

大唐国际发电股份有限公司 Datang International Power Generation Co.,Ltd.



### **Social Responsibility Report**

Environmental, Social and Governance Report

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### **Our Greetings**



The year 2021 marked a milestone in the history of the Party and the country, and it was also an unforgettable and extraordinary year for Datang Power. In the face of a complex and grim business situation along with numerous risks and challenges, Datang Power adhered to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, resolutely implemented the major decisions and arrangements of the CPC Central Committee, fully implemented the requirements of the State-owned Assets Supervision and Administration Commission of the State Council (SASAC), the National Energy Administration and China Datang Corporation, and continuously improved the dual prevention mechanism and deepened intrinsic safety. We flexibly coped with fluctuations in coal prices, the fierce competition during green transition, increasingly strict safety supervision, and huge pressure on energy supply etc. We pressed ahead fearlessly under great burdens, setting off for another journey of new undertakings. In 2021, we have yielded fruitful achievements.

In 2021, we carried forward the Party's great founding spirit and further strengthened our faith, belief and confidence in the Party leadership as our understanding of the Party history deepened. We carried out in-depth study of the spirit of General Secretary Xi Jinping's important speech on the CPC's centenary celebrations on July 1st and the sixth plenary session of the 19th CPC Central Committee, and deepened our understanding on the decisive meaning of "establishing Comrade Xi Jinping's core position on the CPC Central Committee and in the Party as a whole and defining the guiding role of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era" to the historical process of the great rejuvenation of the Chinese nation. From the Party's century-long struggle, we drew political wisdom, sustained our revolutionary legacy, and gathered the strength to forge ahead. While resolutely implementing the major decisions and arrangements of the central government, we adhered to our original aspiration, "upholding General Secretary Xi Jinping's core position on the CPC Central Committee and in the Party as a whole and upholding the Party Central Committee's authority and its centralized, unified leadership", demonstrating a great sense of responsibility.

In 2021, we bore in mind the country's most fundamental interests, made clear the relations between individual and national interests, and declared phased victory in the tough and prolonged fight on energy supply. In response to the country's political, capability, Party building, and work style tests on the Company, we guaranteed sufficient power supply for major events of strategic and political significance. The Party Committee of Datang Power improved its political judgment, political comprehension and political execution, strengthened political leadership, and demonstrated a strong sense of responsibility. Upholding strong political spirits, all levels of leadership took into account the overall situation with the big picture in mind. We acted resolutely in line with the CPC Central Committee, and sacrificed partial temporary profits for stable energy supply, showing Datang Power's strong resilience against challenges as a central SOE.

In 2021, we implemented a new development philosophy and served a new development dynamic in the new development stage for highquality development, contributed to the carbon peak and neutrality goals, and made major breakthroughs in green transformation. We actively integrated into the national strategy for coordinated regional development. While emphasizing the development of large-scale wind and solar energy projects and the competitive distribution of clean and efficient thermal power projects, we formed synergy for development and maintained our strategic focus on promoting the green transformation and high-quality development. In 2021, we obtained the approval of 84 new energy projects with a total capacity of 6.44GW. Two bases - the 2GW base of Inner Mongolia Tuoketuo Power Generation Company and the 1GW base of Wei County, Hebei Province, were approved and included in the first batch of large wind and photovoltaic (PV) power bases in China, creating a good start for the 14th Five-Year Plan period.

In 2021, we struck to systematic mindset and bottom-line thinking, adhered to a fact-based approach and kept advancing with the times, effectively preventing and resolving all risks and challenges. Being goaland problem-oriented, we implemented a special quality and efficiency improvement campaign targeting the electricity, thermal power and fuel markets based on the principle of "improving sold electricity sales, investment quality, labor productivity while reducing fuel costs and financial expenses, and managing corporate loss." By seeking opportunities in crises, implementing comprehensive policies, making overall and balanced arrangements, and guaranteeing energy supply and efficiency improvement, we stabilized the fundamentals of Datang Power's business. We upheld both safety and development, securing work safety and stabilizing COVID-19 prevention and control.

In 2021, we put people first, valued employees as the primary driving force for development, and pooled our strengths for major undertakings. Always ready to serve the people, we listened to employees' voices and cared for their well-being, striving to become a heartwarming company. By organizing the "Serve the People with Concrete Action" campaign, we resolved the most pressing difficulties and problems that were of great concern to employees, and shared our development and reform results with employees to the greatest extent. Our employees have showed their gratitude to the Party and always followed the Party's leadership. They kept the big picture in mind and performed their duties conscientiously. Under great strain, they withstood numerous challenges against all hardships and obstacles, achieving extraordinary results.

In 2021, we fulfilled social responsibility to support rural vitalization, and engaged in public welfare undertakings, establishing a good corporate image. We assigned work groups and personnel to villages to support and advance local rural vitalization efforts. We provided RMB 10.155 million assistance funds to various regions to help improve local infrastructure, boost the collective economy, and beautify the rural environment. We also engaged in public welfare undertakings, such as visiting elderly care centers and organizing volunteering activities, etc., to promote harmonious and stable development of the society.

An ancient saying goes, "the world moves on in a never-ending process of the new replacing the old." In the year ahead, we will pursue progress while ensuring stability, insist on high-quality development based on systemic efforts, and embark on a new journey with high spirits and energy. While forging ahead fearlessly, we will strive to create a better future for Datang Power and welcome the 20th CPC National Congress with outstanding achievements.

### **About Datang** Power

Datang International Power Generation Co., Ltd. (hereinafter referred to as "Datang Power" or "we") was incorporated in 1994. The Company is the first Chinese enterprise listed in London, the first Chinese power company listed in Hong Kong, and the first Chinese company listed simultaneously in Hong Kong, London, and Shanghai. Engaging in various sectors and industries, including coal, transportation, circular economy and electricity sales, Datang Power is an integrated energy enterprise. In 2021, Datang Power fully implemented the new development philosophy and new energy security strategy, endeavored to promote green and low-carbon transformation, and took solid steps towards high-quality development.

#### By the end of 2021.



33,000 hired 33,000 employees,







and launched business operations in 19 provinces, autonomous regions and municipalities in China.

#### 2016

#### 2018

Datang Power generated 269.704 TWh electricity in total, representing a yearon-year increase of 35.74%. The Company was listed into the "Top 250 Global Energy Companies" by Platts for the 12th consecutive years, with the installed capacity reaching 62.853 GW.

Total installed capacity of Datang Power reached 68.772 GW, with the installed capacity of clean energy and renewable energy projects contributing to 30.27% of the total. The 2GW base of Inner Mongolia Tuoketuo Power Generation Company and the IGW base in Wei County, Hebei Province were included in the first batch of large wind and photovoltaic power stations in China, marching towards a new stage of green transformation.

2017

### **Industrial Layout**

## Corporate Governance

At the historical convergence of the Two Centenary Goals, Datang Power conscientiously implemented the decisions and arrangements of the central government, adhered to the general principle of seeking progress while maintaining stability, fully, accurately and comprehensively implemented the new development philosophy, accelerated the construction of a new development paradigm, and promoted high-quality development. In 2021, the Company continued to strengthen Party building, resolutely implemented the SASAC's three-year action plan for SOE reform and the requirements set by China Datang Corporation (CDT) on reform, and strengthened the business management capabilities. The Company has also made steady progress in the modernization of the system and capacity for corporate governance, and gradually improved the modern corporate structure as well as the law-based governance and risk control systems.

### Party leadership

Strengthening Party building. Always putting the Party's political building first, we follow the spirit of important speeches made by General Secretary Xi Jinping, and implement the decisions and plans of the CPC Central Committee. We have formulated and strictly implemented the "first topic" system to give full play to the leadership of the Party Committee over directions, overall situations and implementation. In 2021, we pushed forward with the special actions during the "Central SOE Party Building Innovation and Expansion Year" and the building of the "three demonstrations," and promoted the continuous improvement of the working mechanism for Party building. We realized solid progress in the "Serve the People with Concrete Action" campaign by completing 270 projects for public well-being, securing the results of Party building.



The Party branches of the Electric Power Department of the National Energy Administration and the steam turbine team of the Inspection and Maintenance Department of Beijing Gaojing Thermal Power Plant jointly carry out the Party Building Day event on "guaranteeing electricity and heat supply for Beijing 2022 Winter Olympics."



Promoting Party history learning and education. We gave high priority to Party history learning and education in 2021, and acted in accordance with the related speeches made by General Secretary Xi Jinping at the conference as well as the guidelines on activities to study the history of the CPC issued by China Datang Corporation. We also set up the central group and organized reading classes to systematically study the Party's history and sustain its revolutionary legacy. Party members of the headquarters also visited Xibaipo to study the Party's history and carry forward the great founding spirit of the Party.



Party members from the headquarters hold the Party Day event to study the Party's history in Xibaipo.

### **Governance structure**

Standardizing corporate governance. We have established a standardized and complete corporate governance structure that enables us to regulate the management of general meetings of shareholders, the Board of Directors, the Board of Supervisors, connected transactions, and information disclosure. In 2021, we completed each important result announcement, and maintained the corporate image of listed companies. We have comprehensively enhanced law-based corporate governance, increased efforts to deal with legal disputes, and effectively protected the legitimate rights and interests of the Company; actively performed the management functions of listed companies, and effectively protected shareholders' interests.



Enhancing risk management and control. In line with regulations of the SASAC on the regulation of listed enterprises, we have established a company-level comprehensive risk management system. We formulated and improved three regulatory documents of the Company, namely the Administrative Measures for Comprehensive Risk Management, Administrative Measures on Internal Control, and Administrative Measures on Internal Control Evaluation to further consolidate the foundation for risk management and control. By analyzing risks, developing risk prevention and control measures, and conducting continuous monitoring of risk mitigation, we realized the overall risk control goal of the Company.

Enhancing ESG management. We push forward with ESG management, review the existing ESG management mechanism during the reporting period, and improve the ESG management structure in line with the Company's operating status and the environmental, social, and governance criteria of the stock exchanges. The Board of Directors, as the decision-making body, develops the top-level design and reviews the efficacy of ESG management. A planning and development strategic committee, an environmental protection management leading group, and other work mechanisms have been established at the management level to improve the organizational structure for ESG management and report to the Board of Directors. Functional departments and ESG-related divisions coordinate and participate in ESG management. Our subsidiaries align their functions with the Company and receive the guidance and requirements on ESG management fulfillment.



of Directors	<ul> <li>Develop the top-level design and formulate ESG policies</li> <li>Supervise and review ESG management</li> </ul>
anagement	<ul> <li>Implement ESG management required by the Board of Directors</li> <li>Establish ESG management organizations</li> </ul>
onal ments and I divisions	<ul> <li>Clarify the departmental responsibilities according to ESG management requirements</li> <li>Participate in ESG management and promote ESG development</li> </ul>
iaries	<ul> <li>Take charge of daily management of ESG information</li> <li>Accept the headquarters; guidance over ESG management</li> <li>Give feedback on ESG management performance</li> </ul>

### **CSR Management**

### Compliance management



We strictly abide by Chinese laws, regulations, rules and regulatory documents, such as the Company Law, Securities Law, Rules Governing the Listing of Stocks on Shanghai Stock Exchange, Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited, Articles of Association, Rules of Procedures for Shareholders' General Meeting, etc., and disclose information in a timely manner. We are committed to ensuring that the Company's production and business activities are legal, compliant and transparent.



efforts to deter Party members and cadres

from corruption with real warning cases.

To urge employees to abide by Party rules

and discipline, we have opened a column

on the Company's WeChat official account,

and released the special issue on integrity

education involving corruption cases and

family values.

#### Opening up reporting channel.

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We have improved the accountability system for handling public complaints, incorporated employees' need into institutionalized and standardized management, and kept informants' relevant information confidential. Every time before major festivals, the Company's Discipline Inspection Commission issues the Notice on Strengthening Supervision During Festivals, ensures that the report hotline is available, and handles letters and visits in time. We deal with disciplinary violation clues without any delay, so that we can crack down on corrupt behavior as soon as possible.

### **Material Topics**

In accordance with the ESG Reporting Guide and GRI standards, we have benchmarked against the topics disclosed by domestic and foreign peers. Based on the Company's actual development, we identify the material ESG topics of the Company and make evaluation through stakeholder communication.

Party Building	Technological Innovation
Responding to National Policies	Protecting the Ecological Environment
Energy Saving and Emission Reduction	Power Market Development
Ultra-low Emission	Compliance Management
Promoting CSR Fulfillment along the Supply Chain Responsibility	Communication with the Public
Clean Energy	Rural Vitalization
Industry Cooperation and Development	Stable Energy Supply



Carbon Management	Protecting Shareholders' Rights and Interests
Employee Development and Rights	Work Safety and Occupational Health
Win-win Cooperation	COVID-19 Response
Risk Management	Respect for Intellectual Property Rights
Voluntary Service	Community Development
Maintaining the Market Environment	Optimizing Customer Service

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### Stakeholders Engagement

We maintain communication with stakeholders and consciously accept the public supervision through releasing CSR reports regularly. With diversified communication mechanisms and channels, we track the needs of different parties and respond efficiently.



and Common Development

#### **Communication Methods** Performance Indicators • Accelerating the Transformation Attending Meetings Work reports of the Mode of Economic Information Submission Development • Reporting Materials Regularly Complying with Laws and • Participating in Relevant Regulations Actively Communicating with Seminars Organized by Government or Regulatory Relevant Regulatory Authorities Agencies Cooperation and Joint Construction Driving the Economic Development Charitable Activities of Areas where Our Operations Publicity Activities are Located • Organizing Volunteer Activities • Organizing Charitable Activities on • Carrying out Donation Activities Environmental Protection Launching Community-based Volunteering Activities Organizing Public Welfare • Developing Circular Economy Activities on Environmental Green office Protection • Ensuring All Pollutants to be • Green Operation Discharged up to Standard Supplier Conference Implementing Open and • Bidding Information Disclosure Transparent Business Principles Strategic Cooperation and Processes Cooperation Agreement Standardizing Management and Honoring Contracts and Agreements Implementing Responsible Procurement

CSR

## Feature 1 **Stabilizing Energy Supply**

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To serve the country's most fundamental interests, Datang Power implements the national requirements on energy security to guarantee stable power supply, showing its strong resilience against challenges as a central SOE. In 2021, the Company generated 272.925TWh of electricity, achieving stable growth. We successfully completed the political tasks of power supply for the 100th anniversary of the founding of the CPC, the New Year's Day and the Spring Festival holidays, and the National People's Congress (NPC) and the Chinese People's Political Consultative Conference (CPPCC), and made full preparations for the power supply for Beijing 2022. **99**-

### **Going All Out to Ensure Electric Power Supply**

In response to the shortage of coal for power generation and the huge pressure on power supply, we strictly ensure work safety, optimize the schedule of operations and leverage multi-party cooperation to coordinate the coal procurement in medium and long-term supply contracts, thus stabilizing fuel reserves and guaranteeing the safe, orderly and reliable power supply. As a result, we completed the task of high-quality electric power supply.



Zou Lei, Party Secretary and Chairman of China Datang Corporation, and Kou Wei, General Manager and Deputy Party Secretary of China Datang Corporation, inspected work safety and the supply of electricity and heat at Beijing Gaojing Thermal Power Plant 60 days before the opening of Beijing 2022 Winter Olympics (Beijing 2022).

#### Making every effort to secure power supply of every household

#### Hebei Chengde New Energy Business Unit

The unit continuously strengthens the awareness of "maximizing power generation capacity," refines its power generation plan, and analyzes work safety and operation indicators according to the power generation plan. It conducts efficient maintenance pre-test, equipment technical transformation, defect repair, etc., in response to environmental challenges to power supply.



stable power supply.

Tianjin Panshan Power Generation Company conducts equipment inspection and maintenance.

#### Inner Mongolia Tuoketuo Power **Generation Company**

Power supply is the most important and pressing political task for the company. Devoted to safe and reliable power generation, the company optimizes power generation strategy to increase the inventory of coal by expanding coal procurement. It also ensures safe and stable operations of power generating units by optimizing operation scheduling and modes, equipment management, etc. As a central SOE, the company has fulfilled its social responsibility to serve the people's livelihood and secure the development and safety with practical actions.



Inner Mongolia Tuoketuo Power Generation Company strengthens equipment inspections.

Hebei Chengde New Energy Business Unit carries out an inspection of power transmission lines to ensure



Tianjin Panshan Power Generation Company

To guarantee safe and stable power supply in winter, the company, as one of the main heat suppliers in Tianjin, conducts in-depth investigation of hazards during generating unit maintenance to ensure that all hazards are eliminated.

## **Ensuring Heat** Supply

As temperatures plummet due to cold waves in 2021, we immediately started the anti-freezing plan, and prepared enough spare parts to ensure the continuous and reliable operations of generating units in winter. We coordinated fuel management, and strengthened the unloading of frozen coal to ensure the supply of coal for power generation. Besides, we upgraded the monitoring level of major operations during the heating season, to improve the quality of monitoring, in a bid to fully identify and reduce operational risks and guarantee sufficient heat supply for the public. In 2021, we supplied a total of 161 million GJ of heat.

#### Guaranteeing heat supply with concerted efforts

#### Hebei Fengrun Thermal Power Company

The company has taken innovative measures to investigate hazards in equipment on coal unloading lines, such as the dumpers and samplers, and restored the normal operation of the coal unloading equipment timely to keep orderly coal supply. It has also vigorously carried out the heat tracing transformation for important measuring points of the generating units, realizing thoroughly uniform heating.



Hebei Fengrun Thermal Power Company guarantees heat supply in snowy weather.

#### Hebei Baoding Thermal Power Plant

Committed to heat supply for urban Baoding totaling 9.6 million square meters, it conducted generating unit inspection and maintenance before the heating season to comprehensively investigate potential equipment hazards, and replace and maintain related equipment, well preparing the heat supply.



Hebei Baoding Thermal Power Plant conducts generating unit inspection and maintenance to comprehensively investigate potential equipment hazards.

### Supplying Power and Heat for the Winter **Olympics**

In 2022, the Beijing 2022 was held in Beijing, the world's first city to host both the Summer and Winter Olympic Games. Keeping in mind the big picture, we shouldered the sacred mission of supplying electricity and heat for the Games, and acted upon the concept of "organizing a green Olympic Games" through strict implementation and coordinated arrangements.

#### Beijing Gaojing Thermal Power Plant

In order to guarantee power supply for the capital during Beijing 2022, the power plant has formulated and issued in advance the Work Plan on Ensuring the Safety and Stability of Beijing 2022 Winter Olympics and Winter Paralympic Games. Consisting of one master plan and ten sub-plans, it would be implemented in five stages. The plant staff also served the Beijing 2022 as volunteers. They were stationed at service stations at Winter Olympics cultural squares to provide publicity and information consulting, and clean the environment for local residents, contributing to the smooth operation of the city.



Hebei Zhangjiakou Power Plant inspects equipment safety to ensure power supply for Beijing 2022.

#### Hebei Zhangjiakou New Energy **Business Unit**

The business unit has strengthened equipment management and hazard investigation, and formulated hazard source analysis and control measures to enhance the safety of operations, laying a solid foundation for power supply for the Beijing 2022.



inspect wind turbines.

### Serving the Winter Olympics with all-out efforts

#### Hebei Zhangjiakou Power Plant

As a core enterprise to supply power for the Games, the power plant has strengthened work safety management while adopting strict COVID-19 response measures. Meanwhile, it has vigorously coordinated shipments of coal in medium and long-term supply contracts to increase coal storage and ensure the completion of power generation tasks during the Games

The inspection team consisted of Party members from the Hebei Zhangjiakou New Energy Business Unit

# Feature 2: **Expediting the Green Transformation**

Datang Power practices a new development philosophy and serves a new development paradigm in the new development stage for high-quality development, and contributes to the carbon peak and neutrality goals(China's 30-60 Decarbonization Goal). We have scientifically formulated the corporate development plan during the 14th Five-Year Plan period, planned the development of new energy projects, and pressed ahead with the transformation and upgrading of traditional thermal power plants to comprehensively advance the transition to green and low-carbon development.

### Drawing on the Advantages of New Energy Resources

Focusing on key issues, we continue to promote the transition to green and low-carbon development featuring the complementary of multiple energy sources, efficient coordination, and the use of intelligent technologies.

#### Inner Mongolia Tuoketuo Power Generation Company contributes to China's 30-60 Decarbonization Goal by integrating the complementary advantages of multiple energy sources

On October 20, 2021, Datang Power Tuoketuo New Energy Delivery Project started construction. The project is one of the first batch of large-scale wind power and photovoltaic base projects and also the first multienergy complementary project built on existing thermal power channels to bundle and transport electric power generated from new energy sources in China. It marked the transformation of the world's largest inservice thermal power plant into a multi-energy (wind, solar and thermal power) complementary integration base. The project is of great significance for accelerating the development of new energy and achieving the 30-60 Decarbonization Goal. With a total investment of RMB 12 billion, the project will have an installed capacity of 2 GW. After the project is put into operation, more than 5 TWh of "green power" will be generated every year, which will save over 1.7 million tons of standard coal equivalent, and reduce more than 4 million tons of carbon dioxide emissions.



Groundbreaking ceremony of the New Energy Delivery Project of Inner Mongolia Tuoketuo Power Generation Company

Promoting the Low-Carbon Transformation of Traditional Coal-Fired Power Plants

Exploiting its strengths in coal-fired power generation, Datang Power promotes the coordinated transformation of "energy saving and consumption reduction of coal-fired power generation, heat supply and flexible transformation and manufacturing" based on the coal-fired power plants and public utilities, and accelerates the capacity expansion and upgrading of coal-fired power generation, thereby injecting new vitality into the old plants, and improving the quality and efficiency of coal-fired generation.

#### Tianjin Panshan Power Generation Company: Completing 20% peak load regulation experiments

In order to enhance the flexibility of power generation and tap the potential of generating units, Tianjin Panshan Power Generation Company actively optimized the deep peak load regulation technology. On August 12 and 13, 2021, the two generating units of the company completed the 20% peak load regulation experiment respectively. During the period, combustion in the units remained stable and various parameters were normal. The company also carried out deep peak load regulation experiments under various modes, such as heat supply in winter and electricity consumption peak in summer, in an effort to gradually improve parameter adjustment in multiple modes and achieve the "flawless" deep peak load regulation throughout the year.



The operators of Tianjin Panshan Power Generation Company record the experimental data of the 20% peak load regulation experiment of No. 4 Unit, trying to continuously strengthen primary frequency control and give full play to the fundamental role of coal-fired generation in the power generation sector.

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## Focusing on Collaborative Innovation to Enhance Value Creation

Innovation is the inexhaustible momentum for development. Datang Power strives to become an innovation-driven company by refining the innovation management system, continuously optimizing our innovation teams, and promoting the multi-dimensional applications of technological achievements. We respond to requirements on market reforms in power industry, optimize the electricity pricing structure, and establish mutually beneficial relationships with stakeholders to jointly create market value and create a better life.

**4** Industry standards revised





## **Promoting** Innovation-Driven Development

While improving innovation systems and mechanisms, we strengthen R&D teams, make breakthroughs in major projects, better the mechanism for R&D investment and achievement commercialization, and manage to resolve key technical problems. Devoted to promoting innovation projects and digital transformation, we strive to realize innovation-driven development.

### Nurturing an innovation culture

We continue to improve the innovation management system and advance innovation systems and mechanisms to consolidate the foundation for technological innovation. By increasing investment and building platforms, we coordinate innovation capability building with the Company's development.



### Innovating in multi-dimensional channels to encourage employee development

Jiangxi Fuzhou Power Generation Company encourages competition for job posts. In 2021, it conducted 20 rounds of job reshuffle through competition, where 138 employees were transferred to new positions or got promoted. The company also organized 16 skills competitions on the simulation of the centralized control system, finding the coupling center, calibration of electricity meters, valve grinding, etc. It also organized one thermal and electrical competition for CDT's Jiangxi Branch, and 10 participants were awarded "Technical Expert" or "Highly Skilled Employee." A total of 1,120 participants have engaged in the above competitions.

The company has built the skills competitions into platforms for employees' learning and demonstrating techniques, and for talents standing out. The competitions have improved engagement of front-line employees, effectively increased the distribution of remuneration to front-line positions in production, operation and development, making front-line employees feel their efforts worthy.



Jiangxi Fuzhou Power Generation Company conducts employee skills competitions.

### **Building innovation teams**

National Technical Experts

Craftsman in Power Industry

Included in Training Support Plan for

Craftsman of Great Power in Central

Enterprises

Technical Expert of Central Enterprises

3

The high-guality innovation workshops are being built at Datang Power with excellent innovative talent teams. We value talents' role in thriving the Company, offer more targeted and effective staff training as well as training programs for transferred personnel. To build innovative teams on an ongoing basis, we expand channels and build platform for talent growth to facilitate the development of professional and technical personnel.

Talent training and recommendation is also valued to give full play to the leading roles of high-level professionals. In addition, we continue to build multiple career development paths especially for technical personnel and those with production skills. In 2021, five employees were awarded Technical Expert and nine were granted the honor of Practitioners of the Power Industry with Outstanding Skills, two received the title of CDT Technical Expert and six received the award of Highly Skilled Employee. Two employees became Technical Expert and Highly Skilled Employee of the Nonferrous Industry respectively, and seven received the title of Provincial Technical Expert.





Ni Xin (right), an employee of Inner Mongolia Tuoketuo Power Generation Company, was awarded the "2021 Outstanding Contribution Award for Skilled Talent Cultivation in the Electric Power Sector" by China Association of Electric Power Education. It is the highest award for skilled personnel cultivation in China's electric power industry.

Hebei Zhangjiakou Power Plant holds the 2021 skills competition

### Promoting R&D results application

We take actions to transform R&D results into practical applications. By widely applying R&D results to actual operations, we have effectively addressed a range of technical problems, and greatly improved the Company's economic efficiency and power output, promoting our second undertaking.



Chongqing Pengshui Hydropower Company has completed the Phase construction task of the "five centers and two platforms" of the smart power plant project. The company has obtained 14 utility model patents, 2 patents for inventions, 3 software copyrights, and 7 scientific and technological achievements. In 2021, in the electric power industry, the project was awarded the third prize of the Innovation Award for Workers and the Award for Demonstration Projects. In addition, the project has become one of the internet pilot demonstration projects selected by the Ministry of Industry and Information Technology, and was exhibited at the Smart China Expo 2021.



The multi-energy centralized control center at Chongqing Branch

Chongqing Wulong Hydropower Company has built the "1+4" innovation sites for model workers' innovation, in which "1" refers to the exhibition room and "4" stands for four practice workshops. The company has completed 117 final reports on innovation, achieved the application and transfer of 16 innovative technologies, and obtained 4 patents for inventions and 40 utility model patents.



Hebei Baoding Thermal Power Plant has made solid progress in building multiple channels for employee development. The company has selected 10 experts and craftsmen who are expected to play leading roles, one of whom was chosen through the green channel. The skills competition and on-the-job training have cultivated employees' awareness of refining techniques and studying business. The company has also introduced incentive schemes based on employee performance appraisals to fully engage and motivate employees.Various types of talents have been fostered and the proportion of employees with qualification certificates increased. Its 59% employees have professional qualifications, and 52% of them possess senior or intermediate qualifications.

#### The smart power plant project of Chongqing Pengshui Hydropower Company

Forging Ahead with Stakeholders i Promoting Harmony and Prosperi

Building a Stro Development

to:

Safe

### Deepening Win-Win Cooperation

Datang Power upholds open cooperation and attaches great importance to safeguard customer information. We strongly oppose unfair competition and commercial bribery, and strengthen privacy management to prevent the disclosure of commercial secrets. We have established win-win mechanisms and platforms with stakeholders, and are committed to creating a first-class business environment that is transparent, high-quality and mutually beneficial.

### Optimizing supplier management

We continue to improve the procurement management system, consolidate its foundation and strengthen the supervision, thereby making procurement more standardized and transparent in all aspects. When procuring fuel, the Company fully considers suppliers' environmental and social impacts, and cultivates their sense of responsibility. By deepening cooperation with large coal companies, we improve the fuel pricing mechanism, reasonably control inventory, and build a low-cost supply chain. While securing coal supply and protecting the environment, we deepen scientific coal blending and combustion to improve comprehensive economic benefits.



In the face of insufficient coal supply and soaring coal prices, Beijing Datang Fuel Co., Ltd. made good use of long-term coal supply contracts in maintaining stability, and actively developed new long-term coal suppliers. The company cooperated with Huaihe Energy Group in transporting coal to Tangshan Beijiao Power Station in open-top containers, effectively reducing environmental risks, and securing energy supply during Beijing 2022.





In response to national policies, Anhui Huainan Tianjia'an Power Station guaranteed power and heat supply and strove to increase the coal inventory. With the help of the provincial energy bureau, it strengthened communication with suppliers in Shanxi Province and ensured the arrival of coal trains. Facing with the supply shortage of solar PV modules and equipment, Anhui Branch of Datang Power coordinated with related suppliers, including Longi Solar Technology Co., Ltd. and Sineng Electric Co., Ltd. to ensure stable supply of necessary materials and equipment. It guaranteed the procurement and timely delivery of equipment for solar PV projects in Feidong and Fengyang, which laid the foundation for putting the project in production as scheduled.



Developing the industry's first dual-purpose car dumper for open-top container and general open wagon

In March 2021, the Party Branch of the Equipment Department of Hebei Fengrun Thermal Power Company and Dalian Huarui Heavy Industry Group (DHHI) jointly completed the design, installation, commissioning and operation of the first dual-purpose car dumper for both open-top container and general open wagon (FZ1-CJ-1) in the industry. The new equipment has greatly improved the coal unloading capacity at the railway, and is expected to save millions of yuan in costs every year, marking a major step for developing a green logistics system.



### Exploiting long-term coal supply contracts' role in maintaining stability and developing win-win cooperation

#### Communicating with suppliers closely to ensure timely deliveries

### Building win-win partnerships

Datang Power actively cooperates with various stakeholders such as governments, enterprises, suppliers, etc., and advocates openness and mutual benefit. We create high-quality partnerships that bring opportunities, and work with stakeholders to create an inclusive and win-win business environment.



#### Zhejiang Branch reaches a cooperation agreement with Intime Department Store

Zhejiang Branch picks up price signals through green power trading, a brand-new independent market, to explore the commercial and social value of zero-carbon green power. On November 22, 2021, Intime Department Store and Zhejiang Branch signed a cooperation agreement on green power trading in Hangzhou. 30GWh of green power were traded between two sides. The agreement marks the first regular green power transaction in Zhejiang Province since China began to pilot direct trading of green power. This transaction can ensure green power supply for all the 25 outlets of Intime Department Store in Zhejiang Province, planning to save about 9,000 tons of standard coal equivalent and reduce carbon dioxide emissions by about 24,000 tons, which is equivalent to planting 120,000 trees.



Intime Department Store signs a cooperation agreement with Zhejiang Branch on green power transactions.

### Increasing Market Value

Facing the challenges and opportunities brought by reforms in the electric power market, we have been deeply involved in reforms and adapted to market changes, gradually improving the ability to expand in the power market.

In 2021, as the market-oriented reforms in the electric power sector were deepened across the country, we refined marketing management, exploited the time value and spatial value of electricity, strengthened the construction of the two-tiered marketing system, and vigorously increased our market share.



Zhejiang Branch took immediate actions in response to major policy changes in the gas turbine market. It assigned the marketing department to coordinate the resources of all primary-level units, achieving an increase of RMB 23.5 million in profit and generated an extra of 230GWh of electricity than planned. Zhejiang Branch managed to make the gas turbines work for 249 hours longer than the provincial average, ranking first among all power generation groups. By reducing power loss during power generation, it avoided RMB 239 million loss for gas turbine operations, becoming the only power generation enterprise in Zhejiang province to complete point-to-point, cross-provincial and cross-category power supply replacement. Its marketing department carefully calculated the profit margin and fulfilled its responsibilities in market exploration. The department stepped up marketing efforts and actively communicated with potential users, while Datang Zhejiang New Energy Co., Ltd. collected electricity consumption data and facilitated transactions. In Zhejiang province, the Branch is also the only enterprise achieving the normalized transactions of green electricity through independent bilateral negotiations, which has been highly praised by the energy bureau in Zhejiang.



#### Strengthening the role of marketing personnel and expanding the user base

orging Ahead with Stakeholder: romoting Harmony and Prospe

# **Building a Strong**

Major casualties occurred in 2021



### Consolidating the Foundation for Work Safety

Work safety is our top priority. We put the focus of safety on the primary level based on our bottom-line thinking and a strong awareness of potential dangers. Supported by an efficient and comprehensive safety management system, we improve equipment safety and raise the awareness of work safety. We strive to strengthen the prevention and control responsibilities on work safety during our business development and realize comprehensive control over safety issues.



### Improving the safety management system

In response to General Secretary Xi Jinping's important instructions on work safety, we publicize and implement the latest edition of the Work Safety Law, and act in line with the "work safety first" principle. We have organized work safety actions, including the special hazard inspection campaign from six aspects, made a checklist of responsibilities for production leaders of grassroots enterprises to specify the work safety tasks of each production personnel, and gradually promoted the establishment of the safety management system.



Datang Power holds a meeting of the Work Safety Committee.

#### Optimizing the safety management system and establishing a safety education and experience base

Chongqing Wulong Hydropower Company formulated a task checklist of operation and maintenance to ensure that the person in charge and the supervisor fulfill their responsibilities strictly, efficiently, meticulously, quickly and innovatively. It also helped raise the sense of responsibility of employees at all levels and improve the collaboration and work efficiency of team members. The company organized a meeting of the safety committee on implementing China Datang Corporation's instructions on work safety, issued the Five Major Rectification Tasks of Wulong Hydropower Company, which clarified the 46 tasks, and completed the tasks as planned. Through these efforts, the company further enhanced the safety awareness and skills of employees and registered zero injuries related to accidents in 2021.

Chongqing Wulong Hydropower Company also built a safety education experience base in a bid to improve employees' safety awareness and skills. The base consists of a typical accident injury experience area, a VR experience area, a personal protection equipment and tools experience area, and a first aid experience area, which presents the whole safety education process covering accident experience, safety protection, and emergency rescue.

### Offering safety training

To secure the safe development, we earnestly promote the fulfillment of safety responsibilities and organize safety-related activities, such as lectures and emergency drills. We have compiled the Collection of Effective Work Safety Management Systems (2021 Edition) to guide our subsidiaries for standardized work safety management. As to production personnel from grassroots enterprises, we offer online training on the identification of risks, hazard inspection, and case studies. By producing training videos about typical safety cases and fire control and organizing diversified theme activities, we create a favorable atmosphere for work safety publicity that helps improve the overall safety awareness of employees.



effective.



Ecology and Environment



#### Joint emergency drill for a hydrochloric acid leakage accident

On November 3, 2021, Hebei Zhangjiakou Power Plant invited representatives from Zhangjiakou Municipal Bureau of Ecology and Environment to participate in a joint emergency drill of a hydrochloric acid leakage accident. The drill aimed to improve the environmental risk awareness of the whole plant and ensure stable security and environmental protection work during the Beijing 2022. The drill focused on the on-site disposal of hydrochloric acid leakage, first aid for injuries, and prevention of environmental pollution. All divisions acted promptly and handled the accident in properly by collaboration. The drill turned out to be quite



The joint emergency drill organized by Hebei Zhangjiakou Power Plant and Zhangjiakou Municipal Bureau of

Fall protection VR safety training of Chongqing Wulong Hydropower Company

### Ensuring the safe operation of equipment

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In 2021, four generating units of the Company were named Class-A Reliable Generating Units.

We have strengthened the management of high-risk operations, and released eight risk warning notifications concerning highly risky operations, including working at heights, fire operation, and lifting operations involving heavy materials or equipment. By upgrading risk levels in risk management, appointing project owners as shift leaders, monitoring project sites with security cameras, and conducting on-site supervision, we have effectively controlled operational risks. We also advance the comprehensive management and regular maintenance of equipment to ensure safe operation and improve the conditions of equipment.

	2021 National Class-A Reliable Generating Units
600MW Level	No.6 Unit of Inner Mongolia Tuoketuo Power Generation Company
300MW Level	No.12 Unit of Inner Mongolia Datang International Hohhot Thermal Power Generation Company Limited
300MW Circulating Fluidized Bed	No.1 Unit of Datang Wu'an Power Generation Co., Ltd. No.2 Unit of Datang Jixi Second Thermal Power Co., Ltd.

## **Stabilizing Energy Supply**

As an energy company, we make every effort to ensure energy supply for major political events. For example, we guaranteed power supply for the centenary celebration of the CPC and the annual sessions of the National People's Congress and the National Committee of the Chinese People's Political Consultative Conference, made active preparations for guaranteeing energy supply for Beijing 2022 Winter Olympics, and ensured sufficient heat supply for users during the heating season.



Devoted to ensuring stable power supply

Hebei Tangshan Thermal Power Company makes power supply preparations for major events in advance in every detail of its routine to control risks and ensure the implementation. It also formulates power supply and contingency plans prior to major power supply missions. In 2021, the company formulated the Plan for Power Supply Security During Beijing 2022 and issued ten targeted work plans and two emergency plans to take measures for foolproof power supply.



The company steps up efforts in guaranteeing sufficient fuel supply.

## Case

Wind farm projects generate green power for Beijing 2022

Hebei Zhangjiakou New Energy Business Unit made all-out efforts to generate green power for Zhangjiakou Zone of Beijing 2022. The Wudeng Mountain Wind Farm, the Shandian River Wind Farm, and the Suola Wind Farm under the business unit generated 4 GWh of electricity during the green power transaction period of Beijing 2022 from July to December 2021, accounting for 37.1% of the total transactions. With stable supply of green power for the grid, the business unit contributed to a green Olympics.



### Safeguarding **Occupational** Health

To protect the health and safety of employees, we have established effective staff health and safety mechanisms. Annual employee health examinations and special health examinations for employees in special positions are provided to realize dynamic management of employee health files. We organize activities, like health knowledge promotion and training to enhance employees' health awareness, and promote healthy lifestyles, helping alleviate the pressure and improve the physical and mental health of employees. In addition, we offer labor protection and preventive supplies to employees and vaccinate employees in an orderly manner.

In 2021, all employee received health examinations within the Company.



service for employees.

A wind farm project of Hebei Zhangjiakou New Energy Business Unit

Hebei Tangshan Thermal Power Company hires professional psychological consultants to provide counseling

## Pursuing Low-Carbon and Eco-Friendly Development by Accelerating Green Transformation

To realize green development, Datang Power practices a new development philosophy and serves a new development paradigm in the new development stage for high-quality development, and contributes to China's 30-60 Decarbonization Goal. We dedicate to developing clean energy resources and accelerate the upgrade of thermal power projects to save energy and reduce consumption. While tackling climate change, we practice the Convention on Biological Diversity, and reduce environment pollution.



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### **BO,27**% Percentage of the installed capacity of clean energy and renewable energy projects



## Developing **Clean Energy**

We continue to advance the transition of energy mix to speed up green transformation. We endeavor to develop clean energy to build a new energy development paradigm comprising wind, solar and hydro power, so as to form a better energy mix.

#### Case Serving the new pattern of regional development with offshore wind power projects

The Datang Nan'ao Lemen I Offshore Wind Farm Project located near the Lemen Islands in the southern waters of Nan'ao County, Shantou City, Guangdong Province, is the first offshore wind power project completed and put into operation in Shantou City. The 18km2 wind farm has an installed capacity of 245MW. It is expected to generate 751GWh of electricity each year and a total output value of RMB 565 million. Compared with traditional coal-fired thermal power plants with the same power generation capacity, the project can save about 240,000 tons of standard coal equivalent and reduce carbon dioxide emissions by 450,000 tons per year. It is of great significance to promoting the upgrade of Shantou's energy mix and a new industry development pattern that emphasizes the development of new energy, new materials, newgeneration information technology, textile and clothing, toys and creative products, and healthcare.



An offshore wind power project of Guangdong Branch

## Improving the **Efficiency** of Coal-Fired **Power Plants**

We advance the flexible designs of coal-fired power plants to improve the efficiency of generating units and reduce coal consumption by power generation. In 2021, Datang Power's 19 generating units won awards in the national energy efficiency evaluation of thermal power generating units, two of which won the title of National Reliable Power Generation Units - Gold Medal.



Hebei Tangshan Beijiao Thermal Power Company, focusing on efficient management and equipment operation optimization, completed 94 optimization tasks related to sliding pressure curve and combustion activities. The SO2, NOX and soot emissions thus was continuously decreased, contributing to air quality improvement in Tangshan City.



Hebei Tangshan Beijiao Thermal Power Company



70000

65000

60000

55000

50000

45000 -

64.423

2019



Installed capacity of hydropower projects (MW)



#### Equipment renovation helps improve efficiency and reduce emissions r

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## **Saving Energy** and Reducing Consumption

172.5 million tons Total water consumption

0.85 Comprehensive water consumption per kWh of power generated

**7,600** tons Total oil consumption

**376**tons Oil consumption per GWh of power generated

Aspiring to be a resource-saving enterprise, we set emission targets and develop pathways to strengthen energy consumption management, enhance energy utilization and waste recycling, and reduce the discharge of pollutants while improving business efficiency.

#### Emission target

Further improving the emission management system, making significant progress in green, low-carbon and high-quality development, striving for new achievements in the battle against pollution prevention and control, significantly improving the ability to manage and control ecological and environmental risks, and eliminating potential environmental pollution incidents

#### Implementation pathways

- Setting rules for environmental supervision and management to ensure smooth operation of the governance mechanisms at all levels of subsidiaries regarding environmental risks and hazards
- Clarifying annual targets for environmental assessments, identifying related indicators for each subsidiary, and supervising the decomposition and implementation of the indicators
- Implementing the responsibility system for systematic environmental protection and supervision, and strictly enforcing discipline accountability
- Directly supervising the handling of major environmental issues and urging all levels of subsidiaries to establish and implement the supervisary system



Comprehensive power consumption rate



millon tons Standard coal equivalent consumption

291.72

Standard coal equivalent consumption per kWh of power generated



In response to the requirements of the Hebei Province Three-Year Action Plan for Promoting Water-Saving Enterprises in the Industrial Field (2021-2023), Hebei Baoding Thermal Power Plant has increased the use of reclaimed water as circulating water, launched regular troubleshooting of leaks in the underground pipe network, and optimized the water supply system to save water. In 2021, the plant realized decreases in both water consumption and the total water bill, and was rated as a water-saving enterprise of Hebei Province in 2021



Beijing Tongzhou Technology Co., Ltd. realized a year-on-year increase in fly ash sales in 2021, contributing to the sales increases in solid waste of power generation companies in China. The company was honored as a backbone enterprise for comprehensive utilization of bulk solid waste by the National Development and Reform Commission and won the award of 2021 Leading Enterprise in China's Solid Waste Industry.



Hebei Zhangjiakou Thermal Power Company adopts flexible emission reduction measures to control unorganized emissions, effectively reducing the production of pollutants.

Hebei Wangtan Power Generation Company steps up efforts in freshwater production through seawater desalination, saving more than 500,000 tons of tap water annually.

#### Promoting comprehensive governance of water systems

### Addressing **Climate Change**

In respond to China's 30-60 Decarbonization Goal, we have identified the risks and opportunities brought about by climate change and related policies. By standardizing carbon management, developing carbon capture technologies, and carrying out transactions in the carbon market, we aim to propel the low-carbon and highquality development.

#### Carbon Management -

- Guiding, supervising and evaluating the work related to carbon compliance of subordinate companies
- Improving GHG emission management mechanism, and establishing relevant departments to approve and report GHG emission data of subordinate companies
- Examining and approving agreements related to carbon performance of subordinate companies according to different levels of management authorities
- Subordinate companies designate personnel to provide materials required for carbon performance.



We helped Beijing become a vanguard in carbon neutrality, proposed "Carbon Neutrality" Action Plan in Beijing and the Datang Power Sea Wind Action Plan for the Beijing-Tianjin-Hebei Region, and created the "Carbon Neutral" Demonstration Park of the Capital City in Huairou Science City.





We assisted Tangshan City in its comprehensive green transformation and development, building Tangshan into a national-level carbon-neutral demonstration city. We proposed implementation pathways and action plans from increasing the supply of low-carbon alternative energy resources and promoting green and low-carbon transformation.

3.617 million tons

Total carbon trading volume by

Datang Power throughout the year

protection Conservation

Engaging in

**Biodiversity** 



Commitment to biodiversity conservation. Chongqing Pengshui Hydropower Company, as an "ecological barrier" along the Yangtze River Economic Belt, has played a significant role in biodiversity conservation in the region. It has added luster to the Baili Landscape Gallery along Wu River with remarkable achievements in biodiversity conservation and has been hailed as a shining pearl along Wu River. With its outstanding contributions to the green economy of China, Chongqing Pengshui Hydropower Plant has won the title of Beautiful Power Plant in China.

Fish proliferation and release activities. The year 2021 marked the 12th consecutive year for Chongging Pengshui Hydropower Plant to release fish fry in nearby rivers. By the end of 2021, it had released over 5.6 million fish fry of myxocyprinus asiaticus, procypris rabaudi, sinilabeo rendahli, spinibarbus sinensis, onychostoma simus, and other species. Its efforts have helped protect germplasm resources, population diversity and rare fish species unique to the Wu River, and conserve the fish resources in the Yangtze River Basin, making a due contribution to the Yangtze River Coordinated Protection Strategy.



Chongqing Pengshui Hydropower Station

Biodiversity is the basis for human survival and sustainable development. We actively identify possible impacts of our business on biodiversity and carry out ecological restoration, environmental protection publicity to conserve biodiversity and achieve the symbiosis between corporate development and environmental

#### Co-existing with the water environment harmoniously

Extensive publicity activities. Environmental management personnel of the plant, together with local fishery law enforcement officers, has launched extensive publicity on fish protection knowledge and relevant laws and regulations, such as the ten-year fishing moratorium in the Yangtze River Basin, in order to encourage locals to play their roles in protecting fish resources in Wu River. Remarkable effect has been achieved.

## **Putting People First to Share the Fruits of Development**

Putting people first, Datang Power fully respects the basic rights and interests of employees and has built platforms for employee development. We care about their work and lives, strive to realize common development with them.





## Protecting **Employees' Rights and** Interests

5,793 Female employees

In strict compliance with the Labor Law and the Labor Contract Law, we standardize recruitment procedures, protect the privacy and information security of employees, and safeguard employees' rights and interests. In 2021, the Company had a total of 32,641 employees and signed labor contracts with all employees; the employee turnover rate was 4.2%.

### Equal employment

In line with the principle of law-based and equal employment, we prohibit child labor and eliminate all forms of forced labor and discrimination. Equal employment opportunities and labor security shall be provided for all employees regardless of their gender, ethnic group, religious belief and cultural background. Based on the principle of "selecting excellent and suitable candidates," we have improved the recruitment of fresh graduates. In 2021, we hired 5,793 female employees and 1,650 ethnic minority employees.

#### Staff structure



In 2021, the social insurance coverage rate for employees was 100% at Datang Power.

## Remuneration and benefits

At Datang Power, both men and women shall get equal pay for doing equal work. Besides, we continue to improve payroll management and salary payment policies to ensure salaries are paid in full and on time. Incentive and restraint mechanisms are established to link performance with remuneration. The multi-tiered social security system has been improved to ensure basic old-age insurance, basic medical insurance, medical insurance, employment injury insurance, maternity insurance, unemployment insurance, housing provident fund, supplementary pension, and supplementary medical insurance for all employees.

### **Democratic management**

In 2021, all employees joined the labo r

union.

We standardize democratic management, improve the systems of the workers' congress and disclosure of company affairs, and uphold employees' rights to know, to participate and to supervise. We listen to employees' voices, communicate with them through inspections by employee representatives, grassroots surveys and inspections, etc. and respond to employees' concerns efficiently.









## Supporting **Employee** Development

We continue to optimize the allocation of human resources by cultivating high-performing talents and fully stimulating the vitality of personnel, thereby promoting the high-quality development of the Company.

We have developed an employee training system, based on which we launch training programs for all employees, and carry out key projects, such as management skills improvement, new employee training, and practical training in line with the principle of "on-demand training." We take employee development as a key task of the Company, and train electricity spot pricing staff, thermal power employees possessing two certificates, and wind power operation and maintenance personnel through "theoretical improvement + onsite training." In addition, we have built career growth platforms and a training App for employees to meet their needs for fragmented learning, comprehensively improving training results.

We continue to improve the recruitment and appointment system, and refine career development channels with a sound promotion mechanism. We strengthen the building of the leadership team by selecting and training outstanding young cadres, and continuously improve their ability to perform their job duties.

91.5 hours Average training hours for employees In 2021, we invested RMB 99.82 million in employee training, with each employee receiving 91.5 hours of training on average. We launched 12,520 training programs for 669,928 trainees in total. Among them, 183,074 trainees were on management skills and professional skills, 470,125 trainees were on production skills, and 16,729 trainees attended other training projects.



Inner Mongolia Tuoketuo Power Generation Company's targeted training based on maintenance issues.

## **Caring for Employee** Life

We take good care of our employees and actively respond to the needs of frontline employees. In addition to addressing employees' concerns, we try our best to make them feel more satisfied and happier. Committed to building a happy Datang, we focus on solving six most pressing issues. For example, we have built Employee Care Station and Nursery Room to help employees balance their work and life. To optimize our services on "clothing, food, housing, and transportation," we have improved the canteen menus based on employees' physical examination results and diversified dishes to build a satisfactory canteen. Targeting the marriage and love issues of single employees, we have recruited the "warmhearted matchmakers," collected "resumes" of single employees, and organized parties for them. We also conduct various cultural and sports activities to enrich the cultural life of employees and forge a stronger bond of attachment among them.



Hebei Wu'an Power Generation Company organizes rich cultural and sports activities.



Hebei Douhe Power Plant holds the Meet with Sakura in Spring networking event.



An employee from Hebei Zhangjiakou Thermal Power Company writes spring festival scrolls.

## Forging Ahead with Stakeholders in Promoting Harmony and Prosperity

Datang Power upholds the concept of win-win cooperation, and is committed to achieving common development with stakeholders. We devote ourselves to rural vitalization, care about the country, and strive to promote local economic and social development as well as common prosperity. We are devoted to public welfare undertakings and always try to help more people in need.



## Supporting Rural Vitalization

We act upon the Opinions on Aligning Efforts to Consolidate and Expand the Achievements in Poverty Alleviation With Efforts to Promote Rural Vitalization of CDT. In 2021, we allocated RMB 10.155 million to support rural vitalization.

Adhering to organizational leadership and improving the work mechanism. We have established a leading group for rural vitalization and set up an office under the leading group to take charge of its daily operations. We implement a work mechanism to ensure that responsibilities are fulfilled at all levels, and urge our subsidiaries to set specific targets for rural vitalization and take corresponding measures, so as to ensure the effective completion of various tasks.

Improving work efficiency by taking targeted measures. We take targeted measures and explore effective paths for rural vitalization that meet the actual needs of impoverished areas and local people. We continue to deepen the "Five-sphere Integrated" assistance system with characteristics of Datang Power to align efforts to consolidate and expand the achievements in poverty alleviation with efforts to accelerate rural vitalization.

conducts safety inspections of drinking water and

Increasing investment and ensuring fund transparency. We optimize the allocation of funds to rural vitalization, coordinate funds and projects, strictly standardize fund management procedures while strengthening auditing. We also disclose the information about assistance programs and the use of funds, and accept public supervision.

Creating a good atmosphere through publicity. We publicize CDT's rural vitalization policies on the Company's official website, WeChat official account and other platforms. Our employees and retirees as well as people from all walks of life are encouraged to participate in volunteer activities in poverty alleviation. We work with all parties to create a good atmosphere that facilitates rural vitalization.

- After investigating every impoverished family with school-age children, Hebei Douhe Power Plant has assisted 7 students from families registered as living in poverty in applying for the "Yulu Program" to ensure that they could receive education.
- Hebei Zhangjiakou Thermal Power Company has created a directory of school-age children to ensure that the children in Hujia Village have access to compulsory education.
- Inner Mongolia Tuoketuo Power Generation standardized Party branch, and supports them in learning to organize Party member meetings, the Party branch committee, Party group meetings and Party classes, and in building a demonstration
- Hebei Douhe Power Plant gives Party lessons to Party members in local poverty-striken villages, and helps them carry out education activities on "learning Party history, remembering heroes, and
- Inner Mongolia Tuoketuo Power Generation Company assists the agricultural cooperative of Shabutai Village in establishing cooperation with local enterprises, and helps increase the village's collective incomes through co-operatives'
- Hebei Baoding Thermal Power Plant helps local farmers during the busy spring ploughing season.





Volunteers in red vests from Hebei Zhangjiakou Power Plant assist local farmers in the field.



A villager from Shabutai Village, assisted by Inner Mongolia Tuoketuo Power Generation Company, is happy to have a sugar beet harvest.

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Putting People First to S Fruits of Development

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### Promoting Local **Development**

The delegation led by Kou Wei, CDT's General Manager and Deputy Party Secretary, meets with Bao Gang, Member of the Standing Committee of Inner Mongolia Autonomous Region Party Committee and Party Secretary of the Hohhot Municipal Party Committee, to conduct in-depth exchanges on clean energy and the development of wind and solar energy projects, etc.

We integrate corporate development with local economic and social development, and actively carry out

strategic cooperation with local governments and enterprises to boost local clean energy industries.

## Giving Back to the Community

We actively participate in public welfare programs and carry out welfare activities. While continuously improving our volunteer service mechanism, we encourage our employees to involve into volunteer activities and give back to the community.

### Volunteer services to embrace Beijing Winter Olympics 2022

Volunteers from Beijing Gaojing Thermal Power Plant spontaneously served as guides for guests and friends around the world in the Winter Olympics community. They helped introduce the community in both Chinese and English, giving a full picture of the community's charm. Young volunteers from Zhangjiakou, Hebei Province took the initiative to learn volunteer service experience, spirit, as well as the theoretical and practical courses. They guided community residents to protect the environment through concrete actions, jointly embracing Beijing Winter Olympics 2022. Besides, Youth League members from Hebei Xiahuayuan Power Plant engaged in the urban volunteer activities to welcome Beijing 2022. In the context of "Volunteer for Beijing 2022", these youth have showed Datang Power's professional and responsible volunteer image of stressing on decorum, manners and enthusiasm.



Beijing 2022 volunteers from Beijing Gaojing Thermal Power Plant



The delegation led by Liang Yongpan, CDT's Assistant General Manager as well as the Chairman, Secretary of the Party Committee, and General Manager of Datang Power, visits Dong Xiaoyu, Secretary of the CPC Chengde Municipal Committee to conduct in-depth and friendly exchanges on further strengthening cooperation in the clean energy industry.

#### Case Dingfangshui Primary School visits the history museum of Hebei Xiahuayuan Power Plant

To celebrate the centenary of the CPC and pass down the revolutionary spirit to the next generation, Hebei Xiahuayuan Power Plant organized the Datang Morning Star Classroom campaign. During the campaign, students and teachers at Dingfangshui Primary School were invited to visit the Plant. Through sand table models and display boards, they have learnt about old Party members' lifelong devotion to the development of China's power industry and those red memories. The campaign stimulated students' patriotism and further consolidated their aspiration and conviction.



of Hebei Xiahuayuan Power Plant.



Hebei Datang International Fengrun Thermal Power Company organizes a Party building activity on the Dragon Boat Festival.



Students and teachers at Dingfangshui Primary School write down their wishes for the Party in the history museum



Hebei Wangtan Power Generation Company organizes a blood drive activity.

Pursuing Low-Carbon By Accelerating Greet riendly mation

Putting People First to Fruits of Development Share the

### Outlook 2022

The 20th CPC National Congress will be held in 2022. In the year ahead, we will insist on making progress while maintaining stability, pursue high-quality development, adhere to systemic efforts, and seek pivotal progress in management improvement, structural adjustment, breakthrough and difficulty relief in coal chemical industry, and major risk resolution. We will keep improving the level of intrinsic safety, R&D and innovation, scientific management, quality and efficiency, and the level of Party building. We will continuously improve sold electricity sales, investment quality, labor productivity while reducing fuel costs and financial expenses as well as managing corporate loss. Focusing on work safety, quality improvement and transformation, reform and innovation, management improvement, talent team building, and party building, we will persist in seeking improvements in seven key aspects, and make all-out efforts to create a new future. We will take the initiative to improve our business performance, lead the industrial reform and innovation against difficulties, complete our tasks and goals in 2022 with high standards and quality, and pay tribute to the 20th CPC National Congress with outstanding achievements.

#### Creating values with concerted efforts

Maintaining stable business development, carrying forward the special quality and efficiency improvement campaign, and ensuring a good and stable start for the new year to drive the Company's high-quality development

Strengthening cooperation with the government, enterprises and suppliers, continuing to optimize the business environment, and creating a more efficient, transparent and high-quality cooperation platform

 Strengthening cooperation with large coal enterprises, improving the fuel pricing mechanism, and striving for full coverage of medium- and long-term contracts on thermal coal purchases in 2022

#### Sharing development gains

#### ening win-win cooperation

Putting people first and innovating in informance appraisal and incentive hemes, giving full play to the guiding role of informance appraisal and making sure that inployees' compensation is in line with their informance of the same period

providing targeted and effective training, offering more training opportunities for personnel to be transferred to other positions or regions; continuing to expand the channels for talent growth and working harder to discover and cultivate managerial, professional, and operational personnel

Continuously strengthening leadership building and optimizing the team structure; strengthening the training and selection of young leaders, and striving to solve the problem of an aging leadership team Iocal governments and industry peers
 create a friend circle with industry inside
 and outsiders and create an ecosystem f
 high-quality development
 Enhancing volunteer services and encouragi
 employees to participate in volunteer activities to con
 the Company's commitment to the community a
 contribute to a harmonious society

Taking the initiative to meet people's needs or a better life, continuously improving people's livelihood and well-being, and poosting community development

#### Promoting safe development

 Consolidating the safety basis: Safeguarding the red line and baseline of work safety, further improving the dual prevention mechanism, and becoming an enterprise with high-level intrinsic safety

Guaranteeing safe and stable power supply: Making every effort to ensure fuel supply, as well as stable and reliable power and heat supply preventing and resolving energy supply risks, and creating a safe and stable environment for corporate production and operation

 Strengthening COVID-19 response: Strengthening the implementation of regular prevention and control measures, the upgrading pandemic management and control measures, emergency response and contingency measures to ensure safe and stable work safety during COVID-19

#### Accelerating green transformation

Enhancing the development and efficiency of new energy: Vigorously promoting the development of large-scale wind power and solar PV projects to ensure high-quality and efficient production; consolidating the results of power base projects and accelerating large-scale bases under construction.

Accelerating the development of projects in new sectors: Strengthening technical cooperation, carrying out researches on technical pathways, whole-set equipment and business models, and steadily advancing projects in new sectors

 Increasing efforts in energy saving and emission reduction: Strengthening related efforts, deepening energy saving and the transformation of heating projects in an orderly manner, taking energy conservation and consumption reduction as a long-term mission and contributing to the mission with concrete actions to drive sustainable developmen



## **Key Performance Indicators**

### Economic

Indicator	Unit	2019	2020	2021
Net profit	RMB billion	2.977	5.316	-11.896
Total assets	RMB billion	282.1	280.3	296.0
Revenue	RMB billion	94.3	94	101.5
Electricity generation	TWh	265.3	272.6	272.9
Total installed capacity	MW	64,423	68,278	68,770
Market electricity	TWh	128.691	150.588	170.540
On-grid power	TWh	250.5	254.8	257.7
Proportion of clean and renewable energy	%	27.54	29.4	30.27

### Social

Indicator	Unit	2019	2020	2021
Number of on-job employees	人	32,976	33,340	32,641
Number of female employees	人	6,248	6,044	5,793
Number of minority employees	人	1,492	1,675	1,650
Employee turnover rate	%			4.2
Coverage of collective contract	%	100	100	100
Social insurance coverage	%	100	100	100
Employee physical examination coverage	%	100	100	100
Staff training funds	RMB 10,000	6,628	6,599	9,982
Average training hours per employee	Hour		89.6	91.5
Trade union membership rate	%	100	100	100

### Environmental

Indicator	Unit	2019	2020	2021
Total CO <sub>2</sub> emissions	10,000 tons	19,853	23,298	20,071
Direct CO <sub>2</sub> emissions	10,000 tons	19,845	23,290	20,067
Indirect CO <sub>2</sub> emissions	10,000 tons	8	7.8	3.79
CO <sub>2</sub> emission rate *	g/kWh	768.5	765.8	865.6
Total NO <sub>x</sub> emissions	10,000 tons	2.632	3.033	3.083
NO <sub>x</sub> emission rate	g/kWh	0.13	0.13	0.124
Total SO <sub>2</sub> emissions	10,000 tons	1.493	1.776	1.767
SO <sub>2</sub> emission rate	g/KWh	0.07	0.07	0.071
Total dust emissions	10,000 tons	0.275	0.273	0.272
Dust emission rate	g/kWh	0.01	0.011	0.011
Total wastewater discharge	10,000 tons	520.769	517.142	451.114
Waste water emission rate	g/kWh	0.023	0.021	0.018
Total fly ash emissions	10,000 tons	3,165.18	3,159.11	3,303.88
Comprehensive utilization rate of fly ash	%	60.33		69.22
Total gypsum emissions	10,000 tons		549.53	585.82
Comprehensive utilization rate of gypsum	%			74.32

Referring to the national statistical caliber, the calculation method of carbon emission intensity in 2021 is altered from "power generation + electricity converted by heat supply" to power supply only.

### Main energy consumption indicators

Indicator	Unit	2019	2020	2021
Total water consumption	10,000 tons	18,732.80	20,656.69	17,250.29
Water consumption of per kWh of power generated	kg	0.82	0.86	0.85
Total oil consumption	10,000 tons	0.75	0.74	0.76
Oil consumption of per GWh of power generated	ton	329	306	376
Comprehensive power consumption rate	%	5.61	5.52	5.51
Standard coal consumption	10,000 tons	6,483.11	6,392.04	6,442.21
Coal consumption per kWh of power supply	g	296.23	293.17	291.72

## ESG Reporting Guide Index

Level	Indicators	Disclosure	Report page	Notes	Level	Indicators	Disclosure	Report page	Notes
		A. Environmental					B. Social		
	General Disclosure	$\checkmark$	P40-41、P59		27	General Disclosure	$\checkmark$	P47-49	
	KPI A1.1	$\checkmark$	P59		B3:	KPI B3.1			
1	KPI A1.2	$\checkmark$	P59		Development And Training	KPI B3.2	$\checkmark$	P4	
l : missions	KPI A1.3	$\checkmark$	P59			General Disclosure	$\checkmark$	P46-47	
113310113	KPI A1.4	$\checkmark$	P59		B4:	KPI B4.1	$\checkmark$	P46	
	KPI A1.5	$\checkmark$	P59		Labor Standard	KPI B4.2	$\checkmark$	P46-47	
	KPI A1.6	$\checkmark$	P40-41			General Disclosure	$\checkmark$	P27-29	
	General Disclosure	$\checkmark$	P40-41、P59			KPI B5.1			
	KPI A2.1	$\checkmark$	P40-41、P59		B5:	KPI B5.2	$\checkmark$	P27-29	
	KPI A2.2	$\checkmark$	P40-41、P59		Supply Chain Management	KPI B5.3	$\checkmark$	P27-29	
2:	KPI A2.3	$\checkmark$	P40-41			KPI B5.4	$\checkmark$	P27-29	
Use of Resources	KPI A2.4			In 2021, Datang Power did not encounter problems with sourcing water		General Disclosure	$\checkmark$	P32、P38-40	
	KPI A2.5			Power products do not need to consider packaging materials		KPI B6.1			Power generation companies mai guarantee the safe and reliable supply electricity
3: The Environmental	General Disclosure	$\checkmark$	P38-43		Product Responsibility	KPI B6.2			No related situations
nd Natural Resources	KPI A3.1	$\checkmark$	P38-43		Product Responsibility	KPI B6.3			
4: Xlimate Change	General Disclosure KPI A4:1	$\checkmark$	P38 P38			KPI B6.4			companies do not have product verificat and recall procedure
	NPI A4.I		PJO			KPI B6.5	$\checkmark$	P27	
		B. Social				General Disclosure	$\checkmark$		
1:	General Disclosure	$\checkmark$	P46-49		B7:	KPI B7.1	$\checkmark$	P10	
mployment	KPI B1.1	~	P46		Anti-corruption	KPI B7.2	$\checkmark$	P10	
	KPI B1.2	$\checkmark$	P46			KPI B7.3		P10	
	General Disclosure	$\checkmark$	P34-38				1		
2:	KPI B2.1				B8:	General Disclosure	√	P50-55	
ealth and Safety	KPI B2.2				Community Investment	KPI B8.1	√	P50-55	
	KPI B2.3	$\checkmark$	P35			KPI B8.2	$\checkmark$	P50-55	

### **Feedback**

#### **Dear Readers**,

Thank you for taking time to read Datang Power's 2021 Social Responsibility Report (Environmental, Social and Governance Report). To improve our performance and our next report, we hope you can give us some feedback on the following aspects:

Choice questions (Please tick " $\sqrt{"}$  in the corresponding option)

1. Which type of stakeholder are you?

□ Government	Investor	Partner	Peer Peer
Employee	Customer	Community and the public	🗌 Media
□ Supplier / contractor	□ NGO	□ Others (please specify)	
2. What do you think of Datang Power's	social responsibility performance?		
□ Very good	Good	Average	🗌 Poor
3. What is your overall impression of th	e Report?		
□ Very good	□ Good	Average	🗆 Poor
4. How about the quality of social respo	onsibility information disclosed in the repo	ort:	
□ Very good	Good	Average	🗌 Poor
5. How about the report structure?			
□ Very good	Good	Average	Poor
6. What do you think of the layout desig	gn and presentation of the report:		
□ Very good	🗌 Good	Average	Poor
7. Is there any suggestion on our CSR p	erformance?		

#### 8. What kind of additional information do you expect to see in the Report?

### **About This Report**

responsibilities.

Reporting Scope
Organization Scope: unless otherwise specifie
branches.
Reporting period: the period from 1 January 2
mentioned time span.

#### **Reporting Cycle**

This is the 14th annual CSR Report published by Datang Power.

#### **Basis of Compilation**

This Report is compiled in accordance with the Guidelines to the Central State-owned Enterprises Directly under the Central Government on Fulfilling Corporate Social Responsibilities, the Environmental, Social and Governance Reporting Guide of The Stock Exchange of Hong Kong Ltd., the Circular on Strengthening CSR of Listed Companies and the Guidelines on Disclosure of Environmental Information by Listed Companies of Shanghai Stock Exchange(SSE) and the GRI Sustainability Reporting Standards (GRI Standards) issued by the Global Sustainability Standards Board (GSSB).

#### Data Sources

are reported in RMB, unless otherwise stated.

#### **References to Datang Power**

In the report, "Datang International Power Generation Co., Ltd." is also referred to as "We" "the Company", and "Datang Power".

#### **Release Form**

http://www.dtpower.com/ ).



This is a CSR report publicly disclosed by Datang Power, aiming to respond to the expectations of stakeholders and disclose the Company's sustainability concept, management and results in fulfilling economic, social and environmental

> ed, this report covers Datang International Power Generation Co., Ltd. and its 2021 to 31 December 2021, and part of the contents may exceed the above

All financial data in the Report is taken from Datang Power's official internal documents and statistics. All currency amounts

This report is published in both printed and online versions, and the online version is available on the Company's website (

#### Access to the Report

The report is available in both Chinese and English. For a hard copy, please contact:

Tel: 010-88008287 Email: dtgjzys@163.com