



**中国电建**  
POWERCHINA

# 2021

## ENVIRONMENTAL SOCIAL AND GOVERNANCE REPORT



**POWER CONSTRUCTION CORPORATION OF CHINA**



## About the Report

The report is the 10th *Social Responsibility Report* issued by Powerchina Limited (company referred to as POWERCHINA, Stock Code: 60166). According to the relevant guidance of the State-owned Assets Supervision and Administration Commission of the State Council, this issue is renamed *Environmental, Social and Governance (ESG) Report*, aiming to faithfully reflect POWERCHINA's concept, practices and performance in terms of sustainable development.

The report discloses all businesses of POWERCHINA, and also fully discloses the corresponding key performance indicators so that the stakeholders could fully understand the relevant information of the Company.

### ◎ Basis of Compilation

This report is based on *The Report on the Fulfillment of Social Responsibility by Listed Companies*, *The Shanghai Stock Exchange's Guidelines for Environmental Information Disclosure of Listed Companies and Guiding Opinions on the Fulfillment of Social Responsibility by Central Enterprises* issued by the State-owned Assets Supervision and Administration Commission of the State Council. Furthermore, it has referred to the Global Reporting Initiative (GRI)'s *Sustainability Reporting Guidelines (GRI 4.0, GRI-standards)*, *International Organization for Standardization (ISO)'s Social Responsibility Guide (ISO 26000)*, *the Guidelines on Corporate Social Responsibility Report for Chinese Enterprises (CASS-CSR4.0)* issued by the Corporate Social Responsibility Research Center of the Chinese Academy of Social Sciences, *United Nations Sustainable Development Goals (SDGs)* and other standards.

### ◎ Reporting Period

From January 1, 2021, to 31 December 2021, some content is extended as needed, which has exceeded this time range.

### ◎ Scope of the Report

Powerchina Limited and its wholly-owned, holding enterprises; some indicators include the relevant indicators of enterprises entrusted by the controlling shareholder Power Construction Corporation of China.

### ◎ Data Clarification

The financial data cited by this report mainly come from the audited financial report, other data come from the company's official documents and statistical reports.

### ◎ Term Description

In order to facilitate expression and reading, Powerchina Limited in the report is addressed as "POWERCHINA" or "Company" or "We" according to the specific situations.

### ◎ Confirmation and Approval

The report was reviewed, confirmed and approved by the company's board of directors in March 2022 to ensure that the report complies with the principle requirements as "Materiality" "Quantification" "Balance" and "Consistency".

### ◎ Access to the Report

This report is in Chinese and published to the stakeholders and the public in the form of PDF electronic documents. The PDF electronic documents can be downloaded from the website of the Shanghai Stock Exchange and the official website of POWERCHINA (<http://www.powerchina.cn>).

We sincerely thank you for your attention, and look forward to your feedback, suggestions and corrections, which could assist us in improving POWERCHINA's ESG control and disclosure. For that, we will be more than grateful.

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# A Thriving POWERCHINA

○ On June 28, 2021, the first batch of generating units of Baihetan Hydropower Station, another "national business card" for China's world-leading hydropower industry, was officially put into operation, in which POWERCHINA undertook all the design and 80% of the construction work.

## Company Overview

The controlling shareholder of Powerchina Limited is one of the Fortune Global 500 companies—Power Construction Corporation of China. The Company was formerly known as Sinohydro Limited which was established in Beijing by Sinohydro Construction Corporation of China and Hydrochina Corporation Limited on November 30, 2009. On October 18, 2011, the Company was listed on the Shanghai Stock Exchange. In January 2014, the Company name was changed from "Sinohydro Limited"

to "Powerchina Limited", and the stock abbreviation was changed from "SINOHYDRO" to "POWERCHINA".

In 2021, its parent company Power Construction Corporation of China, as the world's largest designer and contractor in the power sector, was ranked 107th among Fortune Global 500 companies, 1st among the ENR Top 150 Global Engineering Design Companies, and 5th among the ENR Top 250 Global Engineering Contractors.

## Scope of Business

POWERCHINA is mainly engaged in general contracting of domestic and international water conservancy and hydropower construction projects and related survey, design, construction, consulting, supervision, and other supporting services; the manufacturing, installation and trade of mechanical and electrical equipment and construction machinery; engineering design, construction, consulting and supervision of electric power, high-ways, railroads, ports and waterways, airports and housing construction, municipal utilities,

urban railways, clean energy, water resources and environment, mines, etc.; investment and financing business; electrical power production; import and export, etc. The Company is the largest water conservancy and hydro-power construction enterprise in the world with the leading technological level and the strongest brand influence in the industry.

## Governance Achievements

In 2021, the Company was awarded a series of capital market honors, including the "Top 100 Award" of the 23rd Golden Bull Award for Listed Companies, the "Best Listed Company" of the 11th Golden Bauhinia Award, the "Excellent ESG Practice Case of Listed Companies in Beijing" of the Beijing Association of Listed Companies, "the Listed Company with the most investment value" of the 2020 China Securities Journal Golden Bull Award, and the Best Board of Directors of the 17th

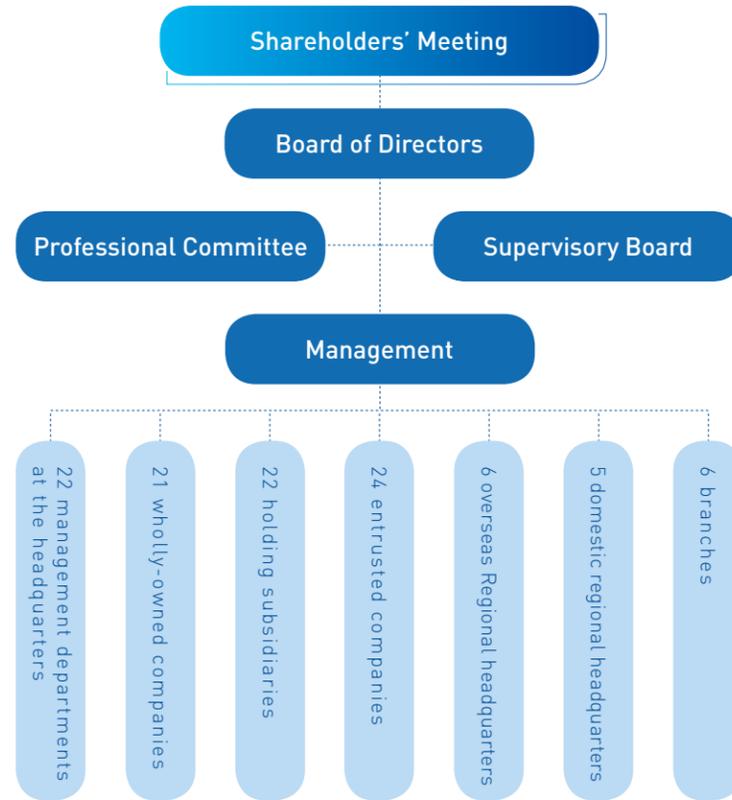
Golden Roundtable Award for Board of Directors of Listed Companies in China.

## Organizational Structure

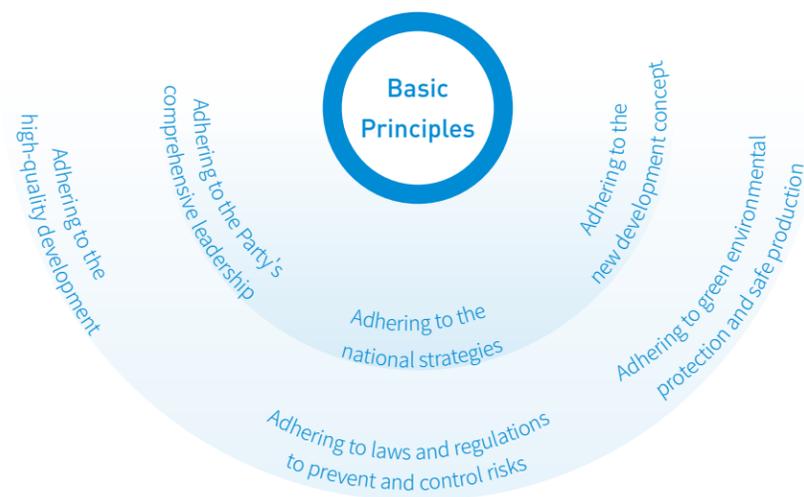
There are 43 second-level wholly-owned and holding subsidiaries, including 7 hydropower design companies, 18 hydropower engineering companies, 4 professional market platform companies, 9 investment and operation platform companies, 4 financial service platform companies, and 1 real estate company under POWERCHINA.

43

second-level wholly-owned, holding subsidiaries



## Developmental strategies



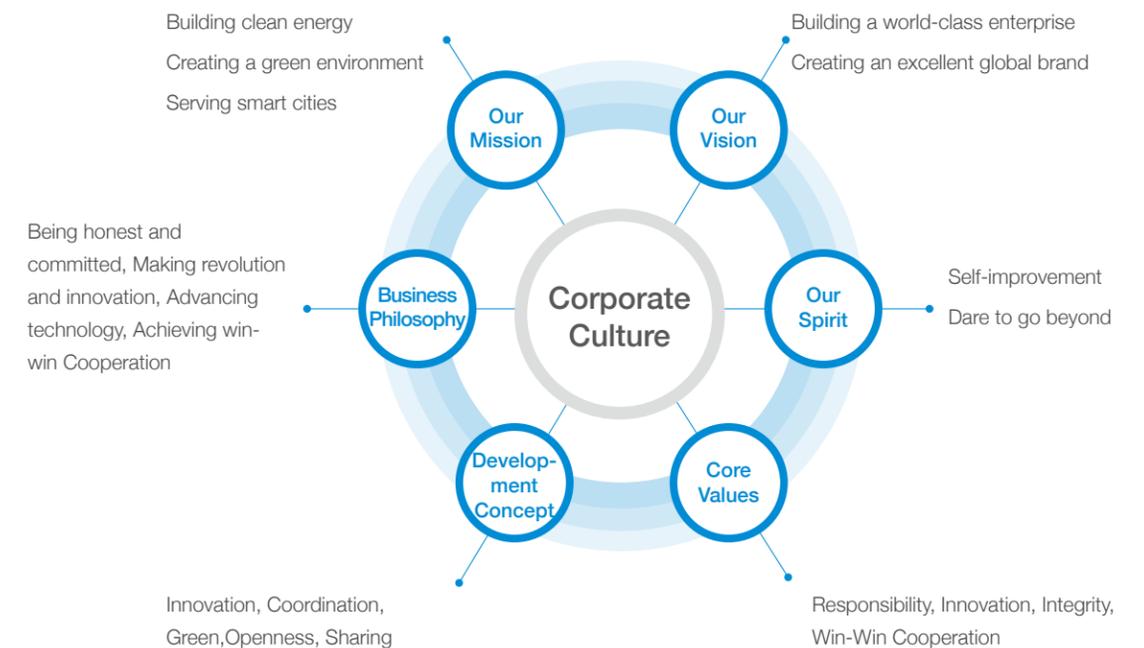
## Strategic Orientation

Aiming at becoming a world-class enterprise, coordinating both the domestic and the international market, highlighting the three core businesses of energy and power, water resources and environment, urban construction and infrastructure, integrating the three major links of "investment, construction and operation", strengthening capacity building on seven areas including overall innovation, market expansion, quality performance, lean management, resource integration, asset operation, risk management and control, etc. and systematically promoting eight strategic actions of Party building, technological innovation, deepening reform, management improvement, international development, talent-based enterprise, honest employment and digital transitions so as to better serve the national strategies, fully promote high-quality development and play a better role and make a greater contribution in the "14th Five-Year Plan" period.

## Overall Objectives

The overall objectives of the "14th Five-Year Plan"	Initially become a world-class enterprise with global competitiveness
<ul style="list-style-type: none"> <li>A world-class business system is basically formed</li> <li>A world-class management system is basically formed</li> <li>A world-class talent team is basically built</li> <li>The Party's leadership and construction are further strengthened</li> </ul>	<ul style="list-style-type: none"> <li>A world-class technology innovation system is basically formed</li> <li>A world-class globalized business layout is basically formed</li> <li>The three-year action task of state-owned enterprises is fully completed</li> </ul>

## Corporate Culture



# ESG Governance

## Board Statement

The ESG of POWERCHINA is comprehensively supervised by the Board of Directors. The board of directors participates in the deliberation and decision-making of major ESG issues of the Company and assumes overall responsibility for the ESG work. The relevant functional departments, branches, and subsidiaries of the Company are responsible for the specific implementation of ESG affairs. In addition, the

Board is responsible for formulating the Company's ESG governance strategy, evaluating and determining ESG risks and opportunities, regularly reviewing the progress of ESG work, approving disclosure information in ESG reports, and evaluating whether the Company's ESG risk management and internal control systems are applicable and effective .

## ESG Governance System

POWERCHINA learns from the prevailing standards and advanced practices of ESG management of global enterprises, fully considers the practical basis of the Company's operational management, continuously integrates the ESG

management concept into the enterprise strategy and operation management system in practice, and promotes the management of responsibility to achieve sustainable development.

- The board of directors decides on the ESG management structure, participates in and supervises ESG work throughout the process, and regularly reviews the progress of ESG;
- Establishing a work leadership group led by the Company's main leaders, responsible for the leadership, decision-making and overall deployment of the ESG work of the Company. The Brand and Social Responsibility Division of the Administration Department of the Company is responsible for the planning, coordination and daily management of ESG-related work. Thus, an ESG management organization system that is characterized by in-depth participation at all levels, horizontal coordination, and vertical integration has taken its form;
- Formulating and issuing strategic guidance documents and related management systems such as the *Concept, Strategy and Action Plan on Social Responsibility, Construction Plans on the Management System of Social Responsibility*, clarifying ESG planning goals in the "14th Five-Year Plan" of the Company, and continuing to improve the institutional basis for ESG management;
- Regularly organizing system-wide training on social responsibilities and for ESG business personnel to strengthen ESG capacity building, and continue to improve ESG management capabilities and performance.

## Communication of Stakeholders

In response to the differentiated needs of different stakeholders, POWERCHINA continuously improves communication mechanisms, expands communication forms, and strives to accurately, timely and comprehensively disclose the information concerned stakeholders. In 2021, the Company further revised *The Management System for Information Disclosure, The Internal Reporting System of Major Events and Inside Information Insider Registration and Filing System*, organized special training on securities affairs, and popularized the latest policies of market supervision, information disclosure systems for listed companies, etc. to relevant employees, and continued to increase the levels and qualities of information disclosure.

POWERCHINA has formulated the company's 2021 Investor Relations Work Plan, maintained good communication with various investors through multiple channels, participated

in 6 strategy meetings organized by domestic and foreign securities companies throughout the year and received 38 sessions of research by domestic and foreign investors as well as analysts. In addition, the Company maintains good interaction with investors through on-site and online performance promotion meetings, telephone conferences, investor collective reception day, etc., actively participates in social responsibility (ESG) related forums, and compiles and distributes quality social responsibility (ESG) reports year after year. On our official website, we set up columns of "Social Responsibility" and "Investors Relations", focusing on and actively speaking in the social responsibility (ESG) field, conveying the Company's value with information of high quality and showing a good market image. In August 2021, the Company has won the Class A evaluation of the Shanghai Stock Exchange's 2020 annual Information Disclosure Work.

Stakeholders	Demands of stakeholders	Communication mechanism	Our response
Government	Responding to the national strategy Law-abiding compliance operation Asset preservation and appreciation of assets Full tax payment according to the law Promoting the stable employment Combating climate change	Policy guidance Special meeting reports Information delivery Work objectives and assessment Strategic cooperation	Abiding by laws and regulations Implementing national policy Integrity management by the law Practicing business with integrity Developing clean energy Assuming social responsibility
Shareholders	Avoiding economic risks Keeping information communication	Regular or temporary reporting Shareholders' meeting Board of Directors Daily communication Official website of the Company	Keeping stable profit Maintaining shareholder rights Timely disclosure of information
Clients	Guaranteeing engineering quality Improving customer service Innovating engineering technology	Customer service hotline Satisfaction survey Official website of the Company Client visits	Implementing quality management Providing excellent service Strengthening technological innovation Protecting client privacy Leading collective growth
Partners	Complying with business ethics Practicing mutual benefit and win-win development	Regular communication Business communication and cooperation Industry forum and exhibition	Adhering to integrity and trustworthiness Mutual benefit and equal consultation Maintaining good cooperation
Staff	Improving benefits and welfare Protecting personal safety Supporting career development Realizing personal value Work-life balance	Staff congress Daily communication Various types of business training Staff recreational activities	Stabilizing salary and incentives Safeguarding employees' rights Carrying out democratic management Strengthening employees' training Enriching employees' life Continuing epidemic prevention and control
Community	Supporting community construction Supporting social public welfare	Community visits Care-taking and exchange Open Day Public welfare and charity Environmental protection	Participating in community activities Devoting efforts to Public welfare and charity Aiding to rescue and disaster relief Practicing green production Environmental protection and public welfare

# Identification of Substantive Topics

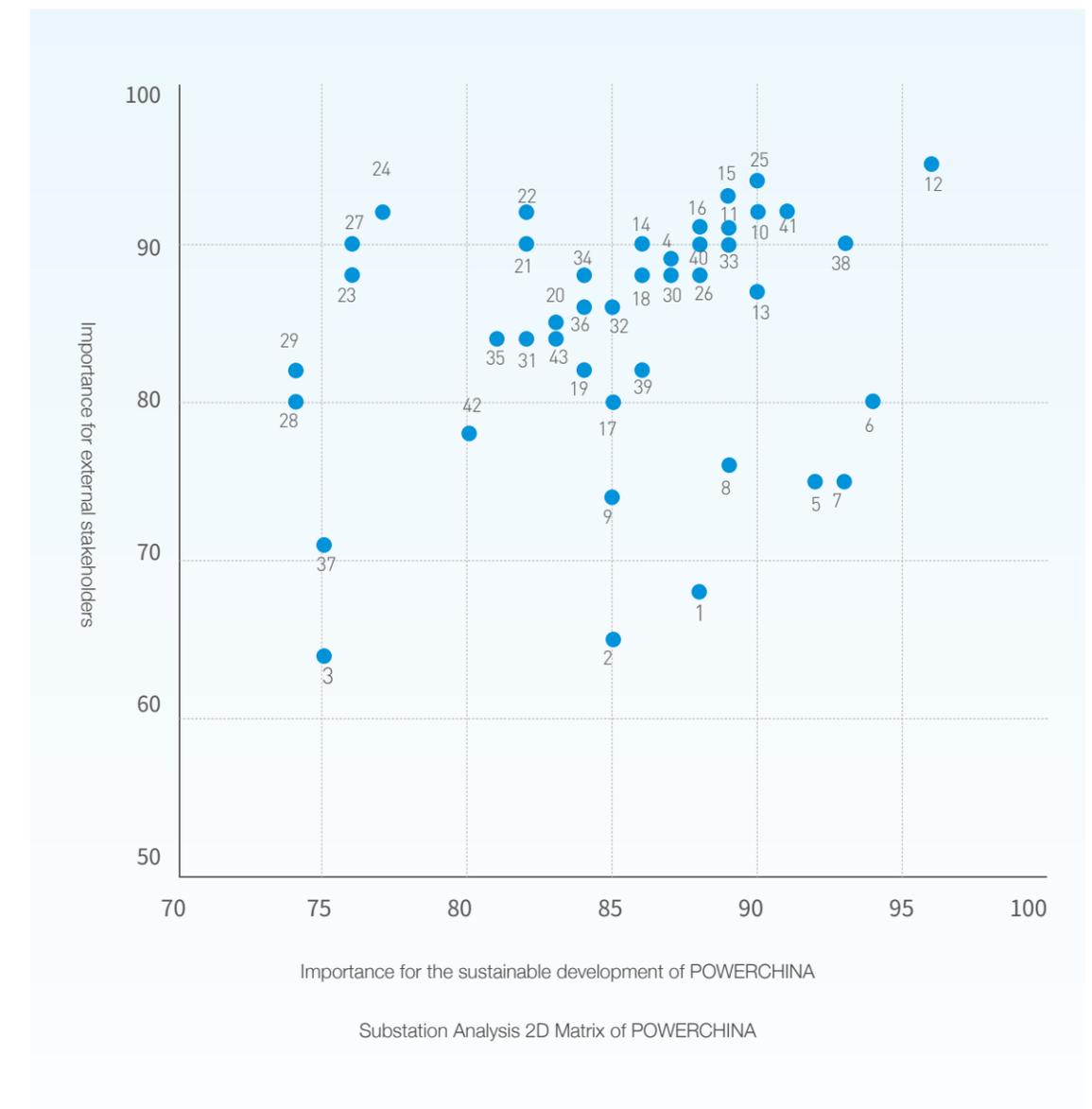
## Identification of Topics

POWERCHINA has actively carried out ESG substantive topic identification and research work to disclose according to the requirement of the regulatory authorities and the ESG rating standards both at home and abroad, accurately focusing on the policy orientation and social public opinion, continuously updating the database of key topics of ESG. Currently, there are 43 topics covering three major categories of environment, society and governance, effectively responding to stakeholders' ever-updating demands, leading POWERCHINA to create a sustainable win-win value.

Governance topics	Social topics	Environmental topics
1.Responsibility strategy	12.Guaranteeing engineering quality	38.Developing clean energy
2.Responsibility governance	13.Adhering to innovation	39.Saving energy resources
3.Social responsibility training	14.Protecting clients' privacy	40.Strengthening emissions management
4.stakeholders' communication	15.Providing excellent service	41.Combating climate change
5.Optimizing governance structure	16.Adhering to integrity operation	42.Environmental educational publicity
6.Serving national strategy	17.Practicing procurement liability	43.Participating in environmental public welfare
7.Strengthening the Party building	18.Standardizing supply chain management	
8.Risk management and internal control	19.Strengthening strategic cooperation	
9.Clean governance and anti-corruption	20.Driving industry development	
10.Standardizing information disclosure	21.Protecting intellectual property rights	
11.Investor relationship management	22.Employment compliance	
	23.Democratic management	
	24.Salary and welfare, health and safety	
	25.Health and safety	
	26.Training and development	
	27.Work-life balance	
	28.Localization procurement	
	29.Driving local employment	
	30.Cultivating local talents	
	31.Protecting local environment	
	32.Carrying out the charitable donation	
	33.Helping rural resolution	
	34.Supporting against epidemic	
	35.Aiding to rescue and disaster relief	
	36.Supporting community public welfare	
	37.Carrying out volunteer services	

## Analysis of Topics

POWERCHINA carries out the investigation of internal and external stakeholders, based on the Company's context, analyzing and sorting -from dimensions of "the importance to the sustainable development of POWERCHINA" and "importance to external stakeholders" - the importance of topics, in order to determine the key topics of the ESG reported this year. This report discloses these topics to achieve good communication effects with the stakeholders.



# Governance for A More Permanent Operation

POWERCHINA has committed to a global operation, quality-efficient operation, with sustainable development goals, continuously optimizing corporate governance, improving the corporate governance structure with clear responsibilities and rights as well as regulated management. We constantly strengthen integrity risk prevention and control, implementing clean governance and anti-corruption. Focusing on energy power, water resources and environments as well as urban construction and infrastructure, we aim to make the core business stronger and better. POWERCHINA has committed to providing products and services of high quality to ensure client rights and strengthening supplier management and supplychain building. With commodity supply and the foundation of development being improved continuously, we strive to create a greater value for shareholders.

Improving the company's governance 14

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Making the main business stronger and better 18

Guaranteeing customers' rights 22

High-Quality Supply Chain 24

○ The full image of Lianghekou Hydropower Station



## Improving the company's governance

Benchmarking against other world-class enterprises, POWERCHINA continuously advances the modernization of its governance system and capabilities. The Party committee supports the board and managers, and the board and managers are responsible for the implementation of decisions made by the Party committee. The Supervisory Board effectively oversees the Company and ensures that the company is operated in a regulated way, and both directors and senior managers are fulfilling their duty diligently. The bodies of governance at all levels are characterized by statutory and transparent rights and responsibilities, coordinated operation, and effective checks and balances, which provide powerful assistance to the Company's sustainable development. In 2021, two wholly-owned enterprises, POWERCHINA RESOURCES LIMITED and the SINOHYDRO Bureau 11 Co., Ltd were determined by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) as management benchmarks for other key state-owned enterprises.

### Strengthening the Construction of Governance System

- The "Two consistencies" are resolutely and earnestly implemented at POWERCHINA. We have carefully practiced Opinions on Central Enterprises to Strengthen the Party's leadership in the improvement of Corporate Governance, revised the implementation of the Company's decision-making systems of Three Important and One Major Decision Items, and prepared a List of Decision and Procedures on Three Important and One Major Decision Items, which will strengthen the Party's leadership and improve the organic unity of corporate governance to ensure that the Party's leadership is legally enforceable in the system, guaranteed in the procedure, and implemented in practice, and the Party committee's leading role in "setting the direction, managing the overall objective, and promoting implementation" is fully utilized.
- POWERCHINA continues to strengthen the board of directors by building its subsidiaries and promoting a regulated, scientific, effective operation of the board. We have continuously enhanced the competence of the board and fully encourage it to play a big role in setting strategies, making decisions, and fending off risks as well. In 2021, 50 second-tier subsidiaries that must have boards have established their board of directors, and the number of managers who are under the tenure system and contractual management accounted for 93% of its kind. The qualified 17 wholly-owned subsidiaries have all established their board of directors where external directors dominate, and 233 third-tier subsidiaries and below have established boards, realizing a coverage of 84%. In addition, we have scientifically decided on the boundaries of rights and responsibilities of each governance entity, sorted out 69 major policy decision items in 10 categories of Party building, management, strategy, reform, etc., and clarified the decision-making entity's role and operating mechanism in this regard to effectively promote the corporate governance in a standardized, procedural and scientific way.

Understanding numbers for the Year 2021

15

board meetings were convened

63

proposals were reviewed by the board



○ POWERCHINA 2021 Work Conference

## Strengthening the Enterprises with Legal Representatives

In 2021, the Company has further strengthened the management of hierarchical tiers and legal entities, and continued to reduce the current number. As of the end of December 2021, 270 legal entities were reduced, among which 30 legal entities were accomplished in 2021, with cumulative recovered funds reaching 11.4 billion RMB, saving managerial costs of 320 million RMB in total. The Company's organizational structure is further streamlined, and the control efficiency is significantly improved.

At the end of December 2021



### Combating Illegal Affiliates

POWERCHINA has established a Comprehensive Leading Group against "illegal affiliates", formed an inspection group and the guarantor group to inspect the enterprises at all levels, and promoted comprehensive work with strong execution and solid work style.



○ Seminar for the construction of the board of POWERCHINA

# Integrity Risk Control

POWERCHINA continues to make systematic efforts to address awareness, ability and resolve to resist corruption and thus form integrated, coordinated measures. We have made unanimous efforts to punish and deter, restrained officials with systems, raised their awareness, promoted the normalization of supervision more specifically, and actively cultivated a clean and positive environment of development. At the same time, we must fully grasp the work prevention and control of the epidemic, promote the construction of a risk prevention and control system, strengthen the construction of compliance management and the "Legal Framework of POWERCHINA", and effectively prevent major business risks, safeguarding the Company to achieve high-quality development.

## Anti-corruption

### Upholding the Redline

POWERCHINA has always maintained a high pressure on anti-corruption, adhering to the main principle of severeness. By strictly investigating the "few key" issues, we have achieved a result that incremental cases are curbed and case-in-stock is reduced. In 2021, the POWERCHINA Discipline Inspection Committee has dealt with 50 cases with letters and calls, and 164 cases were verified preliminarily, and 17 were filed accordingly. 53 persons have been disciplined consequently, and 305 persons have received punishment within their organization.

### Grasping Management

We have further strengthened the Party style and transparent government construction and anti-corruption work, organized the 2021 Party Work Integrity Construction and Anti-Corruption Work and Warning Education Conference, issued "Key Working Issues on 2021 Party Work Integrity Construction and Anti-Corruption Work", and performed mission breakdown to ensure that the responsibility is accounted and well allocated. Besides, we continue to make systemic efforts to ensure a mechanism where awareness, ability and resolve to resist corruption are upheld.

### Strengthening Supervision

We highlight political supervision, strengthen daily supervision, deepen the supervision and management, strictly implement the Eight-Point decision on improving work conduct set by the Central Committee and the follow-up implementation measures, and keep up our effort to tackle pointless formalities, bureaucratism, hedonism and extravagance. We promote "Three No Corruption", and increase the accountability for discipline enforcement, seriously investigate and handle cases of violations of discipline and law, complete the annual tasks of special inspections and internal inspections of illegal affiliates in the Company ordered by the State-owned Assets Supervision Party Committee of the State Administration of China (SASAC) with high quality. In 2021, the Company has completed the three rounds of the Party committee routine inspections in 36 wholly-owned subsidiaries and the Party committee inspection rectification assessment in 19 wholly-owned subsidiaries.

### Promoting Good Styles

POWERCHINA is paying great attention to the quality of discipline inspection cadres. Coupling with Party history education activities, the Discipline Inspection Commission of POWERCHINA has carried out 6 research at the grassroots level, 4 Party classes, and organized 4 centralized lectures for discipline inspection cadres. Coupling with Party history educational activities, we have carried out Party conduct, clean governance, and integrity education training, enhancing the consciousness of self-discipline among all staff.

# Risk Control

POWERCHINA continues to strengthen the risk prevention and control, conscientiously implements the compliance policy requirements of the central government and SASAC, continues to focus on major operation risk control, especially on Covid-19 prevention and control overseas, and fully leverages the important role of compliance, audit and oversight in fending off risk, ensuring sustained healthy development of the Company.

Amendment to the *Administrative Measures for Risk Assessment*

Formation of Major Risk Management Research Report during the "14th Five-Year Plan" period

Formation of the *Year 2021 Comprehensive Risk Management Report, the Year 2021 Comprehensive Risk Management Summary Analysis Report on Subsidiary*

Sorting out *A Check & Investigation Report on Overseas Business Legal Risks*

Entrusted by the Bureau of Policies, Laws and Regulations of SASAC, organizing the *Compliance Guide against World Bank Group Sanctions*

## Regular Epidemic Prevention and Control

Facing a complicated and challenging Covid-19 pandemic, POWERCHINA has always considered the lives and health of employees and stakeholders as the top priority. By intensifying the prevention and control of COVID-19 measures and taking further actions, POWERCHINA has guaranteed steady project progress while the resumption of work and production is pushed ahead in a coordinated way. The Company is highly concerned about the health and safety of overseas employees, and has taken all feasible measures such as chartered flights to ensure a safe and healthy journey, thus achieving the "stability on two fronts and security in two areas" goals.

## Investigating significant operational risks

We have actively carried out special rectification operations against financial capital risks, and further promoted the investigation and rectification of illegal businesses, such as trade financing. Integration of audit supervision and punishment for those failing to perform their duty in terms of due operations and investment has been accelerated. We have established a partnership enterprise of POWERCHINA ensuring the investment and operation, preventing systematic risk in PPP projects' operation. By carrying out risk project governance, we have effectively addressed some major risks of related projects.

## Enhancing the capacity to safeguard the rule of law

With the in-depth promotion of the integration of the legal system, legal capacity and legal culture, we continue to build up the Company's capability on legal governance, compliance operation, and standardized management in terms of major legal dispute case management, international business risk prevention, legal review and supervision, etc. In 2021, the Company has conducted law publicity and risk management education effectively, a compliance culture-building has been advanced in-depth and the measures of the building of the "Legal Framework of POWERCHINA" are paying off.

50

cases with letters and calls have been dealt with by the POWERCHINA Discipline Inspection



53

people have received disciplinary sanctions on the party and the government level



## Making the Main Business Stronger and Better

As a global pioneer in the cleaning, low-carbon energy, water resources, and environmental construction fields, a cadre in the global infrastructure interconnection, and a leading service provider for "B&R" Construction, POWERCHINA has focused on its main business and consolidated the in-depth implementation of the new development concept, so as to find the development positioning and comparative advantage of itself in the domestic circulation and domestic international double circulation. The Company grabs the new opportunities brought by the new development pattern, firmly promotes the development of globalization, the synergy of the whole industry chain, the whole life cycle service, and fully expands the "big building" market, steadily promoting the integration of "investment, construction, and operation", so as to make the "water-" much stronger, the "energy " much better, and the "city" much bigger.

### Expanding the Great Infrastructure

In the field of infrastructure construction, POWERCHINA actively increases the market development in urban rail transit, intercity railway, highway, municipal bridge, underground integrated pipe, old community renovation, civil-military airport, inland channel, etc. As a result, a large number of infrastructure projects enjoying great reputations such as the Beijing-Shanghai high-speed rail, Chengdu subway, Zhongshan-Kaiping high-speed express, and China-Laos railway were built. We have participated in the construction of "China's most important projects", such as the Sichuan-Tibet Railway, with the spirit of overcoming difficulties. We have accomplished Shenzhen Metro Line 7 with high quality, which has become the only subway project in China that has won both the Gold Award of National Quality Engineering Award and the Zhan Tianyou Award. The Company's infrastructure business has grown steadily and converged gradually toward the industry synergy.



○ Participation in the construction of the Jakarta-Bandung high-speed rail project

## Focus on "Water, Energy and City"

In the field of "water, energy and city", POWERCHINA continues to consolidate and strengthen its advantages in water utilization and governance, and heads on to be the best in the fields of water resources allocation, water security, water environment governing and water ecological restoration, thus creating new advantages in water supply and water development, acquiring and holding high-quality water assets, and exploring the promotion of water-city linkage. With a view to the "Carbon Peak, Carbon Neutrality" goal, the Company fully develops and explores the market of pumped-hydro energy storage (PHES), PV power, wind power, geothermal energy, biomass, hydrogen, energy storage and integrated energy, and actively participates in the construction of power grids. Centering on the innovative business thinking and business model of "exploring the city, operating the city and serving the city", the Company accelerates the deployment in the fields of housing construction, municipal utilities, rail transportation, comprehensive urban development, urban renewal, old neighborhood renovation and urban public utility operation to make the urban business a new growth pole.

In 2021, the Company signed 731.5 billion RMB of new contracts in the "water, energy and city" business, accounting for 93.7%, including 1,245 RMB of new contracts in the new energy business, up 42.6% year-on-year.

# 731.5

billion RMB of new contracts in the "water, energy and city" business



○ Wroclaw Flood Diversion River Regulation Works in Poland - the first time a Chinese enterprise successfully fulfilled its contract in the EU infrastructure market and obtained a Taking-over Certificate

## Integration of Investment, Construction and Operation

In the field of investment, construction and operation, POWERCHINA has accelerated its development from single investment-driven to the integration of investment, construction and operation, and strives to form a beneficial development pattern of "strong investment, strong contracting, superior assets, superior capital" that is characterized by accurate investment, excellent construction, efficient operation and smooth exit.

In 2021, the Company has issued the *Opinions on Further Improving the Management and Control of Recent Investment*, clarifying the orientation of investment as profit and cash creation as well as risk prevention and control, introducing special incentives for renewables and pumped water energy storage investment business as well as special fund guarantee policies for the preliminary work of major investment projects to better enhance the development of the Company.

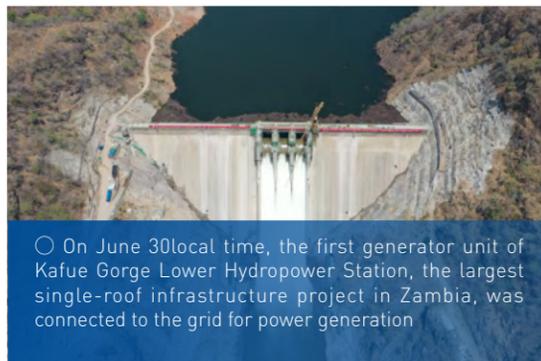
### China-Laos Railway - Connect the Lao people to the world through railways

Case 

On December 3, the 1,035km long China-Laos Railway connecting Kunming and Vientiane went into operation, which has profoundly changed the transportation pattern of Laos, and is of great significance to China and Laos in the promoting economic, social and humanistic cooperation and communication, accelerating the construction of China-Laos Economic Corridor and building China-Laos Community of Destiny. Since the commencement of construction of the China-Laos Railway, POWERCHINA has gathered its high-quality resources, which demonstrates the advantages of integration of the whole industrial chain, to build "road, bridge and tunnel" high-quality projects. The participation units including SINOHYDRO BUREAU 3CO., LTD, SINOHYDRO BUREAU 10 CO., LTD, SINOHYDRO BUREAU 14 CO., LTD, and SINOHYDRO ENGINEERING BUREAU 15CO., LTD of POWERCHINA have completed the targets and tasks at all nodes safely and with high quality through the careful formulation of construction plans, adoption of advanced technology and construction methods, and scientific and reasonable organization of construction, making the China-Laos Railway a "model project" for Chinese railroads going abroad with practical actions and practicing the spirit of mutually beneficial of the "Belt and Road" initiative.



On December 3, the entire China-Laos Railway line went into operation, which has profoundly changed the transportation pattern of Laos, and is of great significance to China and Laos in promoting economic, social and humanistic cooperation and communication, accelerating the construction of the China-Laos Economic Corridor and building China-Laos Community of Destiny.



On June 30 local time, the first generator unit of Kafue Gorge Lower Hydropower Station, the largest single-roof infrastructure project in Zambia, was connected to the grid for power generation



Sino-German Ecopark - the first Sino-German industrial ecological park cooperation project and the first urban complex project in China implemented in accordance with international standards, covering a total area of 10 square kilometers

## Promoting Globalization

POWERCHINA has actively responded to the national "B&R" Initiative, optimized the configuration of international business resources, deeply restructured international business, established "three steps" on the global development strategy of "group establishment for international business, localization of international operation and globalization of POWERCHINA", promoting its international business to achieve the development of high quality, so that the brand value and international influence of POWERCHINA have been significantly improved.

In 2021, the Company made a breakthrough in the development of the overseas new energy market, with 84 billion RMB of new contracts signed, accounting for 39.98% of the total new contracts signed in international business. The

Company co-signed the world's largest Wind Energy and PV & Energy Storage Project — the Saudi Red Sea Wind Energy and PV & Energy Storage Integrated Project; pushed forward the implementation of five projects in Vietnam in the mode of Construction Financing; and successfully signed three spot-exchange projects in Angola with European funds. The first electricity investment project in Europe — the Ivoivik Wind Power Project in Bosnia and Herzegovina, was successfully launched; the China-Laos Railway Project was officially opened to traffic; the first generator unit of Kafue Gorge Lower Hydropower Station in Zambia was connected to the grid for power generation; and the Nam Ou River Hydropower Station in Laos, which was invested and operated by the Company, was put into operation in the whole river basin.

- Xiamen University Malaysia Campus Project, Kariba South Bank Expansion Project in Zimbabwe, Memve'ele Hydropower Project in Cameroon, and Nam Ou River Sixth-Grade Hydropower Station Project in Laos were awarded the "2020 China Construction Engineering Luban Prize (for the overseas projects)".
- Jatigede Dam Project in Indonesia, Kuwait University City Business School, and Women's College Project, etc. was awarded the National Quality Project Award.

### Rural road opens the door for Kenyan peasantry to get rid of poverty and achieve prosperity

Case 

In March 2021, POWERCHINA Municipal East Africa Corporation completed the construction of 17.3 km asphalt double-layer surface pavement of the 2nd branch rural road of section 444 and successfully opened to traffic, connecting Elgeyo-Marakwet and Uasin Gishu and connecting the villages and towns around these two counties. The opening of the project will facilitate not only the travel of inhabitants, but also the transportation of crops, opening a door for local people to get out of poverty and achieve prosperity.



This is a road benefiting the people. Chinese company helps Kenya build the roads, use the actual actions to build new roads to the deepest corner in the mountains, to the doorsteps of the villagers, and bring them the hope to communicate with the outside world. Meanwhile, these highways will effectively revitalize the resources in poor areas, help the development of rural specialized industries, and enhance the 'blood-making' capacity of the rural area, so that it will gradually embark on the road out of poverty and wealth.

—Mandago, Leader of the County Uasin Gishu, Kenya

## Guaranteeing Customers' Rights

### Strengthen Quality Management

In accordance with the *Quality Management System Requirements (GB/T19001-2016/ISO9001:2015)* and *Code for Quality Management of Engineering Construction Enterprises (GB/T50430-2017)* standards, POWERCHINA has promoted the establishment of a quality management system covering the whole process of production and operation. In terms of quality management, the Company enhances the implementation of quality standards and specifications, strictly and specifies and assigns the responsibilities to survey, design, and construction units; implements quality supervision, insists on "zero tolerance" for quality and safety problems; strengthens the collection and collation as well as replication and promotion of advanced technology and experience in quality management; increases the creation and declaration of high-quality projects; focuses on culture development of "strengthening the enterprise by quality", enhances the quality awareness of all staff, and develops and expands the spirit of craftsmen and model workers. In 2021, the Company's Sichuan Dadu River Monkey Rock Hydropower Station, Guohua Dongtai Phase IV (H2) 300 MW Offshore Wind Farm Project and other projects were awarded the 2020-2021 National Quality Project Award; nine projects including the Dahua Bridge Hydropower Project, which was constructed or cooperated by the Company, was awarded the Luban Award; the Baihetan Test Team of the Baihetan Test Center of the China Water and Hydropower Fourth Engineering Bureau Co. Ltd under POWERCHINA was nominated for the China Quality Award; the Northwest Consulting Company of the Northwest Institute was awarded the "The 19th National Quality Award"; the Wuzhou-Liuzhou Expressway Project and the Ya'an-Kangding Expressway Project undertaken by POWERCHINA Road and Bridge Company were awarded the "Li Chun Award" for the first batch of highway transportation quality projects in 2020-2021, which is the first time for POWERCHINA to be awarded the highest quality award in the national highway and transportation industry. The Company and its member enterprises did not have any major engineering quality problems or accidents throughout the year.



○ Chengdu Rail Transit Line 18 was awarded the 2020-2021 National Quality Engineering Gold Award

Applied for

# 4,532

patents



# 4,275

patents granted



### Insist on Innovation-Driven Development

POWERCHINA places scientific and technological innovation at the core of the overall development, focusing on the requirements of the Company's high-quality development and building of a world-class enterprise, and dovetailing with the requirements of national strategies, and market exploitation and structural adjustment, transformation and upgrading. Driven by the construction of original technology sources, the Company has been incrementally improving the mechanism of the scientific and technological innovation system, solidly promoting major technology research tasks, and accelerating the construction of high-end professional platforms with the synergy between industry, academia, research, and application as the link, the digital transformation as an effective means, and the institutional mechanism innovation as the guarantee. In addition, the Company strictly complies with the Patent Law of the People's Republic of China and other relevant laws and regulations in terms of intellectual property protection to comprehensively strengthen the management and protection of intellectual property in production and operation and effectively avoid the risk of intellectual property infringement. In 2021, the Company applied for 4,532 patents, obtained 4,275 granted patents, and won hundreds of new ministerial and provincial-level science and technology awards, including the highest industry award for outstanding achievements such as Double Shield TBM technology.

### Breakthroughs in technology research

Four "1025 special" tasks were concluded on schedule; the first domestic full-capacity feed pump set of 1,000mw ultra-supercritical unit, large wind turbines and BIM simulation system with independent intellectual property rights, and whole-life track cycle management system; approved to undertake eight major national scientific and technological research tasks including CZ railway and Qinghai-Tibet scientific expedition, and 10 national natural fund projects in the field of offshore wind power and hydropower; leading the organization of nearly 20 provincial and ministerial-level scientific and technological research tasks, and carrying out major scientific and technological projects for novel electric power systems and make breakthroughs in core technologies in the source of original technologies.

### Improve the collaborative innovation system

actively advance the development of central enterprises innovation consortium, six provincial and ministerial-level R&D platforms including the Tibet Water-Wind-PV-Storage Energy Technology Innovation Center led by the Company were approved to set up; the construction of water environment, solar thermal, intelligent rail and other group-level R&D platforms is proceeding orderly.

### Advancing digital transformation

New projects were fully integrated into the PRP-ERP-GRP three-level information management system; independently developed BIM-centric collaborative design platform, fully covering the entire design process; established a smart site system based on "BIM+" technology to carry out several intelligent applications in projects such as the Lianghekou Hydropower Station; completed and put into operation a number of smart water platforms, smart energy platforms and smart city platforms; the "three-chain and one-platform" digital innovation management was selected as a benchmarking project by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC); the digital transformation training was carried out in East China, North China and Southwest China, with more than 400 participants.

### Practicing the strategy of "strengthening the enterprise with talents"

the Company's chief technical expert Zhang Zongliang from Kunming Institute, was elected as an academician of the Academician of Chinese Academy of Engineering; Zhang Chunsheng from Eastern China Institute (ECADI) was elected as a national survey and design master; and Xu Min from SINOHYDRO BUREAU 10 CO., LTD was rated as the 15th national technical expert. The Company organized and carried out the first "Electric Power Construction Craftsman" and special-grade technicians, and evaluated and employed 10 "Electric Power Construction Craftsmen" in the first batch.

### Optimizing customer service

POWERCHINA insists on client-centered services, continues to summarize and revise its customer service system in the daily operation and management, continuously optimizes customer services, and improves the customer experience. POWERCHINA has strengthened its performance control, responded to client feedback and complaints in a timely manner, and handled them properly. Through customer callback and satisfaction surveys, we collect customers' opinions and make timely corrections; we have also strengthened product knowledge dissemination and potential risk warnings through diversified customer training and product descriptions; resolutely curbed false propaganda; strengthened information security, paid attention to customer data management and privacy protection, shaped the "brand of POWERCHINA" and enhanced the company's reputation, customer satisfaction and loyalty.



○ Letters of thanks from clients



○ Panzhuhua Wanjiashan PV Power Plant

## High-Quality Supply Chain

### Responsible Procurement

POWERCHINA has actively advanced the improvement of the procurement management system and established and maintained a qualified supplier database. The Company's headquarters, subsidiaries, and basic level units have always been carrying out qualified supplier audits according to the principle of "three levels for each database", and keep a direct connection with the State Administration for Industry and Commerce (SAIC) and credit information service relying on POWERCHINA Equipment and Material Centralized Procurement Platform, to ensure the accurate and true supplier information.

In addition, the Company made solid progress in the annual evaluation of suppliers by investigating the implementation of suppliers' social responsibilities in business cooperation and by integrating the concept of responsible procurement and social responsibility management into the process of supplier management and procurement management. Furthermore, the Company has been practicing green procurement, giving priority to low-carbon and environmentally friendly products and clean energy. By the end of 2021, POWERCHINA had incorporated 41,834 suppliers into the qualified supplier database at all levels, among which a total of 22,526 active suppliers had participated in procurement practices.

Totally

# 22,526

active suppliers are involved in procurement behavior



### Supply Chain Management

Following the guidance of the concept of modern supply chain management, POWERCHINA has been carrying out high-quality supply chain management based on actual development and in accordance with the idea of "complementing, strengthening, consolidating and extending the supply chain". The Company has set two demonstration goals: an intelligent global supply chain and a supply chain for the clean energy industry of "One Belt, One Road", and has implemented corresponding demonstration initiatives.

### Developed and built a supply chain cloud service platform.

The Company has worked for the transformation and upgrading of procurement management toward supply chain management, and successfully applied it in 8 pilot projects of 7 subsidiaries and put it into full-scale trial operation by the end of October 2021, which promoted the digital transformation of supply chain management.

### Deepened the centralized management and control of bulk material procurement.

The innovative pilot work of centralized joint procurement of steel bars in the Sichuan-Chongqing and South China regions has reduced procurement costs, which saved procurement funds, reduced about 200 activities of repeated bidding and tendering, and significantly improved procurement efficiency and benefits, and provided strong support for market development and project implementation of the subsidiaries in the said region.

### Intensified centralized management and control of critical equipment.

POWERCHINA innovatively conducted annual framework procurement for 16 categories of common-used construction equipment and four categories of critical wind and PV equipment, effectively pooling procurement resources and enhancing market voice and bargaining power. Among them, the critical wind and PV equipment procurement for all company investment and construction projects is requested to be made through the annual centralized procurement.

### Comprehensively increased the level of e-commerce establishment and operation.

POWERCHINA has further standardized and promoted the centralized procurement of sporadic products from "POWERCHINA Electronic Mall". In 2021, POWERCHINA Electronic Mall had completed the planned transaction amount ahead of schedule, with a final transaction amount of 1.082 billion RMB, about 5% lower in product price compared with mainstream e-commerce platforms.

### Operation of Procurement Platform

POWERCHINA Equipment and Material Centralized Procurement Platform have been put into service since 2014, and in recent years, its functions have been upgraded and improved by the "Internet +" technology, which realized electronic closed-loop management for the whole procurement process from the phase of procurement planning to supplier performance evaluation and has been applied in project offices, branch offices and other basic level units.

In 2021, under the instruction of POWERCHINA, the Company's subsidiaries conducted remote off-site and online contactless bid opening and evaluations relying on the centralized procurement electronic platform. They carried out a total of 20,481 items of equipment and material procurement on the centralized procurement platform, of which 16,486 were completed online for the whole process, accounting for 80.49% of the total procurement.

Final transaction amount of

# 1.082

billion RMB



About

# 5%

lower than mainstream e-commerce platforms in the product price



# 20,481

items of equipment and material procurement were completed on the centralized procurement platform



# Environment: For A More Sustainable Ecology

POWERCHINA regards environmental protection as the cornerstone of the sustainable development, strictly complies with the relevant provisions of domestic and international laws as well as regulations on environmental protection, fully supports green and low-carbon energy development, promotes green and low-carbon infrastructure construction and operation, strengthens ecological environment management and biodiversity protection, actively responds to climate change, strives to reduce the disturbance from its development on the environment, maintains the harmonious coexistence between human beings and nature, and provides strong support to global sustainable development.

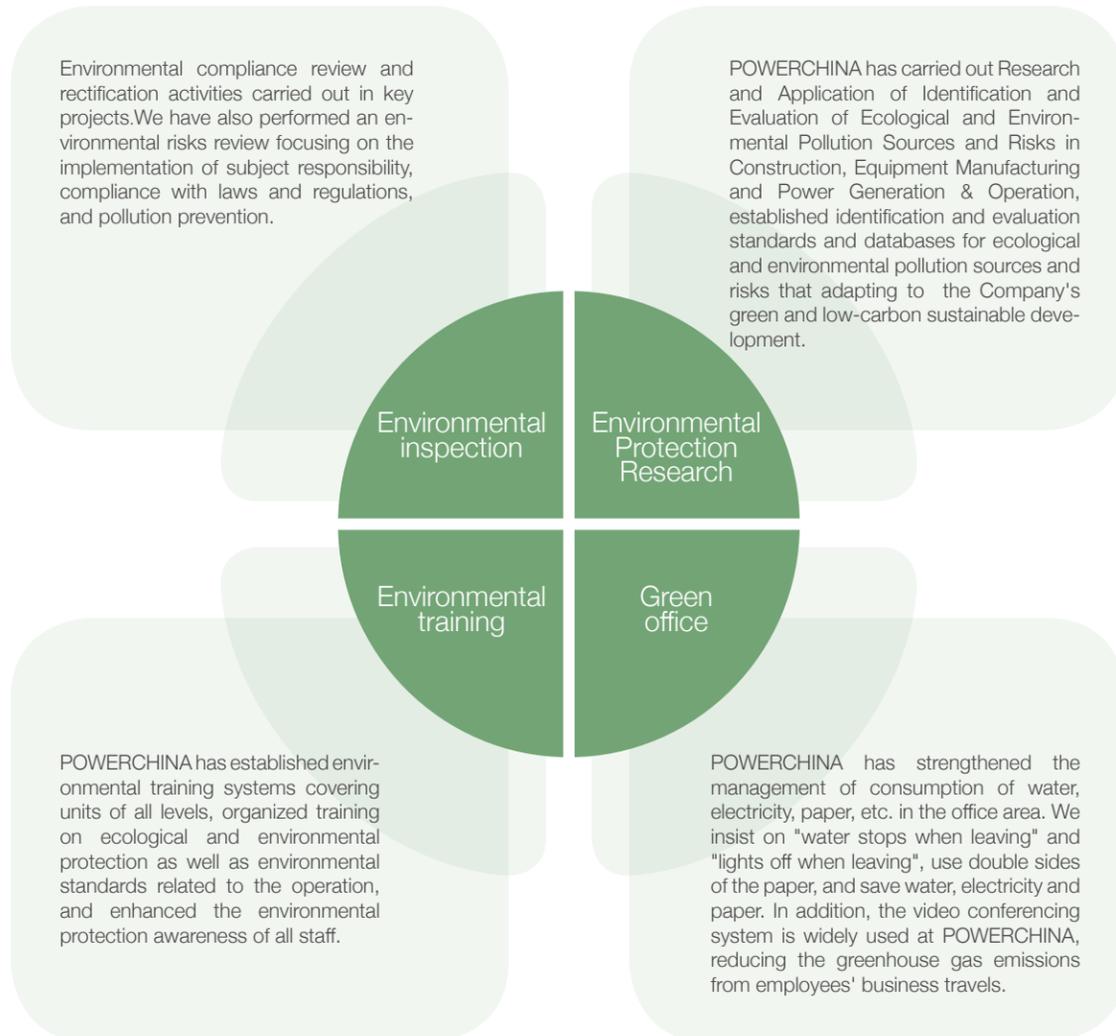


○ Beijing Yongding River Lianshi Lake Ecological Restoration Project

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## Perfecting Green Management

POWERCHINA continues to strengthen the top-level design of energy-saving and environmental protection, strictly implementing "both Party and company posts take the same responsibility for ecological and environmental protection, and one post with dual responsibilities", strengthening the investment and construction projects according to the law, strictly implementing various ecological environmental governance measures, conducting regular investigation and treatment of potential ecological and environmental risks. Meanwhile, we have strengthened the policy publicity of environmental protection regulations, continuously improved the green construction management as well as the emergency response system in the project engineering and construction process, and strictly prevented the occurrence of various types of ecological and environmental protection violations.



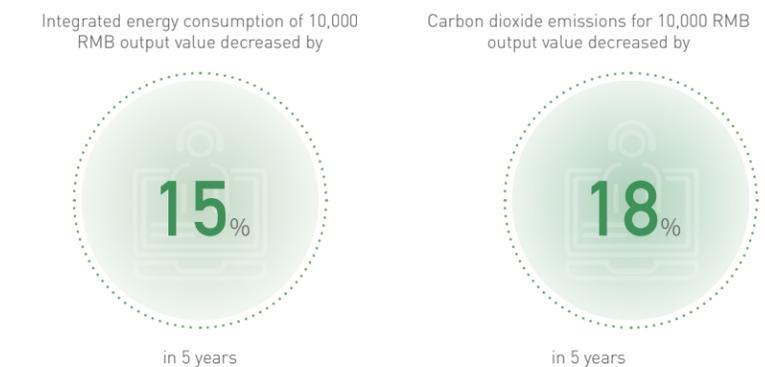
## Addressing Climate Change

POWERCHINA adheres to the path of green and low-carbon development, and cooperates with global partners to address climate change. The Company focuses on the optimization of energy structures, striving to build a new power system mainly based on new energy, promoting the production of green building materials, issuing green "carbon neutral" asset securitization financial products, actively conducting carbon transactions, and strives to contribute to the achievement of the goal of carbon compliance and carbon neutrality.

### Enhancing Top-level Design

POWERCHINA implements steadfastly the national objective of "Carbon Peak and Carbon Neutrality" according to the *Guidance on Promoting the High-Quality Development of State-Owned Enterprises to Achieve Carbon Peak and Carbon Neutrality* issued by the SASAC, in which controlling carbon emissions serve as a focus and a clear path to achieve "Carbon Peak and Carbon Neutrality" is mapped out. The Company will incorporate energy-saving and carbon reduction targets into the "14th Five-Year Plan"; promote low-carbon energy structures and focus on building a clean power system; continuous make efforts to policies and actions related to climate change; actively carry out carbon market transactions; enhance the carbon capture technology research and development. In September 2021, "CITIC Securities - POWERCHINA 2021 Green Asset Support Special Plan (esp. for carbon neutrality)" have been successfully issued on the Shanghai Stock Exchange, incorporating financial resources into the green and Carbon Neutrality field successfully.

### "14th Five-Year Plan" Target



## Developing Clean Energy

Bearing in mind the mission of "developing clean energy, creating a green environment, and serving smart cities", POWERCHINA is committed to the new energy development, participating in the grand blueprint of the energy revolution. In 2021, POWERCHINA has implemented the restructuring of new energy business and established POWERCHINA Renewable Energy Development Co. Ltd. to plan, coordinate and promote the development of the Company's new energy business; we have strengthened the top-level design of our new energy business development, published the *Implementation Plan for New Energy Business of Electric Power Enterprises, Guidance on the Integration of New Energy Investment, Construction and Operation of Electric Power Enterprises, Opinions on Strengthening and Improving the Investment Business of Electric Power Enterprises*; established a leading group and research center for new energy planning and research, promoted key technology research in new energy, new power systems and other industries, and accelerated the core capacity of biomass, geothermal energy and other new businesses, actively explored the frontier technical reserves such as hydrogen energy, and effectively protect energy security and sustainable development.



○ On November 26, 2021, POWERCHINA Renewable Energy Development Co., Ltd. establishment

### Empowering Green Winter Olympics

Case

### As of the end of 2021

Total installed capacity

**17.3785** million kW

Clean Energy Holdings grid-connected installed capacity

**14.2185** million kW

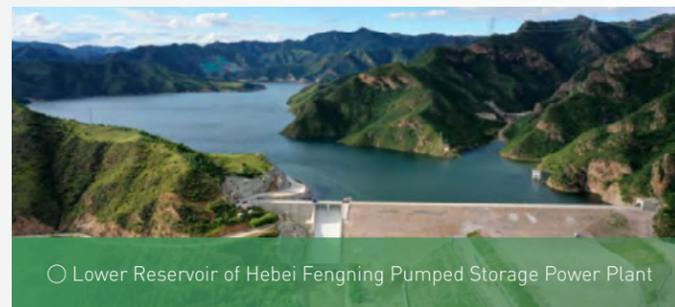
Proportion of Clean Energy

**81.82** %

On December 30, 2021, the first unit of Fengning Pumped Storage Power Plant in Hebei achieved commercial operation—the world's largest pumped storage power station designed and constructed by POWERCHINA.

Fengning Power Plant is a key green energy project supporting the 2022 Beijing Winter Olympic Games, with a total installed capacity of 3,600MW. It is the world's largest pumped storage power plant in terms of installed capacity, energy storage capacity, underground plant size and underground cavern scale, and it provided the Beijing Winter Olympic Games a reliable guarantee for 100% green power supply, which was the first time in the history.

Meanwhile, as the main regulating and adjusting power plant for the Beijing-Tianjin-Hebei power grid, the Power Plant has these "six functions": peak regulation, frequency regulation, phase regulation, energy storage, system backup and black-start. It is the "golden key" to hold up the energy and power transformation of the Beijing-Tianjin-Hebei region, which is of great significance to ensuring the safety of the power grid, promoting the consumption and utilization of new energy, and boosting the ecological protection of the capital economic circle, and it contributes to the achievement of the "Carbon Peak, Carbon Neutrality" goal.



○ Lower Reservoir of Hebei Fengning Pumped Storage Power Plant

## Hydropower Project

With its extraordinary competitiveness in the field of water conservancy and hydroelectric power, POWERCHINA has fully been participating in domestic and international hydropower projects, undertook the planning and design of most of the large and medium-sized hydropower projects in China, and participated in most of the hydropower construction in China and that of major large and medium-sized hydropower plants in the world. In 2021, the number of major Hydropower projects undertaken by POWERCHINA achieved commercial operation, and greatly contributes to the optimization of energy structure.

### As of the end of 2021

Installed hydro power capacity

**6.4824** million kW

YoY growth in 2021

**1.2** %

1

**On June 16**, all 12 units of the Wudongde Hydroelectric Power Plant, which were constructed with the participation of POWERCHINA, were put into operation, reducing carbon dioxide emissions by 30.5 million tons per year, which is equivalent to planting 85,000 hectares of broadleaf forests.

2

**On June 28**, the first unit of Baihetan Hydropower Plant designed and built by POWERCHINA achieved commercial operation. It is the world's largest hydropower plant in terms of construction scale and unit capacity and the second largest in the world in terms of installed capacity, with the reduction of carbon dioxide emissions by 51.6 million tons per year.

4

**On June 30**, the first unit of Kafue Gorge Lower Hydropower Plant achieved commercial operation. It is a model project of the "Belt and Road" implemented by POWERCHINA. It is also the first large hydropower plant invested in the past 40 years and the largest infrastructure project at present in Zambia with the reduction of carbon emissions by 3,189 tons during the construction period.

3

**On June 30**, Yangfanggou Hydro-power Plant, the first domestic EPC hydropower project over 1 million kW implemented by POWERCHINA, achieved all generating units commercial operation, which can reduce carbon dioxide emissions by about 4.75 million tons and sulfur dioxide by about 34,000 tons.

5

**On September 29**, the first unit of Lianghekou Hydropower Plant, the largest hydropower project in the Tibetan region in terms the scale of construction and investment, which was constructed by POWERCHINA, achieved operation on schedule, reducing carbon dioxide emissions by 21.3 million tons per year.

7

**On October 9**, Jinsha Hydropower Plant constructed by POWERCHINA was fully completed and put into operation for power generation, which can reduce carbon dioxide emission by 2 million tons, sulfur dioxide by 6,000 tons, and nitrogen oxides by 5,000 tons per year.

6

**On September 28**, the Nam Ou River Cascade Hydropower Plant in Laos invested and developed by POWERCHINA, the first cascade hydropower project invested by a Chinese enterprise overseas, was put into operation all cascades, and as of October 2021, the cumulative power generation from all cascades has exceeded 7.9 billion kWh, providing 12% power supply for Laos.

8

**On December 30**, the first unit of Fengning Pumped Storage Power Plant in Hebei — the world's largest pumped storage power plant constructed by POWERCHINA, was put into operation at full capacity. It can consume and absorb 8.7 billion kWh of excess electricity per year and generate 6.288 billion kWh of electricity per year, which can meet the electricity consumption of 2.6 million households for one year. It can save 480,000 tons of standard coal and reduce carbon emissions by 1.2 million tons per year, the equivalent of reforestation of more than 240,000 mu (about 16,000 m<sup>2</sup>).

As of the end of 2021

Installed wind power capacity

6.2845 million kW

YoY growth in 2021

18.9%

### Wind Power Project

POWERCHINA is taking great efforts to explore the wind power market: building a new business system for offshore wind power, issuing the "Implementation Plan for Accelerating the High-Quality Development of Overseas Wind and Solar Power Business (2021-2025)", actively applying for building the State Key Laboratory of Clean Energy and Offshore Wind Power, and systematically planning for the National Energy R&D Center for Offshore Wind Power Safety Hazard Prevention and Control to provide support for the development of wind power business.



○ Sachal Wind Farm Project in Pakistan — total installed capacity 49.5MW, the first electric power project financed and launched under the China-Pakistan Economic Corridor (CPEC)

### Photovoltaic (PV) Project

In addition to developing domestic PV business, POWERCHINA has also deeply explored the foreign PV market. In 2021, the Company has signed a number of PV power station projects including Yangon New Energy PV Project in Myanmar, Chirata Floating PV Project in Indonesia, EPC project of Chile PV power station, and Phase II of Suriname Microgrid PV Project. Lingwu PV Power Generation Co., Ltd., a subsidiary of the Company, was awarded the 3A-level honor of PV power generation enterprise by the Science and Technology Development Service Center of China Electricity Council (CEC), and the Gauchari PV Power Station project in Jujuy Province, Argentina and the 233MW PV Power Station Project in Algeria were selected as the Best Practice Cases in international energy cooperation at the second "One Belt, One Road" Energy Ministerial Conference.



○ Algeria 233MW PV Power Station

As of the end of 2021

Installed PV power capacity

1.4516 million kW

YoY growth in 2021

12.4%

## Implementation of Green Production

Strictly observing the *Law of the People's Republic of China on the Promotion of Clean Production*, the *Law of the People's Republic of China on Environmental Impact Assessment* and other relevant laws and regulations, POWERCHINA pursues resource conservation, pollution control and emission reduction in the whole process of production and operation, striving to fight the battle for protecting the blue sky, green water and clean soil. In 2021, the Company's pollutant up-to-standard discharge rate reached 100%.

### Saving Energy and Resources

POWERCHINA carried out the *Research on and Application of Identification and Evaluation of Ecological and Environmental Pollution Sources and Risk Points in Building Construction, Equipment Manufacturing and Power Generation & Operation*, promoting better green construction management, improving the control of key energy-using units, key energy-consuming production processes, and equipment by focusing on the control of total energy consumption. In addition, the Company actively optimized production processes and production procedures, promoted energy-saving technologies and methods to reduce the total energy consumption of various types of energy and improve energy resource utilization.

### Reducing Pollution Emissions

POWERCHINA strictly implements the relevant national requirements on pollution emissions, comprehensively promotes clean production, strengthens control of pollution sources, carries out refined environmental protection management, upgrades environmental protection technology, intensifies environment control and management of production processes, reduces pollutant emissions throughout the life cycle of projects, and lowers the burden of production on the environment.

### Atmospheric Pollution Prevention and Control

POWERCHINA implements air pollution prevention and control in strict accordance with the *Law of the People's Republic of China on Prevention and Control of Air Pollution* and other relevant laws and regulations on exhaust gas emissions, and entrusts qualified third-party monitoring organizations to conduct regular environmental monitoring, equips each project with portable environmental monitoring instruments for regular and irregular testing of construction sites, installs online environmental monitoring instruments for real-time environmental monitoring, and sets up physical protection and other measures to reduce the impact of pollutants on the atmosphere.

### Water Pollution Prevention and Control

POWERCHINA strictly controls the discharge and treatment of wastewater in accordance with the *Law of the People's Republic of China on Water Pollution Prevention and Control* and local discharge standards. POWERCHINA sets up waste-water treatment systems to collect and treat production wastewater until meeting the threshold for discharge. POWERCHINA Chengdu Engineering Institute developed a new technology for the deep treatment of IV grade water, which is able to help bio-chemical systems to realize water discharge of TN<10mg/L, meeting new requirements for IV grade water discharge.

## Ecological Environment Protection

### Solid Waste Pollution Prevention and Control

POWERCHINA strictly complies with the requirements of the *Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution*, and revises the relevant management system of the Company in a timely manner to ensure that solid waste management meets the latest national, local and industry requirements. The Company reduces waste from the emission source, supervises and manages the whole process of collection, storage, transportation and utilization of solid waste, and conducts compliant transfer and treatment in accordance with the *Technical Specification for Collection, Storage and Transportation of Hazardous Waste*.

### Noise Pollution Control

POWERCHINA strengthens the management of sound environments. The Company controls noise at sources through reasonable construction layout and construction time arrangement as well as other measures, and also prevents noise pollution during construction by using low-noise equipment, installing noise reduction barriers, and setting no-noise signs, so as to minimize the impact of noise on the surrounding environment.

### Circular Economy Development

POWERCHINA strictly abides by the *Law of the People's Republic of China on the Promotion of Circular Economy*, actively implements the "14th Five-Year Plan" for Development of Circular Economy of the National Development and Reform Commission (NDRC) to develop a circular economy based on the three principles of reduction, reuse, and recycling, making resource utilization, gradient utilization and recycling of various by-products generated in the production and service processes to maximize resource recovery and utilization as much as possible.

### Creating Green Environment

POWERCHINA insists on the protection and restoration of the integration of mountain, water, forest and farmland and the integration of lake and grass. By centering on the water system, POWERCHINA adheres to emission source treatment, overall planning of water and land, zoning and overall advancement. Through river regulation, pipe network collection, ecological landscape and other projects, POWERCHINA realized the governance objectives in terms of water security, water environment, water ecology and water economy, and constructed a benign and stable ecosystem.



○ Maozhou River Basin Water Environment Comprehensive Treatment Project



○ Fuhe River Estuary Wetland Water Quality Purification Project

### Biodiversity Protection

In biodiversity protection and practice, POWERCHINA implements the ecological concept of respecting nature, conforming to nature and protecting nature, follows the laws of natural ecosystem succession and inherent mechanisms, and carries out overall protection, systematic restoration and comprehensive treatment of ecosystems whose functions were damaged, degraded and weakened through engineering and non-engineering measures.



○ To protect the endangered wedge-tailed eagle, white-bellied sea eagle and other rare birds, POWERCHINA introduced the world's leading technology "eagle monitoring and protection system" in its Wild Cattle Hill Wind Farm, which was awarded the "Renewable Energy Innovation Award 2021" by the Australian Clean Energy Agency.

### Carrying out Ecological Public Welfare

POWERCHINA actively publicizes and implements the concept of environmental protection, and leverages activities such as "Energy Conservation Publicity Week" and "National Low Carbon Day" to organize energy conservation and environmental protection publicity activities on the themes of "Energy Conservation, Carbon Reduction, Green Development" and "Low-Carbon Life, Green Building Future". In addition, the Company has carried out activities such as garbage sorting, voluntary tree planting and garbage cleaning on a large scale to convey ecological and environmental protection concepts to all walks of life.



○ Garbage sorting game in the North Branch River Project of SINOHYDRO BUREAU 6 CO., LTD

# Society For A more Eternal Beauty

POWERCHINA always keeps in mind its corporate social responsibility and corporate citizenship, adheres to cooperative sharing business philosophy and drives partners with its own development. The Company attaches great importance to safe production, strengthens security responsibility system construction, builds solid safety borderlines, adheres to people orientation, safeguards the rights and interests of employees, and cares for the growth of employees; sincerely gives back to the society, supports the development of the community, and creates good life together with the stakeholders.



○ Tibet Engineering Company holding the "Hand in Hand for Love" charity activity

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## Deepening the Win-win Partnership

### In-depth Cooperation Between the Government and the Enterprise

POWERCHINA deeply integrates into and serves the strategy of national and regional coordinated development, continuously strengthens the domestic key regional market layout, and attaches great importance to government-enterprise exchange cooperation. The Company works with governments and enterprises in the modern integrated transportation system, infrastructure construction, ecological environmental governance, clean energy transformation and other fields, and such cooperation covers the entire industrial chain and is in multiple levels and various areas.

In 2021, the Company has signed 21 strategic cooperation agreements with 13 provinces (cities and districts), including Gansu, Jilin, Tibet and Guangxi, and with 8 central enterprises, including China South-to-North Water Diversion Corporation Limited, CHINA HUANENG, CRRC, and CCCC. POWERCHINA exchanges visits with the five major power generation groups, SDIC, China Three Gorges Cooperation, China South-to-North Water Diversion Corporation Limited, CRTG, CCCC and other large enterprise groups, and jointly signs the world's largest solar power storage project with Huawei - the Saudi Red Sea Wind Energy & PV energy Storage Integrated Project, joining hands with partners to complement each other's advantages, attaining mutual benefit, sharing development opportunities.

21

strategic cooperation agreements were signed



○ On September 17-18, Ding Yanzhang, Party Secretary and Chairman of POWERCHINA, attended the cooperation symposium of Yunnan and central enterprise projects

### Expanding Overseas Cooperation

POWERCHINA firmly promotes the "three-step" strategy for the overseas business, focusing on water resources and environment, energy power, infrastructure, etc. In 2021, we have established third-party market partnerships with a total of 51 renowned companies in 16 developed countries. A total of 75 third-party market collaboration projects about 50.323 billion US dollars are in construction and promotion. Making full use of the platform of the CIIC to sign cooperation agreements with HitachiABB Power Grid and Vestas, POWERCHINA's overseas partner cooperation has achieved a series of pragmatic results.

POWERCHINA has actively strengthened its localization construction, and the Company East and South Africa Region actively cooperates with localized resources and European partners to promote project financing in East and South Africa Region; its West and Central Africa region has realized localization of management personnel mainly in Cameroon; its Middle East and North Africa region has explored cooperation with local companies in Saudi Arabia and Algeria to accumulate performance; its Eurasia region relocated to Serbia to firmly grasp market opportunities; its Asia Pacific region has taken the lead in formulating the local work evaluation and management methods for regional subsidiaries and strengthening the integrated management of various personnel; its Vietnam subsidiary has improved the localization system in engineering, operation and maintenance, and equipment manufacturing; its Americas region has deepened mutual trust with partners and promoted the localization process in Panama and Brazil.

### Strengthening Exchanges and Mutual Understanding

In 2021, POWERCHINA has actively participated in the Boao Forum For Asia, International Infrastructure Investment and Construction Forum (IIICF), China-Africa Expo, 2021Clean Energy Expo China, Central Enterprises' Work Conference for Aiding Tibet, etc., actively strengthened cooperation with all parties, exploring multilateral cooperation paths, conjugating cooperation consensus.



○ On April 25, 2021, Ding Yanzhang, Party Secretary and Chairman of POWERCHINA, attended and spoke at The 4th Digital China Summit

## Adhering to the Red Line

POWERCHINA has thoroughly implemented the important remarks and instructions of General Secretary Xi Jinping on safety production, insisted on "People first and life first", firmly established the "red line consciousness" that development shall not be sacrificed over safety, and resolutely achieved a serious system, strict prevention at source, strict control in the process, and strict punishment in the consequences as an important scale and important connotation of the Company's high-quality development. In 2021, the Company had not a major production safety accident and above, and several sub-companies and project departments won the "Advanced Group of Electricity Safety Production", "Advanced Team of Electricity Safety Production", and "National Youth Production Safety Demonstration Post" and other honors.

### Paying Close Attention to the Safety Management

#### Management system construction

Performing safety management construction "Continue to promote the system standard depth landing year", the Company at all levels has developed implementation plans, organized to carry out "System standard entering the field and team", deepening "A post with a list", promoting "A post with an assessment"; completing the safety norms preparation missions entrusted by the National Energy Administration, including "Standardized Implementation Specification for Safety Production in Electric Power Construction" and "Anti-accident Measures for Safety in Electric Power Construction".

#### Standardization construction

Strengthening the construction of safety production, implementing the standardization review of sub-enterprises, self-examination reviews and self-assessment sampling.

#### HSE information system

Our HSE management information system has passed the acceptance successfully and the construction has witnessed phased results and the trial operation is progressing smoothly, with information technology means empowering the standardization of safety production.

### Implementation of Inspection and Rectification

POWERCHINA has organized and launched a special action for security risks and hidden dangers inspection and rectification, "Three-year action of special rectification of safety production", risk prevention and removal of hidden dangers and other kinds of safety inspection actions, and has deeply integrated "general and normalized" supervision and inspection into our daily safety production. In 2021, our total investment in safety production has reached 705.516 million RMB. There were no major or severe safety production accidents throughout the year, the foundation of safety production was strengthened and the level of safety production was effectively improved.



○ Ding Yanzhang, Secretary of POWERCHINA's Party Committee and Chairman of the Board, carried out safety supervision

### Strengthening Emergency Management

The Company establishes the emergency coordination mechanism that works closely with the Emergency Management Department, and establishes the information-sharing and alerting mechanism at various levels, through which the information of meteorological disasters and safety alerts can be transmitted to the front line promptly, so that the front line workers could get prepared for emergencies at the earliest time possible; organizes the survey of geological disasters around the construction site and the living camp, comprehensive inspection, timely maintenance and service of flood control machinery ensuring a good condition; organizes various types of emergency drills including flood control, construction safety, collapse accident, fire-fighting safety, helping employees master emergency-responding measures and improving emergency rescue and relief capabilities; strengthens the construction of emergency response forces, sets up emergency teams in projects with longer construction cycles and a greater number of construction machineries, and allocates part-time rescue personnel and equipments as engineering rescue and relief forces. The Company has launched 8,598 rounds of emergency drills throughout the year, and the Company's emergency management ability was continuously strengthened.



○ POWERCHINA Real Estate Group carrying out fire-fighting safety drills



○ STECOL Corporation launching tunnel collapse emergency drill

### Cultivating Safety Awareness

In 2021, the Company has further strengthened theoretical study on safety, organized the watching of the special documentary "Life is more Important than Mount Tai - Studying the Important Discourse of General Secretary Xi Jinping on Safety Production", carried out safety accident warning education, publicity and consultation day, "Ankang Cup" safety knowledge competition and other various "Safety production month" activities, creating an atmosphere of safety culture in all aspects of the enterprise with a production safety training coverage rate of 100%.

The total investment in safety production reached

# 7.05516

billion RMB.



## Paying Attention to Talent Development

### Understanding numbers in 2021

Total number of employees:

132,000

Number of female employees:

28,300

Ratio of female managers (Vice Senior Title):

23.88%

## Protecting Legitimate Rights and Interests

The Company strictly abides by the Labor Law and other applicable laws and regulations, and maintains the protection of legitimate rights and interests of employees in an important position. The Company fully respects individual differences such as ethnicity, race, gender and religious beliefs, and resolutely opposes employment discrimination; adheres to hiring in a compliant way, continuously improves the Company's labor-management measures, and improves the multi-level welfare protection system such as medical care system, protects employees' legitimate rights and interests; establishes and improves the employment system, including salary system, incentive mechanism, etc. to stimulate the entrepreneurial vitality of employees; establishes a long-term mechanism to ensure the payment of migrant workers' wages, and effectively protects the legitimate rights and interests of special groups.

## Helping Employees to Grow

The Company attaches great importance to talent development, continuously broadening the career development channels for employees of different fields and levels, helping employees to grow and become talents, and realize their own value. In 2021, the Company has prepared and published the "14th Five-Year Plan" Human Resources (Talent) Plan and the *Guidance on Construction of Career Development Channel for Employees, Management Measures of Chief Technical Experts, Management Measures of Special Technician, Chief Technician and Skill Expert* and other policy documents; set up the "Company Training Center", integrated the functions of vocational skill appraisal center, and improved the vocational education and talent training system; increased the incentives for those who have obtained vocational qualifications, and stimulated the enthusiasm of employees to obtain various vocational qualifications.



On October 25, 2021, POWERCHINA 2021 [Total No. 4] Country representative training course was officially opened

## Work Life Balance

The Company is committed to fostering "Happiness in POWERCHINA" atmosphere. By holding a variety of cultural and sports activities for employees such as building cultural centers, organizing sports and competition activities, outdoor health activities, networking activities, and entertainment evening parties, the Company assisted the employees to achieve work-life balance and greatly enhanced the employees' happiness and sense of belonging.



The Company's Senior College has held a cultural performance to celebrate July 1st



Cultural and sports activities held by POWERCHINA Hydropower Development Group

## Caring for the Life of Employees

optimizing the working environment of employees with special types of work and providing labor protection supplies; carrying out occupational health protection lectures such as *Law on Prevention and Control of Occupational Diseases and Basic Knowledge of Health Manager*; improving the medical protection mechanism for employees, performing regular occupational health checkups and maintaining effective management on employee health; performing "Spring Sprout Program of Vaccination" and offering "Caring Free Clinic" and other activities to overseas employees to protect employees' health in all aspects.



The Company pays attention to special groups of employees, and makes every effort to solve the problems of "first aid" for them. The Company has set up various grants to provide employees with hardship relief such as the special subsidy for employees with difficulties and the mutual aid fund for critical illnesses. The Company has carried out the "Golden Autumn Scholarship" activity to help with the education of the children of employees with difficulties; set up "Caring Stations" at the grass-roots level to make the workers' homes warmer.

Carrying out in-depth "I do practical things for the masses" activities; organizing holiday greetings for employees; setting up mother and baby rooms for female employees; establishing the "Workers' Mental Health Service Center", providing psychological counseling to overseas employees through remote medical platforms, providing all-round care for employees and building a warm-hearted home for them.

## Devoting to Social Welfare

### Continue to Contribute to Rural Revitalization

POWERCHINA has studied and implemented the important instructions of General Secretary Xi Jinping on rural revitalization, resolutely carried out the decision and deployment of the Party Central Committee and the State Council, and fulfilled extra the working requirements of "removing hats but not efforts" to the strict implementation of the policy requirements of "four no-removals", thus achieving "five no-removals". We have prepared the *14th Five-Year Assistance Plan in Rural Revitalization* and the *2021 Annual Implementation Plan for Assisting Rural Revitalization*, further increasing the assistance in education, medical care, employment, industry, consumption, infrastructure, etc., and POWERCHINA has continued to deepen the efforts in key areas of poverty alleviation such as Xinjiang, Tibet, and Yunnan to ensure that rural revitalization achieves important results.

Total investment of

# 43.3053

million RMB for rural revitalization

The number of cadres selected and dispatched is

# 56

The number of industrial development projects is

# 48

The number of people who benefited from vocational skills training is

# 3,178

The investment in improving education resources in the supported areas is

# 2,584,700

 RMB

The number of people with disabilities aided in the supported areas is

# 330

### Caring for Tibet

POWERCHINA is actively involved in the great cause of assisting and building Tibet in the field of energy power, water resources and environment, infrastructure, and other fields; selecting cadres aiding Tibet, and working in cooperation with Tibetan State-owned enterprises to conduct projects, solving the employment problems of local farmers and herdsmen, carrying out twinning support, and absorbing Tibetan university graduates for employment. From talent assistance to technical assistance, project assistance, and public welfare assistance for Tibet, POWERCHINA insists on the concept of "blood transfusion" and "blood creation" in aiding Tibet and provides a continuous source of vitality to Tibet. The Company has been awarded "Advanced Unit Aiding Tibet", "Advanced Collective Aiding Tibet" many times, and many cadres aiding Tibet have been awarded the honorary titles of "Excellent Staff Aiding Tibet" and "Advanced Worker in Talent Aiding Tibet" among other honorary titles, which are highly affirmed by the Organization Department of the Central Committee and other relevant departments of the state.



○ On September 17, 2021, Ding Yanzhang, Secretary of the Party Committee and Chairman of POWERCHINA, was invited to attend the State-owned Enterprises' Conference on Aiding Tibet and the Conference on State-owned Enterprises' Contribution to Quality Development in Tibet

### Helping Xinjiang with Culture

POWERCHINA has thoroughly implemented the working requirements of General Secretary Xi Jinping "Helping Xinjiang with culture", formulated the *Implementation Plan for Conscientiously Implementing the Party's Xinjiang Governance Strategy in the New Era and Further Doing a Good Job in Aiding Xinjiang*, and invested 15 million RMB to help build the Niya Culture Museum in Minfeng County, Xinjiang, to help Minfeng County excavate the Niya culture, build the Niya ruins for the development of the ancient silk road culture and tourism industry marked by the ancient country of Jingjue.

### Caring Activities in Northern Yunnan

In response to the characteristics of the high incidence of diseases in Jianchuan County, Yunnan, POWERCHINA has maintained the industrial revitalization according to the local conditions, investing 15 million RMB to assist in the construction of digestive disease prevention and control center, helping the local specialized industrial development in combination with medical care business; continuing to promote the dairy farming on a scale of ten thousand cows as well as 100,000 acres of pastoral planting projects in Jianchuan, enhancing residents' income and local tax, driving the development of related industries.



○ POWERCHINA invested a total of 15 million RMB to help build the Jianchuan County Digestive Disease Prevention and Control Center



○ POWERCHINA has donated two management boats of a novel type to Jianchuan County, Dali Prefecture, Yunnan Province

## Aids and Disaster Relief Against COVID-19

### Fighting the COVID-19 with one Resolution

In the face of the complex situation of the repeated ups and downs of the epidemic in China, POWERCHINA fully supported the front line against the epidemic and organized human and material resources to fight against the COVID-19 at the earliest time possible. The Firefly Volunteer Service Team from SINOHYDRO Bureau 4 has participated extensively in various volunteer activities to fight against the epidemic in different projects and communities, and performed outstandingly on the front line in Qinghai, which was affirmed and commended by the Qinghai Provincial Committee of the Communist Youth League; SINOHYDRO Bureau 14 has provided 6 vehicles and more than 1,500 sets of "water horses" and "iron horses" (road obstacles) to help fight the epidemic in Guangzhou; SINOHYDRO Bureau 15 has established six temporary Party branches regarding epidemic prevention and control, where more than 200 Party members took the initiative to go to the front line against COVID-19 in Xi'an. All units and departments have shown the spirit and responsibility of State-owned Enterprises by acting as the "guard team" against the epidemic and the "guardian" of the masses, and provided a strong guarantee for winning the battle of epidemic prevention and control.



○ SINOHYDRO Bureau 3 offered Xi'an University of Technology supplies in support of the fight against the pandemic



○ Young volunteers from the Nanjing Project of SINOHYDRO Bureau 5 assisted the community to carry out epidemic joint prevention and control



○ SINOHYDRO Bureau 14 has supported the epidemic prevention and control work of Huadu District, Guangzhou City



○ The Vietnam Offshore Wind Power Project Management Team of Zhongnan Engineering Corporation has organized a volunteer team to help the "Spring Sprout Program of Vaccination" in Bac Liêu Province

POWERCHINA has actively responded to the national call in the context of the global epidemic, and fully cooperated with our embassies and consulates to promote the "Spring Sprout Program of Vaccination". All overseas companies carried out volunteer services actively in Laos, Vietnam, Rwanda, Zambia, Algeria, and other countries and have set great examples as "POWERCHINA".

### Working Together on Disaster Relief

POWERCHINA has fully utilized its professional advantage, committed to the rescue force and rushed to the front line in various disaster relief operations such as the heavy downpour in Henan, rainstorm in Shaanxi, mudslide in Shuangjiangkou, Sichuan, and earthquake in Yangbi, Yunnan.

### Aiding flood-stricken Henan



In July 2021, Henan has suffered a heavy downpour and the situation of flood prevention and relief was grim. After the disaster occurred, POWERCHINA has conveyed and implemented the important instructions of General Secretary Xi Jinping on flood relief, resolutely implemented the decision and deployment of the Party Central Committee and the State Council, and donated 10 million RMB; each subsidiary company has raised rescue materials, set up rescue teams, dealt with drainage and flooding, transferred people, blocked dikes, cleaned up mud, dredged rivers, and located hidden dangers, was fully committed to carrying out flood relief activities and assumed the due responsibility as a State-owned Enterprise.



○ The Zhengzhou Subway Line 8 Project Management Team of SINOHYDRO Bureau 8 has successfully completed rescue and support tasks at multiple subway locations



○ The Hebi Branch of the 6th Company of SINOHYDRO Bureau 9 has participated in the dike rescue and successfully blocked the breach of the Weihe River

### Contributing to Public Welfare in the Community

POWERCHINA has always adhered to its philosophy, giving back to the society with love, and continued to carry out "Candlelight", "Firefly", "Ruo Shui", "Le Cheng" and other construction activities by young volunteer teams, actively organizing all kinds of public welfare activities, widely launched the campaign learning from Lei Feng, serving the "14th Game of PRC" and promoted the normalization as well as the institutionalization of young volunteers. The Company actively promotes local infrastructure construction overseas, improves local people's living conditions, actively carries out donation activities to help local vulnerable groups, and strives to improve local people's livelihood. In 2021, SINOHYDRO BUREAU 7 CO., LTD demonstrated its "China's sense of responsibility" in the construction of Pakistan Railways and was awarded the "National Best Volunteer Service Award Learning from Lei Feng".



○ 248 volunteers of SINOHYDRO BUREAU 3 CO., LTD escorted the opening ceremony of the "14th. Game of PRC", and got highly appraised by the organizing committee



○ POWERCHINA's representative in Cameroon Seg (left) led volunteers to donate caring materials to ACENAMM Orphanage



○ POWERCHINA has organized a donation activity for the primary school María mbasogo ngüi in Equatorial Guinea.

# POWERCHINA

## Looking into the Future

The 20<sup>th</sup> Congress of CPC is coming in 2022. It will be an important milestone that implies we will embark on a new journey toward the Second Centenary Goal of comprehensively building a modern socialist country. Corresponding to this, POWERCHINA will keep participating in social activities and taking responsibility in an attempt to unfold a brand new chapter driven by higher quality.

A new journey unfolds a new mission, and a new duty calls for further actions. We will be a practitioner focusing on high-quality development by adhering to the basic rule of prioritizing stability while pursuing progress, highlighting the theme of high-quality development, and anchoring the corporation transformation. We will also be an industrial leader by focusing on the main business, transforming and upgrading the current business, persisting in innovation, and constructing high-quality projects. We will be a guardian of the ecological environment by focusing on carbon-neutral and carbon peak goals, strengthening pollution control work, and adhering to the green development concept. We will also undertake social responsibilities to make efforts to better life, providing quality goods and services, aligning interests with stakeholders, helping rural revitalization, and dedicating caring to society.

Working hard toward our great goals is “an uphill battle”. To participate in the new journey toward the Second Centenary Goal, we will convert our mission and responsibilities to action, trying to act as a top-ranked enterprise with a significant influence and a brilliant brand worldwide and welcoming the 20<sup>th</sup> Congress with outstanding achievements!

○ The first 55m water depth offshore jack-up exploration test platform in China



# Appendix

## Table of Key Performance

Classification	Indicators	Units	2021
Operating Performance	Total assets	Hundred million RMB	9639.77
	Operating income	Hundred million RMB	4489.80
	Total profit	Hundred million RMB	167.49
	Net profit	Hundred million RMB	134.58
	Debt to asset ratio	%	75.09
	Net profit attributable to the parent company	Hundred million RMB	86.32
	State-owned capital preservation and appreciation rate	%	109.11
	Taxes paid	Hundred million RMB	170.19
	Earnings per share	RMB/share	0.4979
	Science, Technology Engineering and Management	Science and technology, R&D investment	Hundred million RMB
Number of scientific and technological R&D personnel		Person	20695
Number of annual patent applications		Item	4532
Number of annual patents granted		Item	4275
Number of provincial work methods		Item	428
Number of National Engineering Awards		Item	34
Number of Provincial Science and Technology Progress Awards attained		Item	299
Number of national and industry standards compiled and completed		Item	126
Number of participating in international standards		Item	9
Number of national-level R&D institutions		Number	8
Number of provincial-level R&D institutions		Number	60
Number of software copyrights obtained		Item	687
Engineering quality acceptance rate		%	99.71
Customer satisfaction		%	94.11

Operation in Compliance	Rate of economic contract fulfillment	%	100
	Number of compliance training sessions	Sessions	58
	Number of participants in compliance training	Ten thousand people	5.6
Responsible Supply Chain	Supplier certification rate	%	83.47
	Number of suppliers penalized (blacklisted)	Number	85
	Number of supplier training sessions	Sessions	2
	Supplier training participants	Person/time	590
	Supplier training	Hour	3
	Number of potential suppliers rejected for social responsibility non-compliance	Number	0
	Number of suppliers reviewed during the reporting period (number of declared suppliers )	Number	28004
	Number of suppliers whose cooperation was terminated due to social responsibility non-compliance	Number	0
	Responsible procurement ratio	%	100
	Overseas Presence	Number of countries with management offices worldwide	Number
Number of management offices worldwide		Number	321
Number of countries (regions) where we have operations		Number	127
Employee Rights	Number of employees	Ten thousand people	13.2
	Number of female employees	Ten thousand people	2.83
	Number of employees of ethnic minority	Persons	6811
	Employment contract signing rate	%	100
	The social security coverage rate of employees	%	100
	Number of employees with disabilities	Persons	309
	Proportion of female managers (associate senior title)	%	23.88
	Number of employees absorbed during the reporting period	Persons	9584
	Localization ratio of overseas employees	%	62.3
	Number of paid vacation days per capita per year	Day	8.3
	Staff satisfaction	%	100
	Turnover rates of employees	%	3.04

Safety Management	Total investment in safety production	Ten thousand RMB	705516
	Safety production training coverage	%	100
	Number of production safety accidents	Number	9
	Number of employee casualties	Persons	13
	Number of newly diagnosed cases of occupational diseases among employees	Item	0
	Number of emergency drills	Time	8598
Harmonious Society	Total external donations	Ten thousand RMB	1839.15
	Total investment for rural revitalization	Ten thousand RMB	4330.53
	Materials as monetary contributions to rural revitalization	Ten thousand RMB	165.37
	Number of cadres selected for special posts	Persons	56
	Number of industrial development projects	Item	48
	Number of people who benefited from vocational skills training	Persons	3178
	Subsidies for students in the supported areas	Ten thousand RMB	222.08
	Number of students in the supported areas	Persons	1968
	Investment in improving education resources in supported areas	Ten thousand RMB	258.47
	Investment in helping people with disabilities in supported areas	Ten thousand RMB	16.93
	Number of people with disabilities in supported areas	Persons	330
	Number of volunteers	Persons	24560
	Hours of volunteer service	Hour	20016
Environmental Protection	Total investment in environmental protection	Hundred million RMB	7.97
	Energy consumption of 10,000 RMB of operational income (comparable price)	Ton of standard coal / Ten thousand RMB	0.75
	Nitrogen oxide emissions	Ten thousand tons	1404.20
	Sulfur dioxide emissions	Ten thousand tons	1106.90
	EIA approval rate of new construction projects	%	100
	Pollutants reaching standard emission rate	%	100

## Feedback

### Dear readers:

Hello! Thank you for reading this report. We attach great importance to it and hope that you can evaluate POWERCHINA's 2021 Environmental, Social and Governance Report and put forward your valuable comments. We will take your opinions and suggestions as a matter of continuous propulsion of our social responsibility management and practice, and we promise to protect your feedback information that is not obtained by third parties.

1. Do you think that this report reflects the significant influence of POWERCHINA on the economic, social, and environment?

Yes  Average  No

2. Do you think the identified stakeholders in this report and the analysis of their relationship to POWERCHINA is accurate and comprehensive?

Yes  Average  No

3. Do you think the information disclosed in this report is complete, accurate and clear?

Yes  Average  No

4. Do you think the overall framework of this report, the content design and the formal arrangement are convenient for reading?

Yes  Average  No

5. Do you think it is convenient to find information or topics you pay attention to in this report?

Yes  Average  No

6. What is the overall impression of this report giving you in all aspects?

Very good  Good  Average  Very poor

7. Which information that you are interested in is not disclosed in this report?

8. Do you have any opinions or suggestions for this report and Company in the future regarding compiling this Environmental, Social, and Governance Report?

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