERCHINA participated for the first time in a national emergency drill — the "Emergency Mission 2024" joint rescue exercise — to strengthen its overall capacity for handling emergencies.



Conducting Emergency Drills

S3.4 Metrics & Targets

Indicator name

Total investment in safet production

Training coverage rate of safety production

Number of major production safety accidents

Emergency drills

	Metrics & Units	2022	2023	2024
ty	RMB ten thousand	944,965.57	963,923.12	1,077,856.49
of	%	100	100	100
	/	0	0	0
	Times	12,408	15,830	17,412

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S4 Care for Employee Development

Employees are the cornerstone of the Company's sustainable prosperity. POWERCHINA fully respects and protects employees' legitimate rights and interests, optimizes talent development mechanisms, promotes work-life balance, and continuously enhances employees' sense of fulfillment in the workplace.

S4.1 Governance

The Public Affairs Department and the Organization and Human Resources Department are responsible for the overall management of affairs related to employee rights protection and career development. Using inspection and rectification as starting points, the Company has significantly improved the scientific, standardized, and precise management of the selection, training, appointment, and evaluation of talents. Effective and thorough control measures have been implemented in recruitment, labor management, and remuneration distribution. The Company issued the Guidelines on the Construction of Career Development Pathways for Employees and the Occupational Health Management Measures (2024 Edition) and established a comprehensive remuneration management system to protect the legitimate rights and interests of every employee. Priority is given to improving employee health, safety, and well-being. The Company advocates for values of diversity, inclusion, and equality, and has built a comprehensive talent development system to drive innovation and long-term growth together with employees.

S4.2 Strategy

Protect Employees' Rights and Interests

POWERCHINA strictly complies with the Labour Law of the People's Republic of China and the Labour Contract Law of the People's Republic of China, resolutely protects the legitimate rights and interests of employees, opposes and firmly addresses workplace discrimination, and promotes democratic management by facilitating channels for employees to express concerns and provide feedback, thereby fostering an inclusive, open, and equitable working environment.





The Company has established a comprehensive remuneration management system to ensure the timely and full payment of salaries. A sound benefits management system is in place to provide employees with legally compliant welfare services such as regular medical check-ups and staff cafeterias.

The Company has developed a democratic management system based on employee congresses, given full play to the role of labor unions, improved the mechanisms for consultation and coordination, and enhanced the legal governance of labor relations. Complaint procedures have been established to ensure proper handling of employee appeals, including mechanisms for tracking and feedback.

Data Reading • 2024

Labor contract signing rate employee participation rate in labor union



Onboarding and Enrichment Activities for University Graduates:

Empower Employees

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POWERCHINA adheres to the strategy of strengthening the enterprise with talents and continuously promotes the high-quality development of talent teams. The "Hundreds, Thousands, and Tens of Thousands" talent training initiative continues to advance, along with the development of a comprehensive management talent system. The Company also enhances the industrial workforce and accelerates the aggregation of talent to support High-quality development. Steady progress has been made in building a capable and refined leadership team within subsidiaries, with more clearly defined responsibilities. The evaluation and assessment of cadres have been further optimized, and for the first time, annual on-site evaluations were conducted for all subsidiary leadership teams and external directors, further stimulating vitality and motivation among cadres and talents.

Talent Recruitment



sessions Chief Accountant and other headquarters roles

Cultivation of Talents



standardized, and precise talent management improve the talent echelon

through competition

Career Development



- aligned with the Company's strategic and operational needs
- formation





(o) In alignment with international employment needs, the Company organized overseas recruitment

(o) The competitiveness of talent selection was enhanced through open recruitment for positions such as

() The market-oriented employment reform continued to deepen, while improving recruitment quality

Or a construction of the second se

(o) The Company implemented the order-based training program for skilled talent and continued to

National and institutional vocational skills competitions were held to promote learning and training

(o) A post-ranking system was established in line with market principles and talent development rules and

The Company issued implementation plans for the development of scientific and technological talent, project managers, management professionals, and team leaders to build a "flying geese" talent



A total of K individuals were honored under ministerial or provincial-level science and technology talent programs, including **7** at the national level named "Model Workers of State-owned and Enterprise'

The Company received the "Talent Development Award" from the Silk Road International Talent Alliance

Implement Caring for Employees 0-

Focus on Employee Health

The Company places great importance on the occupational health and safety of employees. In strict compliance with the Labour Law of the People's Republic of China and the Law on the Prevention and Control of Occupational Diseases of the People's Republic of China, POWERCHINA continuously allocates resources and adopts measures to protect employees' physical and mental well-being. Through the establishment of an employee health management system, organizing health check-ups, providing psychological counseling services, and implementing occupational disease prevention initiatives, the Company is committed to creating a safe, healthy, and comfortable working environment. In 2024, there were 0 new cases of occupational diseases in POWERCHINA

Organize Leadership Training Courses



Participate in Industry Competitions



Occupational Disease Prevention Campaigns on Site

Enrich Employees' Life

POWERCHINA is committed to meeting employee needs by organizing a wide range of cultural and sports activities, continuously fulfilling employees' aspirations for a better life. Employee sports competitions were organized to showcase "the spirit" of POWERCHINA staff in the new era. Facilities such as "Employee Homes", small group lounges, and staff libraries were built to enrich the cultural life of employees. A total of 7,636 cultural and sports activities were held throughout the year.

Metrics & Targets

S4.4

Proportion of female ma (associate senior title)

Employees absorbed du reporting period

🔄 Our Activities • 2024



POWERCHINA International organized a basketball friendship match in Guinea



POWERCHINA Guiyang Engineering Corporation organized walking activity



POWERCHINA Guiyang Engineering Corporation organized events for International Women's Day

Care for Employee Well-being

The Company attaches great importance to employees' quality of life and adheres to the philosophy of "offering help before snow falls or rain comes." It strives to turn the "list of urgent concerns" into a "list of happiness." The Company provided care for retirees, including regular physical examinations, reimbursement services, and hospital visits for more than one hundred retired employees at headquarters. It explored the concept of "Overseas Employee Homes" to host diverse activities that enriched the cultural and sports life of staff working abroad and fostered an atmosphere of unity and progress. Efforts were also made to clear arrears and ensure timely wage distribution for migrant workers. The Company paid special attention to employees facing difficulties and those on the front line by providing targeted support and assistance to help them overcome challenges. In 2024, the Company allocated a total of 52.48 million yuan in support funds, assisting 25,000 individuals.

S4.3 Impact, Risk & Opportunity Management

The Company attaches great importance to risk management regarding employee responsibility. A risk assessment and management mechanism and process have been established to proactively identify potential risks related to employee management. As the Company continues to expand and transform its business, cross-disciplinary knowledge and skills are increasingly required from employees, especially those related to emerging technologies. If the Company fails to provide corresponding training, employees may find it difficult to keep pace with business development, which may hinder their career development. To address the above risks and opportunities, POWERCHINA actively implements management measures, encourages self-improvement among employees, and establishes internal platforms for learning and exchange. The Company organizes various professional training sessions and experience-sharing events to help employees enhance their overall capabilities and adapt to the evolving demands of business development. Personalized career development guidance is also provided to employees, helping them clarify their development direction based on their abilities and interests, and strengthen their capacity to overcome potential limitations in career development.

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The SinoHydro Foundation Engineering visited foreign employees on Eid al-Adha

	Units	2022	2023	2024
anagers	%	22.80	22.50	20.58
uring the	Persons	11,797	13,924	11,076



SINOHYDRO Bureau 5 organized a group wedding for employees.

S5 Enhance People's Livelihood and Well-being

Committed to People's Livelihood, Dedicated to Social Responsibility. POWERCHINA is deeply committed to corporate social responsibility, aligning with national initiatives while pursuing its own development. The company actively contributes to society by supporting rural revitalization, participating in charitable activities, engaging in emergency rescue and disaster relief efforts, and consistently promoting the well-being of the people. Through these actions, POWERCHINA shares the fruits of development with society and continues to deliver warmth and care to the community.

S5.1 **Advance Rural Revitalization**

The implementation of the rural revitalization strategy is a major decision made by the CPC Central Committee to promote the comprehensive construction of a modern socialist country. It serves as the overarching approach for work related to agriculture, rural areas, and farmers in the new era. As a key force in economic and social development, POWERCHINA promotes rural revitalization with high quality. Through various means, the Company enhances living and production conditions in rural areas, empowers rural communities with quality resources, and contributes to the construction of rural economic and cultural systems, vividly demonstrating the strength and warmth of POWERCHINA.

Our Honors · 2024

Rated "Good" for six consecutive years in the performance evaluation of targeted poverty alleviation by central SOEs

The case Fulfilling the Mission of a Central SOE to Support Revitalization with Devotion selected as a 2024 Best Practice by the China Association for Public Companies

The case Restoring Ecological Vitality to Jianhu Lake for Rural Revitalization selected as an Excellent Case by SASAC

Value of donated materials for rural revitalization

Persons benefiting from vocational skills training

RMB / 36/1 million

The case *Reviving Cultural Heritage for* Inheritance and Development selected as a 2024 Outstanding Practice by the China Association for Public Companies

Data Reading · 2024

Total voluntary investment in rural revitalization

RMB A million

Number of students supported in assisted regions







Assisted counties under targeted support to develop characteristic industries based on local conditions, extend industrial chains, enhance value chains, and stimulate endogenous economic drivers. Promoted the deepening and implementation of sustainable

Provided gratuitous assistance funds for projects in Minfeng County, Xinjiang, including the military-civilian integration initiative "Promoting Agriculture through Military Support and Mining," and the development of Minfeng's distinctive agricultural industry demonstration

Improved mechanisms for linking industrial assistance projects with local farmers, supported silage processing facility construction for the cloud-based livestock farm in Jianchuan County, and facilitated balanced development of the dairy, livestock, planting, and

Accelerated the cultivation of "one village, one product" Industrial project and "one township, one specialty" agricultural industrialization.

Completed training programs for grassroots rural officials, technical pioneers, and rural

Carried out capacity enhancement training for village doctors and industry pioneers in Minfeng County, improving healthcare services and professional capabilities at the grassroots

Supported the construction of the Shaxi Vanguard International Writers' Residency Center in Jianchuan County, promoting the creation of a "village sojourn + industry" model to drive the High-quality development of local cultural and tourism;

In line with General Secretary Xi Jinping's directives on "cultural enrichment in Xinjiang" and "letting cultural relics speak," supported the construction of the Niya Museum in Minfeng County, Xinjiang, promoting an ethnic economy integrating "culture + tourism + industry," and enhancing the High-quality development of county's culture and tourism.

Leveraged core technologies in comprehensive water environment treatment, responded to urgent local needs for sustainable development, and carried out environmental improvement initiatives to strengthen rural infrastructure and address shortcomings;

POWERCHINA continued advancing the water environment management project in the Jianhu Lake Basin of Jianchuan County, as well as the Beautiful Countryside Construction Projects in Ruokeya and Lancheng Townships of Minfeng County. These efforts contributed to the development of livable and business-friendly villages characterized by harmony and

POWERCHINA established paired cooperation with the Party branches of Shilong Village and Baila Village in Jianchuan County, Yunnan Province, and the Party branch of Lancheng Township in Minfeng County, Xinjiang Province. Through initiatives such as joint Party building, co-implementation of practical projects, and collaborative industrial development, the Company extended its Party-building experience and best practices to grassroots communities in its designated assistance counties. This approach facilitated mutual support and mutual progress between both sides.

Shared Prosperity through Rural Revitalization

> SINOHYDRO Bureau 4 visited Alateng Township in Akesai County to provide support and care to disadvantaged residents







POWERCHINA Guiyang Engineering Corporation provided on-site guidance and training in rice cultivation and paddy-field fish farming in Liuhe Village



POWERCHINA Chengdu Engineering Corporation Limited combined support for aspirations with paired Party-building cooperation POWERCHINA Hubei Engineering launched a livestream campaign themed "Youth Support with Love, Helping Farmers with Heart" to promote the sale of specialty agricultural products from Liangyu Village in Baokang County, a designated assistance village







POWERCHINA Sichuan Electric Power Engineering helped facilitate a bountiful harvest of Rui Xue apples in Qianxi Village

> POWERCHINA Central China Electric Power Engineering organized an educational support initiative titled "Fulfilling My Childhood Dreams, Growing Up with the Enterprise"

S5.2 Delivering Warmth through **Public Welfare**

Volunteerism Rooted in Compassion

Uplifting hope and enabling a better future. POWERCHINA remains committed to public welfare in areas such as environmental protection, educational assistance, and support for the disadvantaged. The Company actively engages in volunteer services, mobilizing significant human, material, and financial resources to give back to society and spread warmth through concrete actions. Guided by the "people-oriented development philosophy," POWERCHINA also actively integrates itself into the development and community building efforts of countries participating in the "Belt and Road Initiative". It promotes overseas public welfare programs to ensure development outcomes are shared by people around the world.

👬 Volunteerism · 2024

29,153

volunteers in the company

35,062

hours of volunteer activity







POWERCHINA Resources' Nam Ou River project in Laos held the "golden autumn" cultural and educational charity event.



POWERCHINA

International Group

drive in Cambodia

organized a donation

POWERCHINA International Group launched a beach cleanup campaign in Malaysia

Stand Strong on the Front Lines of Disaster Relief

In the face of natural disasters, POWERCHINA has always upheld the principle of putting people and life first. The Company follows Party directives, responds swiftly, and spares no effort or conditions in disaster prevention, mitigation, and relief. By leveraging its professional strengths, POWERCHINA assembled expert teams and specialized emergency rescue units to participate actively in flood control and emergency rescue operations across Guangdong, Guangxi, Jiangxi, and Hunan. The Company mobilized resources overnight to rush to disaster-affected areas such as Huludao, Hanyuan in Ya'an, and Tuanzhou Embankment in Huarong near Dongting Lake, doing everything possible to protect lives and property. These actions reinforced POWERCHINA's role as a main force in emergency response.



Education Volunteer

Activity" in local communities

SINOHYDRO Bureau 11 organized volunteer support for students during the National College Entrance Examination.

Mobilized more than **7,500** personnel and over **4,100** sets of equipment

Case: POWERCHINA under Typhoon "Yagi": **Our Responsibility and Commitment**

In September 2024, Typhoon "Yagi" struck Wenchang in Hainan and Xuwen in Guangdong, causing extensive damage. POWERCHINA responded promptly by establishing a dedicated disaster relief team that worked around the clock to repair damaged infrastructure and restore essential services. The Company utilized modern technologies such as drones to quickly assess disaster conditions, improve rescue efficiency, and ensure transparency by releasing timely updates through official platforms. These efforts received high praise from local governments and residents, significantly enhancing the Company's public image and brand recognition. POWERCHINA's actions demonstrated the responsibility and strength of a central state-owned enterprise. The response was selected as one of the "Outstanding Public Relations Cases of 2024," laying a solid foundation for sustainable development.



Post-Typhoon"Yagi" Reconstruction Survey Conducted by POWERCHINA Jiangxi Electric Power Engineering

Future Prospect

Setting Sail with Determination, Ushering in a New Chapter through Continued Endeavors. The year 2025 marks the conclusion of the 14th Five-Year Plan and the strategic planning stage of the 15th Five-Year Plan. POWERCHINA will continue to unite closely around the CPC Central Committee with Comrade Xi Jinping at its core, uphold the comprehensive leadership of the Party, and take deepening the company's strategic transformation and High-quality development as the main threads of its work. The Company will stay focused on the "two pathways," center around the "five values," prioritize the execution of the "six key tasks," strive to be a pioneer in the "three leading roles," and better leverage the "three core functions." Through these efforts, POWERCHINA will accelerate its progress toward becoming a world-class enterprise with global competitiveness. The Company will contribute to the comprehensive advancement of China's strength and national rejuvenation with tangible achievements in High-quality development, demonstrating new commitments and accomplishments in building POWERCHINA's chapter of Chinese path to modernization!

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Appendix

Key Performance Table

Classification	Indicator Name	Unit	2022	2023	2024
	Total Assets	RMB 100 Million	10,407.69	11,545.55	12,890.01
Operational	Total Operating Revenue	RMB 100 Million	5,726.13	6,098.44	6,345.52
Performance	Total Profits		192.47	208.76	195.31
	Net Profit	RMB 100 Million	156.84	171.46	158.26
	Technology R&D Investment	RMB 100 Million	208.11	232.30	242.68
	R&D Investment as a Percentage of Main Business Revenue	%	2.94	3.76	3.83
	Technology R&D Personnel	Person	21,862	22,356	22,895
	Annual Patent Applications	Item	6,591	9,099	10,608
	Annual Patent Licenses	Item	7,454	7,092	8,629
	Provincial/Ministerial-Level Construction Methods Adopted	Item	556	1,094	1,601
Technology	Provincial/Ministerial Science and Technology Awards	Item	434	412	433
Engineering and Management	National and Industry Standards Compiled	Item	157	142	134
	International Standards Participated	Item	9	17	5
	National-Level R&D Institutions	Pcs	7	7	7
	Provincial-Level R&D Institutions	Pcs	69	62	137
	Software Copyrights Obtained	Item	882	1,828	2,421
	First-time Acceptance Qualification Rate of Project Quality	%	99.79	99.69	99.80
	Customer Satisfaction Rate	%	95.03	94.11	95.5
	Economic Contracts Performance Rate	%	100	100	100
	Percentage of Employees Receiving Anti-Bribery and Anti- Corruption Training	%	3.67	22.59	22.94
	Number of Concluded Corruption Litigation Cases	Case	0	0	0
Compliance	Number of Directors Receiving Anti-Bribery and Anti- Corruption Training	Person	4	4	4
Management	Percentage of Directors Receiving Anti-Bribery and Anti- Corruption Training	%	50.00	57.14	44.44
	Number of Management Personnel Receiving Anti-Bribery and Anti-Corruption Training	Person	15	15	11
	Percentage of Management Personnel Receiving Anti- Bribery and Anti-Corruption Training	%	78.95	78.95	68.75
	Number of Employees Receiving Anti-Bribery and Anti- Corruption Training	Person	6,021	37,325	37,400

Classification	Indicator Name	Unit	2022	2023	2024
	Number of Suppliers	Pcs	69,057	85,974	103,414
	Number of Suppliers from Mainland China	Pcs	68,491	85,214	102,537
	Number of Suppliers from Hong Kong, Macao, Taiwan, and Overseas	Pcs	566	760	877
	Supplier Certification Rate	%	85.98	87.61	75.91
	Number of Penalized Suppliers (Blacklisted)	Pcs	85	220	8
Responsibility	Supplier Training Sessions Conducted	Time	3	5	5
Supply Chain	Supplier Training Participants	Person-time	600	1,126	1,350
	Supplier Training Hours	Hour	5	10	10
	Number of Suppliers Reviewed during the Reporting Period (Number of Declared Suppliers)	Pcs	30,103	39,991	38,919
	Number of Potential Suppliers Rejected due to Social Responsibility Non-Compliance	Pcs	0	0	0
	Number of Suppliers Whose Cooperation Has Been Terminated due to Social Responsibility Non- compliance	Pcs	0	0	0
	Responsible Purchasing Ratio	%	100	100	100
	Number of Countries with Management Institutions Worldwide	Pcs	111	116	116
Overseas Layout	Number of Management Institutions Worldwide	Pcs	372	402	424
	Number of Countries/ Regions Covered by Our business	Pcs	131	130	130
	Total Number of Employees	Ten thousand persons	16.41	16.52	16.39
	Number of Female Employees	Ten thousand persons	3.42	3.47	3.26
	Ethnic Minority Employees	Person	8,079	9,432	9,764
	Labor Contract Signing Rate	%	100	100	100
	Social Insurance Coverage Rate of Employees	%	100	100	100
Employees' Rights	Disabled Employees	Person	588	553	469
and Benefits	Employees Absorbed during the Reporting Period	Person	11,797	13,924	11,076
	Localization Rate of Overseas Employees	%	54.06	76.89	73.94
	Average Annual Paid Vacation Days per Employee	Day(s)	8.18	8.09	7
	Employee Turnover Rate	%	2.28	2.38	2.3
	Number of Induction Training Sessions for Newly Recruited University Graduates	Sessions	364	617	456
	Number of Induction Training Sessions for Newly Recruited University Graduates	Person-time	19,573	22,913	23,750

Employ and

Classification	Indicator Name	Unit	2022	2023	2024
	Total Investment in Safety Production	RMB ten thousand	944,965.57	963,923.12	1,077,856.49
	Training Coverage Rate of Safety Production	%	100	100	100
	Number of Major Production Safety Accidents	Pcs	0	0	0
Safety Management	Newly Diagnosed Cases of Occupational Diseases among Employees	Case	0	0	0
	Number of Employee Fatalities	Person	4	11	13
	Emergency Drills Conducted	Times	12,408	15,830	17,412
	Investment in Work-Related Injury Insurance	RMB 100 Million	1.85	2.02	2.00
	Total Donations	RMB ten thousand	3,049.56	1,671.41	1,899.46
	Total Free Investment for Rural Revitalization	RMB ten thousand	5,276.16	6,574.4	6,803.72
	Total Paid Investment for Rural Revitalization	RMB ten thousand	42,235.78	32,029.17	3,557.55
	In-Kind Donations for Rural Revitalization	RMB ten thousand	917.32	234.86	236.21
	Number of Seconded Cadres Selected	Person	68	74	68
	Number of Industrial Development Projects	Pcs	74	66	55
Harmonious	Number of Persons Benefiting from Vocational Skills Training	Person	12,120	7,753	3,909
Society	Financial Support for Students in Assisted Areas	RMB ten thousand	198.6433	125.76	180.38
	Number of Students Subsidized in Assisted Areas	Person	2,123	1,966	959
	Investment in Improving Education Resources in Assisted Areas	RMB ten thousand	509.96	1693.88	294.9
	Investment in Assisting Disabled People in Assisted Areas	RMB ten thousand	89.672	51.53	86.39
	Number of Disabled People Assisted in Assisted Areas	Person	444	392	233
	Number of Volunteers	Person	26,281	28,926	29,153
	Volunteering Hours	HH	28,472	32,375	35,062
	Total Investment in Environmental Protection	RMB 100 Million	9.87	10.06	11.33
Environmental	Energy Consumption per RMB 10,000 of Revenues (Comparable Price)	Tons of standard coal/ RMB 10, 000	0.07	0.06	0.06
Protection	New Projects EIA Pass Rate	%	100	100	100
	Emission Rate of Pollutants Meeting Standards	%	100	100	100

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Feedback

Dear readers,

Greetings! Thank you for reading this report. We welcome your feedback on POWERCHINA's Environmental, Social and Governance Report. Your valuable insights are highly appreciated. We will take your comments and suggestions seriously as an important basis for the continuous promotion of social responsibility management and practices, and we promise to protect your feedback from being accessed by third parties.

1.Do you think this report can reflect the great impact of POWERCHINA on economy, society and environment?

⊖ Yes	○ Average		() No				
2.Do you consider that the analysis of the stakeholders identified in this Report and their relationship with POWERCHINA is accurate and comprehensive?							
⊖ Yes	○ Average		() No				
3.Do you consider that the	information disclo	sed in this Report is o	complete, accurate and	d clear?			
() Yes	() Average		O No	() No			
4.Do you consider that the g	eneral framework,	content design and fo	ormat of this Report are	e easy to read?			
() Yes	() Average		() No				
5.Do you consider that the	information or issu	ues you are interested	d in can be easily found	d in this Report?			
() Yes	() Average		() No				
6.What is your overall impr	ession of this Repo	ort from all aspects?					
○ Very good) Good	○ Average	O Poor	○ Very poor			
7.What other information do you believe is of concern to you that is not disclosed in this Report?							
8.Do you have any comments or suggestions on this Report and on the future preparation of environmental, social and governance reports by the company?							
You may also contact us at:							
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