



SUSTAINABLE DEVELOPMENT REPORT



Report Guide

Organizational Scope

China Datang Corporation Ltd. and its subordinates.

Period

From January 1 to December 31, 2024 (some contents hereof go beyond the foregoing period).

Issuance Cycle

This is an annual report, i.e., the 19th Social Responsibility/ Sustainable Development Report of CDT.

Glossary

For the purpose of better presentation and readability, "China Datang Corporation Ltd." is also referred to as "We", "the Group", "Group Company" or "CDT" in this Report.

Data Declaration

The data presented herein are entirely cited from formal documents, statements and information platforms of China Datang Corporation Ltd., which are in line with the relevant provisions of *Accounting Standards for Business Enterprises and Accounting System for Business Enterprises* promulgated by the State.

References

- The Guiding Opinions on Central SOEs High Standard Fulfilling Their Social Responsibilities, State-owned Assets Supervision and Administration Commission of the State Council
- Corporate Social Responsibility Reporting Guidelines (CASS-CSR4.0) and Corporate Social Responsibility Reporting Guidelines (CASS-ESG6.0), The Chinese Academy of Social Sciences
- *GRI Standards*, Global Sustainability Standards Board (GSSB)
- ISO 26000: 2010 Guidance on Social Responsibility, International Organization for Standardization
- Financial Stability Board (FSB) Task Force on Climate-Related Financial Disclosures (TCFD) Recommendations
- The United Nations 2030 Sustainable Development Goals (SDGs)

Extended Reading

This Report is available in hard copy and electronic version. Its electronic version can be accessed and downloaded from the official website of China Datang Corporation Ltd. (www.chinacdt.com).

CONTENTS





- 4 Message from the Chairman
- 6 About Us
- Special Responsibility Topic: Paving the Way for Excellence and Reaching First-Class Achievements Through Dedicated Efforts



Energy Supply Support

- 4 Leading Energy Supply Assurance
- Optimizing Regional Energy Supply
- 31 Upholding the Safety Principle



Green Transition

- 8 Accelerating the Energy Transition
- 44 Addressing Climate Change
- 50 Safeguarding the Beautiful Ecology



Sci-tech Innovation

- 56 Strengthening Innovation
 Management
- Striving for Sci-tech Excellence
- Advancing Digital and Intelligent
 Transformation



Value Creation

- 64 Following Compliance and Legal
 Operation
- 66 Deepening Reform and Upgrading
- 69 Upholding the Leading Role of Party Building



Social Responsibility

- 76 Caring for Employees
- 80 Joining Hands with Partners for Win-win Outcome
- 82 Enhancing Social Contributions
- 94 Sustainable DevelopmentManagement
- 98 Future Prospect
- 100 Key Performance
- 102 Indicator Index
- 103 Rating Report
- 104 Feedback







Message from the Chairman

In 2024, under the leadership of the CPC Central Committee with Xi Jinping at its core, the whole Party and the people of all ethnic groups across China united to address changes, implement comprehensive policies, and continuously enhance our national economic strength, sci-tech capabilities, and overall national power. Significant strides were made towards building a modern socialist country. Over the past year, we have thoroughly implemented the spirit of General Secretary Xi Jinping's important instructions as well as the decisions and deployments of the Central Committee. We deeply studied and practiced the spirit of the Third Plenary Session of the 20th CPC Central Committee, furthered the implementation of new energy security strategies, and proactively served the broader picture of constructing a new type of energy system and a new power system. Upholding our original aspirations and brayely shouldering our missions, we seized opportunities and scaled new heights, striving to achieve effective improvements in quality and reasonable growth in quantity. We have thus delivered an outstanding performance to the Party and the nation.

This year, we shouldered our primary responsibilities with courage, reinforcing our position as a pillar of stability in energy supply.

This year, we supported the dual carbon goals and hastened transformation, cementing our status as a national frontrunner in green transition.

This year, we tackled challenges head-on and focused on critical areas, emerging as a pioneer in sci-tech innovation.

We advanced high-quality upgrades to control systems and promoted green electricity delivery to Beijing, enhancing the capital's energy security capabilities. The Tuoketuo Power Plant in Inner Mongolia became an integrated energy base with a total installed capacity of 8.72 GW, combining wind, solar, thermal, and coal power. Key projects, including China's first clean coal-fired power unit with a million-kilowatt capacity paired with photovoltaic synergy in Xinyu, Jiangxi, were successfully commissioned. The Shengli East No. 2 Mine resumed full operations, and Phase II of the Hexigten coal-to-natural gas project—the largest of its kind domestically—was completed and passed performance evaluations. We successfully fulfilled critical tasks such as ensuring energy supply during summer and winter peaks. Compared to the previous year, power generation, heat supply, coal production, and natural gas output rose by 4.81%, 8.87%, 31.95%, and 57.98%, respectively, significantly improving both the capacity and quality of our energy

We advanced the development of a new power system, expediting the shift to renewable energy. The first batch of six national 1 GW-level integrated renewable energy bases were fully operational, several 10 GW-level renewable energy projects, including the Shaanxi-to-Anhui transmission project, achieved decisive breakthroughs. We rapidly expanded strategic emerging industries centered on renewables and strengthened the modern industrial ecosystem. Key projects, including the Southeast Tibet Base, the Tuoketuo Base, and the Loudi photovoltaic + ecological restoration project in Hunan, were selected into the State-Owned Assets Supervision and Administration Commission (SASAC)'s Top 100 Strategic Emerging Industry Projects. Meanwhile, we have set new records in acquiring and securing approvals for new energy indicators, as well as in the scale of project launches and commissioning.

To achieve high-level self-reliance and strength in sci-tech, we established an innovation framework comprising Three Companies and Three Institutes. Significant breakthroughs were achieved in the development and manufacturing of key materials and components for major projects, including the world's first 500 MWclass high-capacity impulse turbine at the Datang Zala Hydropower Station in Xizang Autonomous Region, and the world's first 630 ° C ultra-supercritical double reheat million-kilowatt coal-fired unit in Yuncheng, Shandong. Landmark projects, such as the world's first large-scale commercial application of sodium-ion energy storage technology and the highest single-unit capacity wind power project in ultra-highaltitude regions, were successfully commissioned. Important progress was also made in the localization of wind power and gas turbine control systems.

This year, we optimized quality and efficiency and ensured steady growth, strengthening our role as a cornerstone of value creation.

This year, we embraced responsibility and fulfilled our mission, setting a benchmark in corporate social responsibility.

This year, we upheld our banners and fortified our foundations, solidifying the role of our Party building as a vanguard.

We systematically advanced reforms to deepen improvements, focusing on reducing costs, increasing efficiency, and addressing losses across the board. Total installed capacity surpassed 200 GW, coal production exceeded 30 million tons, and breakthrough progress was made in resolving debt risks in the coal chemical sector. Significant strides were achieved in managing loss-making enterprises and tackling key specialized tasks. All major performance metrics reached historic highs, with total profit and net profit increasing by 35% and 66% year-on-year, respectively. Meanwhile, we fully met the "one profit and five ratios" assessment targets, further enhancing our long-term value creation capabilities.

We advanced major initiatives such as the high-quality co-construction of the "Belt and Road" and China-Africa cooperation for modernization, hosting a series of international conferences and training programs on green, low-carbon development to demonstrate China's commitment and global responsibility. Strengthening international exchanges and innovative collaborations, we established the Silk Road Energy Joint Technology Innovation R&D Center. Operations of coal-fired power, hydropower, and grid projects in Southeast Asia remained stable, while renewable energy projects in Central Asia and Africa were rapidly deployed, with the first batch of solar power projects completed and connected to the grid. Guided by General Secretary Xi Jinping's important instructions on agriculture, rural areas and farmers. we focused on the country's most fundamental interests, steadfastly shouldering the responsibilities of a central enterprise. Additionally, we deepened and solidified the Datang-characteristic "Three-Support and Three-Assistance, and Five-Sphere Integrated Plan" assistance system, sharing the fruits of our development with society.

We implemented the "Four Firsts" mechanism to ensure thorough implementation of General Secretary Xi Jinping's important instructions and directives, promoting the normalization and long-term effectiveness of thematic education. We conducted rigorous disciplinary education, with the Group's experiences and practices in party discipline study featured eight times in bulletins, weekly reports, and the official website of the SASAC. Moreover, we comprehensively advanced rectifications based on the central authority's discipline inspections and national audits, systematizing efforts to enforce strict governance of the Party. By deepening the Party building enhancement project, we cultivated the "Setting the Red Sail: Excellence in CDT" brand, empowering over 4,300 grassroots party organizations, 29,000 party members, and 86,000 employees to faithfully fulfill strategic missions on the frontlines of high-quality development. High-quality Party building continues to guide and safeguard our high-quality development.

Over the past year, we have been deeply encouraged and moved by the warm care and thoughtful guidance of leaders at all levels, the trust and strong support of local governments, the sincerity and cooperation of our partners, and the dedication and selfless contributions of our employees. Many heartwarming moments remain vivid in our minds, filling us with gratitude, inspiration, and renewed confidence.

With unwavering determination and bold strides forward, we are writing a new chapter in our "second entrepreneurship". In 2025, guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, we will remain committed to the goal of building a world-class energy enterprise. Staying true to our mission of "Providing Green Energy For A Better Life", we will vigorously promote the new-era Datang spirit of "Together Strive for Excellence". Embracing the value of "Empowering the World for a Brighter Future", we will shoulder our responsibilities, take concrete actions, and deliver tangible results to contribute even more to the strength and rejuvenation of our nation.





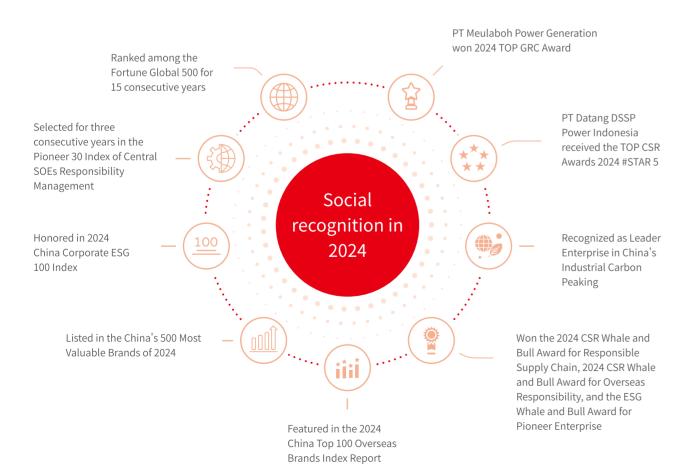
About Us

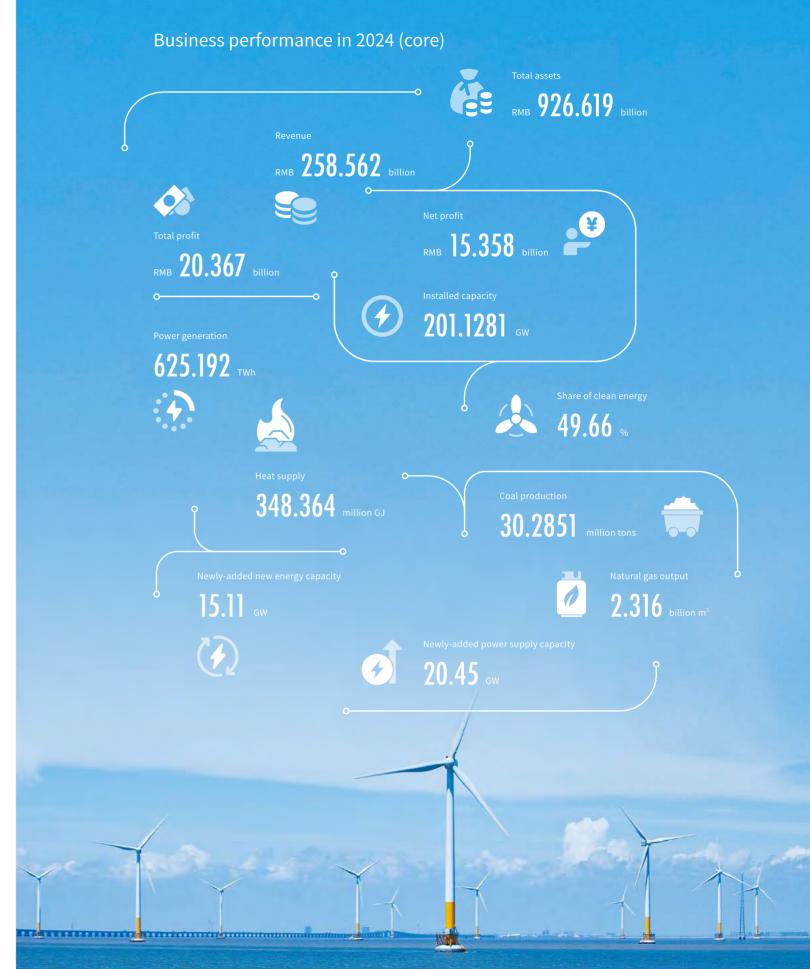
Founded on December 29, 2002, China Datang Corporation ("CDT") is a centrally managed, state-owned super-large energy enterprise with a registered capital of RMB 37 billion. CDT shoulders the critical responsibilities of ensuring national energy security, supporting economic and social development, and contributing to the construction of a beautiful China.

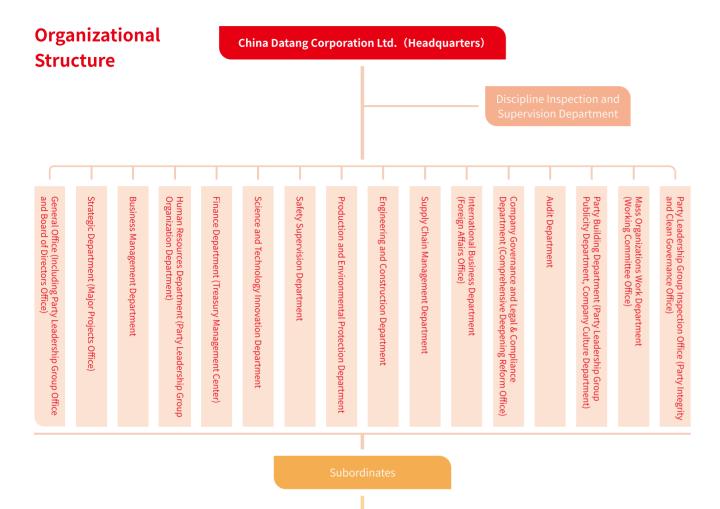
CDT's core businesses span power generation, coal and coal chemical industries, finance, environmental protection, trade logistics, and emerging sectors. Our operational and under-construction assets are spread across all 31 provinces, autonomous regions, and municipalities of China, as well as the Hong Kong Special Administrative Region, and extend to multiple countries and regions, including Myanmar, Cambodia, Laos, and Indonesia. The Group comprises 45 secondary units, including branches and subsidiaries (including five publicly listed companies), and three directly affiliated institutions. With a total installed capacity exceeding 200 GW and nearly 50% of our portfolio in clean energy, we have been ranked among the Fortune Global 500 for 15 consecutive years.

CDT is a "pioneer" in ensuring energy and electricity security for the capital, shouldering over half of Beijing's power supply. We are also the "main force" in providing heating for people's livelihoods in the "Three North" regions, responsible for supplying heat to more than 930 million square meters of residential areas across ten northern provinces. As the "bearer" of China's power industry's revolutionary legacy, we operate key power generation enterprises commissioned during the revolutionary struggle, the construction of China, and the reform and opening-up period. Moreover, we are a "practitioner" of sci-tech progress and innovation in the power sector, owning a number of globally significant, landmark, and demonstrative projects with milestone importance.

Looking ahead, we are committed to the new stage of development, implementing new development concepts, and integrating into the new development paradigm. In alignment with the dual carbon goals, we are taking bold new actions and responsibilities in building a modern energy system and a next-generation power grid. Through these efforts, we are contributing our strength to advancing the great cause of national rejuvenation and building a strong nation through Chinese modernization.







- Datang Huayin Electric Power Co., Ltd.
- Guangxi Guiguan Electric Power Co., Ltd.
- China Datang Corporation Renewable Power Co., Datang Henan Power Generation Co., Ltd.
- Datang Environment Industry Group Co., Ltd.
- The Liaoning Branch of CDT
- The Zhejiang Branch of CDT
- The Fujian Branch of CDT
- The Jiangxi Branch of CDT
- The Guangdong Branch of CDT
- The Chongqing Branch of CDT
- The Ningxia Branch of CDT Datang Shanxi Power Generation Co., Ltd.
- Datang Inner Mongolia Energy Development Co., China Datang Nuclear Power Co., Ltd.
- Datang Jilin Power Generation Co., Ltd.
- Datang Heilongjiang Power Generation Co., Ltd.
- Datang Jiangsu Power Generation Co., Ltd.

- Datang International Power Generation Co., Ltd. Datang Shanghai Energy Development Co., Ltd. Datang International Fuel Trading Co., Ltd.
 - Datang Anhui Power Generation Co., Ltd.
 - Datang Shandong Power Generation Co., Ltd.

 - Datang Hubei Energy Development Co., Ltd.
 - Datang Hainan Energy Development Co., Ltd.
 - Datang Sichuan Power Generation Co., Ltd.
 - Datang Guizhou Power Generation Co., Ltd.
 - Datang Yunnan Power Generation Co., Ltd.
 - Datang Xizang Energy Development Co., Ltd.
 - Datang Shaanxi Power Generation Co., Ltd.
 - Datang Gansu Power Generation Co., Ltd.
 - Datang Qinghai Energy Development Co., Ltd.
 - Datang Xinjiang Power Generation Co., Ltd.

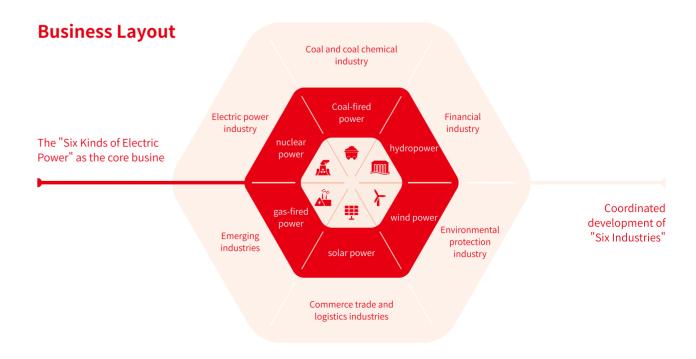
 - China Datang Overseas Investment Co., Ltd.
 - China Datang Energy Investment Co., Ltd.
 - Zhongxin Energy and Chemicals Technology Co.,

- China National Water Resources & Electric Power Materials & Equipment Group Co., Ltd.
- China Datang Corporation Science and Technology General Research Institute Ltd.
- China Datang Technological and Economic
- China Datang Technology Innovation Co., Ltd.
- China Datang Digital Technology CO., Ltd.
- China Datang Finance Co., Ltd.

Research Institute Co., Ltd.

- China Datang Group Capital Holdings Co., Ltd.
- China Datang Group Real Estate Co., Ltd.
- China Datang Group Green and Low-Carbon Development Co., Ltd.
- Digital and Intelligent Center
- CDT Party School (CDT Education and Training

Development The "1264" development strategy of CDT **Strategy** To build CDT into a world-class energy supplier featured by green and low-carbon development, One Vision multi-energy integration, efficient synergy and digital intelligence, and become a leading enterprise in building a beautiful China. To transform from traditional electric To transform from traditional electric power company to green and low carbon energy power company to state-owned capital investment company company By 2025, installed clean energy capacity will Endeavor towards the goals of following Achieve "Dual the national strategy, optimizing the account for over 50%; carbon peaking will be Transformation" achieved by 2030; carbon neutrality by 2060. layout of state-owned capitals, and bolstering industrial competitiveness, forge core competitiveness, and serve as a professional platform for market-oriented state-owned capital operation with capitals as the bond and equities as the foundation. Emerge as the best and strong player Coal-fired power, hydropower, wind power, solar power, gas-fired power, nuclear power. in the field of "Six To strive for coordinated high-quality development of coal and coal chemical industry, financial Kinds of Power" and industry, environmental protection industry, commerce, trade and logistics industries and achieve coordinated emerging industries, with electric power industry as the core. development of "Six Industries" Strong innovation power, strong competitive power, strong development momentum, and Realize goals of "Four strong risk resistance. Strengths" and "Four Excellent market layout, excellent industrial structure, excellent asset quality, and excellent Excellences' talent skeleton.



Company Governance

CDT adheres to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, thoroughly implementing the spirit of the 20th CPC National Congress and the second and third plenary sessions of the 20th Central Committee. We follow the Party's internal regulations and the national legal system, including the Company Law, to deepen the implementation of the "Two Consistent Principles". Meanwhile, we are committed to strengthening the Party's overall leadership while improving corporate governance, clearly defining the responsibilities,

rights, and interests of the Party Leadership Group, the Board of Directors, and the management team. We ensure the efficient implementation of major decision-making processes of "Three major and One big" system and continuously explore the construction of a modern enterprise system with Chinese characteristics that suits CDT's actual needs. This approach aims to achieve a scientific and effective corporate governance system, converting institutional advantages into governance efficiency, and accelerating the development of a world-class enterprise.

Company leaders



Lyu Jun Chairman, Secretary of Party Leadership Group



Zhang Chuangjiang Director of the Board, President, Deputy Secretary of Party Leadership Group



Yu Bo
Director of the Board,
Deputy Secretary of Party
Leadership Group



Wang Ying
Team Leader of Party Discipline
Inspection and Supervision,
Member of Party Leadership Group



Qu Bo Vice President, Member of Party Leadership Group



Tao Yunpeng CFO, Member of Party Leadership Group



Gou WeiVice President, Member of Party
Leadership Group



Li JianweiVice President, Member of
Party Leadership Group



Wang Haiteng
Vice President, Member of
Party Leadership Group

Board of Directors

CDT fully leverages the Board's role in "setting strategy, making decisions, and preventing risks" to improve the modern enterprise system with Chinese characteristics. We have accelerated the development of a scientific, rational, and efficient board, driving effective quality enhancement and reasonable quantitative growth, thus providing crucial support and assurance for operational performance and development.

Board of Directors

Strategy and Investment Committee

Nomination Committee

Remuneration and Assessment Committee Audit and Risk Management Committee

Supervision Committee

Members of Board of Directors



Lyu Jun Chairman, Secretary of Party Leadership Group



Zhang Chuangjiang Director of the Board, President, Deputy Secretary of Party Leadership Group



Yu Bo
Director of the Board,
Deputy Secretary of Party
Leadership Group



Huang Yongda Outside Director



Liu Zehong Outside Director



Wang Shoudong Outside Director



Chen Jianhua Outside Director



Duan Xianghui Outside Director

12 China Datang Corporation Ltd. 2024 Sustainable Development Report 13

Operation of Board of Directors

CDT has established a robust operational mechanism to ensure the Group's Board of Directors exercises its authority and fulfills its responsibilities in accordance with the law. We effectively implement decision-making power over major corporate issues and supervisory authority over the management team. By coordinating decision-making meetings such as Party Leadership Group sessions, board meetings,

Role of outside directors

CDT thoroughly implements the important instructions of General Secretary Xi Jinping and fulfill the requirements of the Organization Department of the CPC Central Committee and the Party Committee of SASAC. Each year, we hold a board construction work conference to ensure that all necessary boards are established. Additionally, we have built a relatively complete system of regulations, developed scientifically sound operational mechanisms, and formed a team of dedicated external directors. These efforts have continuously advanced board construction, playing a vital role in promoting highquality development.

Investor relations



Listed platforms

Datang Power Generation (A-share: 601991, H-share: 00991, London Stock Exchange: 991)

Guiguan Electric Power (600236)

Huayin Electric Power (600744)

Datang Renewable Power (01798.HK)

Datang Environment (01272)



Investor communications

and general manager office meetings, we ensure thorough and in-depth discussions on key decisions, enhancing decision-making efficiency and driving high-quality business development. In 2024, the Board convened nine meetings, reviewed and discussed 52 agenda items. Additionally, the specialized committees held 23 meetings, examined 39 topics within their respective areas of responsibility.

Board construction of subordinates

CDT has steadily advanced the construction of subordinate boards by formulating and revising six management systems, including the Rules for Subordinate Board Operations and the Management Measures for External Directors of Subordinates. We have established a comprehensive "8+1" board management system for subordinates, fully promoting their board construction and ensuring all necessary boards are in place. Moreover, we have fully implemented five key authorities for subordinate boards: decision-making power over medium- and long-term development, performance evaluation of the management team, compensation management for management team members, wage distribution for employees, and oversight of major financial matters. To date, 136 second- and third-tier subordinates have initiated work to implement these board responsibilities.

Information disclosure

CDT and our listed platform companies consistently standardize corporate information disclosure practices by establishing comprehensive management systems and regulations. Internal audit procedures and external oversight are employed to ensure the quality, enhance the standards, and improve the transparency of information disclosure.

Financial information disclosure: Listed companies under CDT strictly adhere to regulatory requirements by annually disclosing financial reports to key stakeholders.

Non-financial information disclosure: CDT has published social responsibility reports for 18 consecutive years, while five listed companies and overseas investment firms have consistently released ESG reports for multiple years.

CDT and our listed subordinates have established positive interactions with investors through measures such as hosting open days, performance briefings, enhancing communication with industry analysts, timely release of reports and announcements, and improving the quality of information disclosure. These efforts have increased investors' understanding and trust in the company.

Business ethics

Guided by the corporate values of "Prioritize Practice and Innovation, Create and Share Together", CDT adheres to legal compliance, upholds integrity in business operations, and practices responsible marketing. We strictly require all employees and partners to firmly oppose corruption, commercial bribery, and unethical practices. By leveraging our influence, we promote adherence to business ethics across the supply chain and industry value chain, fostering a fair, transparent, clean, and trustworthy working and operating environment.

Cultural Brands

Philosophy system of "4+5+1" culture of excellence

	Company mission	Company v	Company vision		pany values	Company spirit	
Four core philosophies	Providing Clean Energy For A Better Life	class energy featured by gi low-carbon deve multi-energy in efficient synergy intelligence, and	To build CDT into a world- class energy supplier featured by green and low-carbon development, multi-energy integration, efficient synergy and digital intelligence, and become a leading enterprise in building a beautiful China		te Practice and ion, Create and re Together	Strive for Excellence Together	
Five special	Business philosophy	Management philosophy	Talent philosophy ◆		Safety philosophy	Integrity y philosophy ◆	
cultural philosophies	Value First, Green Essential, Innovation Wins, Cooperation Mutual Benefit	Group Control, Industrialized Operation, Lean Management, Continuous Improvement	Focus on the Strivers, Enable Strivers to Shine		Life First, Safet Above All	ry Upright Mind and Actions, Clean Conduct	
Employee behavioral guidelines	Love the Country Love the Company	Compliance wi and Regula			ication and Sibility to Work	Efficient Collaboration	

Make excellence a belief

- Organized 836 promotional events during the Excellence Culture Promotion Month
- Won the 5A Grade Enterprise for Corporate Culture Building and Management by the China Corporate Culture Institute and a model unit for corporate culture construction in the power industry
- Longwanggou Coal Mine was listed in the Central Enterprises' Industrial Cultural Heritage (Mining Industry) directory, and Xiaqingyuandong Hydropower Station was designated as a patriotic education base for central enterprises
- Three works won excellence awards at the Fifth Central Enterprises' Core Socialist Values Themed Microfilm and Grassroots Theoretical Propaganda
- Three units received excellence awards at the Fifth Central Enterprises' Core Socialist Values Themed Microfilm



14 China Datang Corporation Ltd.

Outstanding brand "1314510" system

Brand DNA	The acronym REDT represents Responsibility, Eco-environment, Digitalization, and Technology							
Overall objective	To become a world-class outstanding brand							
Three-step strategic goals	Rank among the leading brands of Join the ranks of top global energy Be part of the world's forei central enterprises by 2025 brands by 2030 brand echelon by 2035							
Brand philosophy system	Brand DNA Positionin Responsibility (R), Eco-environment (E), Digitalization (D), Technology (T) Brand positionin A world-class e supplier			Brand Slogan			Brand rsonality	Brand value proposition
			0,	Empowering the World For a Brighter Future		In Res	ccellence, novation, ponsibility, Warmth	Prioritize Practice and Innovation, Create and Share Together
Four-level brand architecture	Corporate brand							Multi-dimensional functional brands
	spec CDT brand em		specialized co emerging in company, re	cialized company, service serv		respor plogy brand, manag ject brand cult		Party building brand, responsibility brand, management brand, cultural brand, personality brand, etc
Five-dimensional image	Solidify the image as a stabilizer for energy supply	as a r leader	the image national in green nsition	Refine the image as a pioneer in sci- tech innovation		Strengthen the image as a pillar of value creation		Enhance the image as a trailblazer in social responsibility
Ten key brand building initiatives	Strengthen element management		ce image gnition	Optimize asset allocation		Expand overseas presence		Intensify communication and showcasing
	Promote technology branding	Drive project branding		Foster cultural branding		Advance responsibility branding		Develop management branding

Make excellence a belief

- Ranked among the Top 30 Central Enterprise Brand Building Capabilities
- CDT's brand practice case was featured in Striding Towards World-Class -Central Enterprises' Practices in Building a Brand Powerhouse
- The *Dream Building Education Support Project of China Datang Group Co., Ltd.* was selected as an outstanding brand case of the year



Scan the QR code to watch the promotional video Imprint of Strength – CDT REDT Brand Strategy

- The microfilm *The Laureate* was selected as an outstanding brand story by state-owned enterprises and won the highest award at the 2024 Brand Innovation Conference & the National Finals of the 12th National Brand Story Competition
- The Light in My Heart won the Merit Award at the 12th National Brand Story Competition (Power Industry Division); Inner Mongolia Company's Camel with Light on Its Back, Shandong Company's Glimmer, Datang International's Good Man, Perseverance, Fighting Snow in Henan, Dancing with Wolves During My Youth, and The Independent R&D Path of "Smart Inspection No. 1", all received Potential Awards









Paving the Way for Excellence and **Reaching First-Class Achievements Through Dedicated Efforts**

In 2024, we remained steadfast in pursuing our strategic goals with a sharp focus and unwavering resolve. Centering on the "three core strategies" strengthening grassroots development, building strong bases, and fostering innovation—we implemented an all-encompassing "100-Day Action Plan". Upholding high standards in project planning and quality during construction and commissioning, we advanced the coordinated development of new energy alongside clean, efficient coal-fired power. Both centralized and distributed systems progressed in tandem, while traditional industries were balanced with strategic emerging industries. Our annual commissioned capacity reached 20.45 GW, with total installed capacity surpassing 200 GW, cementing our role as a main force in national energy security. Significant breakthroughs in coal and coal chemical industries further propelled our drive towards achieving new heights in high-quality development.

Building strong bases

We have established a coordinated mechanism for large base projects to foster synergy through top-down engagement and internal-external cooperation. A landmark achievement was the fullcapacity grid connection of China Datang's Tuoketuo 2 GW New Energy External Transmission Project in north China's Inner Mongolia Autonomous Region, one of the first batch of national large-scale wind and photovoltaic base projects. This milestone heralds a new era of large-scale renewable energy development. Meanwhile, bases in the Hongshui River area of Guangxi, Loudi in Hunan, and Weinan in Shaanxi, among others, have been completed, while offshore wind power projects such as those in Nan'ao, Guangdong, and Pingtan, Fujian, have successively come online, driving sustained vitality. Other major bases aligned with regional development strategies are rapidly advancing, painting a bold vision for the large-scale, intensive development of clean energy.

Strengthening grassroots development

At the grassroots level, we have cultivated fertile ground for entrepreneurship at the frontlines, fostering a strong culture of responsibility and innovation. By deepening the Seven Key Initiatives, we adhere to the principle of treating grassroots matters as our own and colleagues as family. Comprehensive support, coordination, and guidance empower local teams, reduce burdens, and enhance the capabilities of grassroots Party members and officials. Customized strategies such as tailored policy for each province and each enterprise clarify development paths and responsibilities, fully unlocking the potential of grassroots teams and fueling robust growth momentum.

Fostering innovation

We have refined the sci-tech innovation system, igniting a wave of creativity and vitality. Focused on building a new power system and modern energy system, we fully optimized the role of the Three Companies and Three Institutes as key innovation force. Major breakthrough projects include the Zala Hydropower Station, the Yuncheng 630 ° C ultrasupercritical secondary reheat power project, the Ningxia Zhongning compressed air energy storage initiative, and the Duolun green hydrogen production integrated with coal chemical processes. These pioneering national and corporate projects-many being first-of-a-kind or first-batch demonstrationsleverage sci-tech innovation to generate new growth momentum and secure a leading position in future development.

Strategic Breakthroughs and Excellent **Implementation**

High-level deployment guides strategy implementation

We remain dedicated to high-quality development as our primary task and standard. Over the year, we organized two promotion meetings focused on high-quality development and a mobilization conference for the 2024 "100-Day Action Plan" on investment and construction.

Additionally, we introduced a key project scheduling mechanism and further refined our strategic planning and investment management systems. By leveraging group-level oversight, we enhanced strategic leadership and implementation, accelerating development and boosting efficiency.



△ On September 27, 2024, CDT convened a mobilization meeting for the 2024 "100-Day Action Plan" on investment and construction

■ We uphold the "Red Sail" initiative, fostering unity and hard work. By fully utilizing the strongholds of grassroots Party organizations and the exemplary roles of Party members, we harness the collective strengths of Party, government, labor unions, and youth leagues. This synergy mobilizes our workforce to actively engage in critical breakthrough efforts.

Our leaders at every level exhibit the courage and resolve to step forward during pivotal moments. Headquarters departments commit to serving as supportive units, adopting a more efficient and service-oriented approach to create optimal conditions for grassroots teams to concentrate on achieving their goals.

■ We streamline decision-making processes to enhance efficiency. ensuring the timely completion of production targets, laying a robust foundation for the successful conclusion of the "14th Five-Year Plan".

18 China Datang Corporation Ltd. 2024 Sustainable Development Report 19

Coordinated action boosts efficiency and speed

We have strengthened our political commitment and unified strategy across the group. System enterprises work seamlessly together, using key projects as a driving force. By concentrating on critical tasks, reversing schedules, and implementing plans with precision, we maintain high standards in project planning and ensure efficient implementation. Ouality remains at the forefront as we advance construction and commissioning. Fully committed to completing all annual project launch and commissioning tasks on time and to a high standard, we create a powerful synergy to overcome challenges.

Symphony of the 100-Day Action Plan

From the shores of the South China Sea to the snowy plains of the north. from the misty landscapes of Jiangnan to the vast deserts of the frontier, wind turbine towers are being erected, photovoltaic panel mounts installed, and steel structures for thermal power plants welded. In this pivotal year for achieving the goals of the "14th Five-Year Plan", our engineering and construction efforts resonate across the nation like a grand symphony.



United collaboration on the frontline



frames

 Under the scorching sun, construction
 Project Department personnel
 Maintenance personnel closely
 No minor discrepancy is overlooked, workers tirelessly hoist boiler steel



steadfastly remain at their posts, monitor equipment operations on and quality control is strictly maintained tirelessly working around the clock the production front line



We achieved record-breaking performance in new energy acquisitions, project commencements, and production scale

Revitalization for Coal and **Coal Chemical Industries**

As one of the first energy enterprises in China to transition from the power sector into the coal chemical industry, we have faced significant operational challenges in our coal chemical business, which have become a critical factor impacting the highquality development of the Group. Historically, our coal operations have struggled with stagnation and low selfsufficiency. The growing imbalance between our coal-dependent power structure and the underdeveloped coal-related industrial portfolio has posed severe challenges to our energy supply and overall business performance.

The coal chemical industry holds tremendous potential and a promising future. It is essential to enhance the comprehensive utilization efficiency of coal as a chemical raw material, promoting the advancement of the coal chemical industry towards high-end, diversified, and low-carbon development.

—General Secretary Xi Jinping made these remarks during his inspection tour in Yulin on September 13, 2021

The important instructions from General Secretary Xi Jinping have provided clear direction for the high-quality development of the coal chemical industry, reinforcing our strategic resolve to advance our coal chemical business. In 2021, we launched a new phase of "Second Entrepreneurship", demonstrating responsibility by securing energy supplies and driving reform to boost growth momentum. We resolutely embarked on a campaign to expand capacity and improve efficiency in coal and coal chemical operations, comprehensively advancing production expansion, output growth, deepened reforms, cost reduction, and efficiency improvements, achieving remarkable results. Today, in Beijing, 10% of the natural gas supply comes from CDT's coal-to-gas projects. Meanwhile, LC1813 synthetic resin produced by Datang Duolun, a high-end plastic material, is gaining popularity in industries such as automotive manufacturing, healthcare, and premium household applications.



Our strategy



In 2023 and 2024, we advanced a new phase of capacity expansion and efficiency improvement in the coal chemical industry

Our achievements



- Cumulative natural gas production from the coal chemical industry reached 2.316 billion m3, marking a 57.98% year-on-
- Polypropylene output hit 467,200 tons, reflecting a 14.28% year-on-year growth

20 China Datang Corporation Ltd. 21

Setting through challenges toward transformation and renewal

CDT has demonstrated a strong sense of responsibility and commitment by implementing high-level strategies and establishing a coordinated working mechanism to tackle challenges. Through regular on-site supervision and a determined "battle-ready" mindset, we have strengthened the development of key coal projects and driven transformative changes in the coal chemical industry.



Shengli East No. 2 Mine



Hexigten Company's Phase II Project



Longwanggou Coal Mine

Xilinhot Mining Company

A revitalized and thriving coal mine

As the largest coal mine planned by the state in the Shengli mining area, and a key component of CDT's coal-power-chemical industry chain involving Xilinhot Mining Company, Xilinhot Power Generation Company, Hexigten Company, and Datang Duolun (the "Xilinhot-Duolun-Hexigten Project"), the Shengli East No. 2 Mine plays a crucial role in overcoming challenges within the coal chemical industry and ensuring national energy security. With a comprehensive and systematic approach to revitalizing the coal chemical industry and securing coal supply for surrounding power plants, we have firmly aligned our strategic direction with high-quality development goals. Leveraging national energy strategies and regional resource advantages, we have tackled critical issues and broken through bottlenecks to fully support the resumption and reconstruction of the Shengli East No. 2 Mine, aiding in the rebirth of Xilinhot Mining.

- Strengthened the leadership team and selected a high-quality workforce, mobilizing full-system resources to support the resumption of operations at Xilinhot Mining
- Developed a smart mine construction plan, strictly enforced dynamic work safety standards, mitigated project and site risks, and enhanced intrinsic safety levels
- Drafted a green mine plan and provided ecological restoration services, successfully passing environmental inspections at all levels
- Innovated management and operational models by establishing lean management and marketoriented mechanisms, implementing a wage total filing system, introducing six-year term assessments for the management team, and promoting competitive bidding for key projects
- Addressed defects in the coal transportation system and restored railway transport routes

Hexigten Company

Revitalizing idle assets and achieving a historic breakthrough

Hexigten Company remains committed to its original mission, firmly shouldering the primary responsibility for overcoming challenges and revitalizing operations. It is fully addressing risks and challenges such as coal shortages and high prices, while improving China's first large-scale demonstration project for producing natural gas from low-quality lignite. By leveraging its exemplary role, it promotes the circular use of resources and strives to achieve efficient and clean coal utilization.

- Since launching the battle to resume and complete Phase II construction in 2022, Hexigten Company has focused on its production capacity targets, withstanding immense pressure and overcoming numerous obstacles. By adopting an on-site, case-by-case approach and mobilizing resources for efficient collaboration, the company successfully advanced the construction process. The Phase II C Unit was completed and commissioned on September 30, 2023, followed by the D Unit, which was finished and put into operation as scheduled on May 28, 2024
- Hexigten Company has become the largest operating coal-to-natural gas project in China by capacity. In August 2024, it achieved a historic breakthrough by producing 8.02 million cubic meters of natural gas in a single day, shouldering the critical responsibilities of demonstrating the coal-to-natural gas industry and ensuring energy supply

Guoyuan Company

Committed to excellence at Longwanggou

As the first modern 10-million-ton-level underground coal mine independently developed by CDT, Longwanggou Coal Mine was constructed from 2012 and officially commissioned on June 30, 2020. Embodying the Longwanggou Spirit of hard work, quiet dedication, innovative development, and striving for excellence, the company has remained committed to achieving world-class standards, providing crucial support for the growth of CDT's coal industry.

- Guoyuan Company established a dedicated task force to increase production capacity, adopting
 a detailed roadmap for implementation. On June 7, 2023, the mine's annual capacity was
 successfully approved to increase to 15 million tons
- Guoyuan Company has accelerated the development of its smart mine, achieving safe, efficient, and intelligent operations across the entire process—from geological surveying and mining to transportation and washing. In 2023, it was recognized as one of the first national demonstration mines for intelligent operations, and in 2024, it was included in the list of industrial cultural heritage sites of central SOEs

Harnessing coal for a secure and stable energy supply

Annual coal production surpassed

30 million ton

for the first time in history

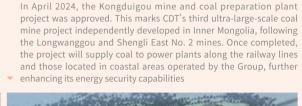
Advancing the coal industry is a concrete step in deepening the implementation of the new energy security strategy, a practical requirement of the Third Plenary Session of the 20th CPC Central Committee, and a key driver for CDT to achieve high-quality development. By further implementing the Four Revolutions, One Cooperation energy security strategy, we are accelerating the high-quality development of our coal and coal chemical sectors, enhancing energy supply capabilities for the capital, and securing a stable energy

future. In 2024, we promoted project development with a tailored approach for each mine, ensuring steady and full production at operational mines. Key coal projects have made significant progress, with annual coal production surpassing 30 million tons for the first time in history, marking a new level of energy security and efficiency. Through these efforts, we are contributing our strength to the nation's development and the great rejuvenation of the Chinese people.

Aiming to boost production capacity and foster industrial synergy, we plan for an ambitious future

- Centered around the Shengli East No. 2 Mine, Xilinhot Power Plant, Duolun coalto-olefins, and Hexigten coal-to-natural gas projects, along with complementary green electricity-to-green hydrogen initiatives, we have established a largescale demonstration zone for clean and efficient energy utilization and industrial transformation
- The Xiwangzhai coal-fired power project will become the Group's first integrated coal-fired power initiative, providing a stronger guarantee for China's energy security

The Datang Duolun 150 MW wind-solar-to-hydrogen integrated demonstration project and the 175 MW renewable energy replacement project for the Datang Duolun coal chemical self-owned power plant







22 China Datang Corporation Ltd. 2024 Sustainable Development Report 23

Energy Supply Support



National call



Ensuring energy supply is the most fundamental mission of energy and power SOEs. With a clear focus on energy security—a national fundamental interest that cannot be overlooked even for a moment—we must leverage China's resource endowments and prioritize addressing risks and vulnerabilities that could impact stable energy supply. By significantly enhancing energy security capabilities and the quality of supply services, we can better meet the growing energy needs of the people. This effort will provide sustained and reliable energy support for Chinese modernization and strengthen the energy security foundation critical to building a strong nation and achieving national rejuvenation.

CDT's action



CDT, with a deep commitment to the country's most fundamental interests, actively implements the new energy security strategy. Upholding our corporate mission of "Providing Green Energy for A Better Life", we integrate into the development of new energy systems and power systems, advancing comprehensive reforms in energy supply and consumption. Meanwhile, we build a diversified clean energy supply system, foster new quality productive forces in the energy sector, and strengthen international energy cooperation across the board to safeguard national energy security.

Value creation • 203



Total installed capacity exceeds

200

G۷

Coal production surpassed

30

million tons

Year-on-year power generation growth

4.81

Year-on-year coal production growth

31.95

0/

Year-on-year heat supply growth

8.87

%

Year-on-year natural gas output growth

57.98

0/



24 China Datang Corporation Ltd.

Leading Energy Supply Assurance

Elevating commitment and embracing responsibility

We steadfastly shoulder the political responsibility of ensuring energy and power supply security. The Party Leadership Group convened multiple meetings of the energy supply guarantee leadership team, carefully analyzing and assessing the supplydemand dynamics of coal, electricity, and heat. It planned and implemented measures to ensure stable power and heat supply, effectively securing

reliable energy provision. Subsidiaries strengthened unit operations and maintenance, ensured fuel supply, and minimized unplanned outages and output restrictions. These efforts successfully fulfilled critical supply tasks during last winter and spring, the two sessions, and the summer peak, demonstrating the Company's role as a dependable pillar of the nation with its actions and capabilities.



Lyu Jun, Party Secretary and Chairman, visits Datang International Tuoketuo Power Generation Co., Ltd. in Inner Mongolia and meets with frontline workers



• Power generation

625.192

TWh

• Heat supply

348.364

million GJ











Hainan Company defends against Super Typhoon Yagi, showcasing resilience of a key SOE





On September 6, 2024, Hainan Province faced the strongest autumn typhoon Yagi to ever make landfall in China according to meteorological records. Datang Haikou Company successfully maintained the islanded operation of Unit 2 and ensured an all-time safe and stable power supply from Unit 1, becoming the sole continuous and reliable power source in the Haikou economic zone, dubbed by the grid dispatch center as the "only spark". On the first day after the typhoon passed, Datang Wanning Company provided 21.35% of the province's available load. Both Wanning and Haikou companies sustained islanded operations for nearly 40 hours, significantly supporting the safe and reliable operation of the Hainan power grid. The Party Committee of Datang Haikou Company was honored with the title of "Advanced Grassroots Party Organization" by the SASAC of Hainan Province for its outstanding performance in combating super typhoon Yagi.

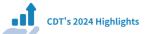


Securing fuel supply and stabilizing prices

We have adopted multiple measures to secure our "essential fuel supply", strengthening communication and coordination with relevant departments and enterprises. Meanwhile, we have continuously consolidated and optimized the level of medium- and long-term fuel contracts, increasing the proportion of high-quality and effective long-term agreements. By closely monitoring changes in coal sources and transportation capacity, we have enhanced fuel dispatch management. In response to market fluctuations, we scientifically determine procurement timing and inventory control targets, ensuring a sufficient and stable stockpile to guarantee reliable power and heat supply.

Enhance fuel reserve management by actively expanding market coal sources and increasing transportation volumes to boost inventory. By closely monitoring coal deliveries, the company ensures precise management of the entire fuel sampling, preparation, and testing process, meeting all accuracy and error standards. It coordinates seamless operations across acceptance, unloading, and storage to guarantee a stable "fuel supply" for power generation units, ensuring households remain warm throughout the winter.

Monitor power load and coal consumption levels based on weather forecasts and early warnings. Ensure the fulfillment rate of long-term contract coal by strengthening communication, coordination, and expediting deliveries, providing a reliable guarantee for meeting peak winter demand.



• Coal production surpassed

30

million tons

Natural gas output





Shaanxi Company

Zhangjiakou Power Generation Company

Huludao Thermal Power Company

Linqing Thermal Power Company

Adhere to a procurement strategy combining high-quality long-term contracts with lowcost market purchases, boosting inventory of high-calorific coal. Achieved a single-day coal unloading record of up to 38,000 tons.

Track changes in coal sources and transportation capacity, enhancing refined management of fuel dispatch. In response to market dynamics, it scientifically determines procurement schedules and inventory control targets while reinforcing efforts in expediting deliveries, quality supervision, and loading oversight.

Enhancing services and bringing warmth to thousands of homes

CDT is committed to providing comprehensive support services and understanding the actual conditions of supply assurance and user needs. By addressing heating concerns, promoting supply-related knowledge, and soliciting feedback, we ensure that people experience warm and attentive service, fully meeting public energy demands.



Baoding Heating Company

After 20 years of exploration and practice, Baoding Heating Company upholds its corporate philosophy of Delivering Warmth to Every Home. Dedicated to providing reliable heating services for the community, the company now covers a heating area of 50 million square meters. Serving over 1,000 residential communities and institutions in the main urban areas of Baoding, it provides high-quality, stable "Datang Heating" to more than 400,000 users. This commitment ensures warmth reaches every home and care touches every heart.

Has strengthened its proactive service mindset by reaching out to users to understand their needs and resolve issues. It pays special attention to caring for vulnerable user groups to "Deliver Warmth to Every Home". The company guarantees uninterrupted access to its 24hour customer service hotline, promptly addressing, resolving, and following up on user concerns. These efforts significantly enhance service quality and reinforce the company's commitment to meeting public welfare responsibilities.

Qingdao Thermal Power Company

Heilongjiang Jixi Regional Company

Treats public heating needs as its top priority, providing round-the-clock services for heating consultations, temperature checks, and maintenance. It ensures prompt home visits to resolve issues such as gas leaks, water seepage, dripping, and fluid leakage and other heating system problems. Employees are assigned to designated areas and integrated into community property management groups, conducting door-to-door visits and responding swiftly to emergencies, ensuring users stay warm throughout the winter.

Focuses on improving heating service quality by providing "face-to-face" service and "heartto-heart" communication. It continues to refine a comprehensive service management system, assigning dedicated "Heating Managers" to each heating area. Through initiatives such as distributing heating service cards and creating Heating Manager groups, the Division consistently enhances service efficiency and effectiveness for residents.

The Jilin Heating Division





Optimizing Regional Energy Supply

Ensuring energy supply for Beijing

As the main force in ensuring energy supply for the capital, CDT provides more than half of Beijing's electricity and over 10% of its natural gas. We continuously strengthen our "capital awareness", fulfill our "primary supply responsibility", and enhance our "core supply capabilities". Also, we are accelerating the transformation and upgrading of power sources securing Beijing's energy needs and

advancing the development of green electricity delivery to Beijing projects. Additionally, we promote large-scale equipment upgrades, renovations, and energy-power sci-tech innovation, contributing CDT's strength to the rapid construction of a new energy system in the capital and the highquality development of Beijing in the new era.

- Established a Capital Energy Supply Leadership Group chaired by the Chairman, and formulated the Plan for Enhancing the Capital's Energy Supply Capacity
- Implemented regular working mechanisms and convened seven monthly meetings to dynamically manage progress through rolling updates and ensure task implementation
- Advanced key projects such as the Otindag 10GW renewable energy transmission base
- Promoted the development of next-generation coal-fired power projects in Zhangjiakou, Xiahuayuan, and Douhe



On December 2, 2024, Yin Yong, Deputy Secretary of the CPC Beijing Municipal Committee and Mayor of Beijing, visited CDT for an inspection and research



The Enhancing the Capital's Energy Supply Capacity labor competition kicks off



 Datang International Tuoketuo Power Generation Co., Ltd. launched competitions for "Shift-based Efficiency" and "Pre-grid Electricity Output", alongside ongoing initiatives to meet designvalue benchmarks. Labor competitions were also held during unit maintenance, comparing safety, timelines, and quality. Through technical breakthroughs aimed at enhancing equipment reliability, the health of the units has steadily improved, achieving a "zero unplanned outages" record in the first half of the year



■ Tangshan Thermal Power Company closely aligns with its operational realities, regularly issuing a "Labor Competition Leaderboard" each month. It recognizes outstanding teams, advanced individuals, excellent supervisors, safety stars, and training stars. Detailed implementation rules with quantifiable metrics have been established to guide employees in energy conservation, efficiency improvement, and work safety



 Zhangjiakou Power Generation Company has continuously improved the technical skills of frontline employees through skill competitions. It also organized specialized events such as "Unit Overhaul Labor Competitions" and "Strengthening Team Building Labor Competitions", laying a solid foundation for the safe and stable operation of the units



 Matou Thermal Power Company has organized labor competitions in various forms, including unit maintenance, skills competitions, and mentor-apprentice challenges. These initiatives have effectively inspired employees to learn technical skills, focus on their work, and contribute actively, fostering a workforce that is reliable, safety-conscious, and technically proficient

30 China Datang Corporation Ltd. 2024 Sustainable Development Report 31

> On November 30, 2024, the Shuoquhe Quxue Hydropower Station's Bai Song Photovoltaic Phase II project, developed by CDT, officially commenced operations. This marks the completion of the final piece of the Shuoquhe Basin's 1 GW-level hydropower and photovoltaic complementary clean energy base, which stands as the highest average

altitude water-solar complementation project in Sichuan Province.

Optimizing layout

We optimize our regional energy layout in line with national strategic initiatives. We accelerate the development of key projects such as those in southeastern Tibet, the "Shaanxi Power to Anhui", "Mongolia Power to Jiangsu", "Qinghai-Shaanxi Mutual Assistance", and "Xinjiang Power Export" bases. By building a multi-win supply system, we promote a coordinated development pattern that balances energy supply with socialeconomic progress and ecological conservation. Meanwhile, we steadily advance towards becoming a world-class energy supplier characterized by "green and low-carbon development, multienergy integration, efficient synergy and digital intelligence".





▲ On August 15, 2024, we successfully connected our first energy storage project in Qinghai to the grid—the 500 MW solar-plus-storage project at the Datang Xinghai Base. This milestone is of great significance for building a new type of power system that is secure, efficient, clean, low-carbon, flexible, intelligent, and integrated, while also enhancing energy supply reliability.

/					
Region	Installed capacity (10,000 KW)	Share of Group (%)	Region	Installed capacity (10,000 KW)	Share of Group (%)
Beijing-Tianjin-Tangshan	2248.73	11.18	Hunan	725.56	3.61
South Grid Hebei Electric Power	316.07	1.57	Guangdong	957.60	4.76
Shanxi	687.25	3.42	Guangxi	1262.69	6.28
Inner Mongolia	718.97	3.57	Hainan	319.13	1.59
Liaoning	414.24	2.06	Chongqing	458.49	2.28
Jilin	584.51	2.91	Sichuan	873.72	4.34
Heilongjiang	602.80	3.00	Guizhou	506.03	2.52
Shanghai	30.66	0.15	Yunnan	920.72	4.58
Jiangsu	1152.01	5.73	Xizang	19.65	0.10
Zhejiang	453.89	2.26	Shaanxi	2192.55	10.90
Anhui	337.06	1.68	Gansu	222.53	1.11
Fujian	312.55	1.55	Qinghai	257.95	1.28
Jiangxi	633.71	3.15	Ningxia	214.65	1.07
Shandong	872.95	4.34	Xinjiang	390.70	1.94
Henan	1168.19	5.81	Overseas	132.20	0.66
Hubei	125.08	0.62	Group total	20112.81	100.00

Note: The installed capacity includes not only power generation equipment but also independent energy storage, renewable energy storage configuration, and thermal storage capacity.

Upholding the Safety Principle

CDT has been deeply studying and implementing General Secretary Xi Jinping's important discourse on work safety. With a focus on building intrinsically safe engineering and prioritizing the identification and management of potential hazards, we have maintained a tough stance on work safety. Also, we have deepened the "Five Key Areas of Rectification" and comprehensively advanced fundamental governance actions to ensure a continuously improving work safety landscape. Adhering to extreme scenario thinking, we have consistently strengthened emergency response capabilities. This year, we have successfully withstood challenges from frequent floods in the Yangtze and Pearl River basins, as well as geological disasters such as flash floods and landslides. Additionally, we have also effectively responded to typhoon landfalls, including Typhoons Gaemi and Yagi, ensuring stable production safety under extreme weather conditions.

Safety management

We have established and continuously improved our safety management system, deepening fundamental efforts to tackle work safety challenges. Meanwhile, we have achieved our best safety performance in recent years, maintaining a stable and secure energy supply. This has laid a solid foundation for our development.

Our honors



- The Seven-Step Method for Problem Analysis and Rectification won the top prize at the 2024 China Electricity Council's Management Innovation Paper Awards
- The Seven-Step Method, Electrochemical Energy Storage Risk Management System Construction, and Coal and Coal Chemical Safety Standardization Achievements received first, second, and third prizes respectively in the 2024 Soft Science Research Outstanding Achievements by the Group
- "China Datang Corporation Continuously Promotes Hazard Identification and Remediation" was included in the National Work Safety Production Newsletter (Issue 7) by the Office of the Work Safety Commission under the State Council

Enhancing safety systems

- We have issued a list of work safety responsibilities for senior executives and department heads at the Group, setting standards that cascade down to deputy-level positions in grassroots enterprises. This translates accountability into routine tasks, advancing the specific implementation of responsibilities.
- We have carefully planned and implemented the overall framework and key task scheduling for the "Three Year Action Plan for Fundamental Governance", ensuring closed-loop management and tangible results.

Preventing safety risks

- We have established a "Daily Planning Management System", developed a work platform, and issued guidelines on "Key Requirements for Work Organization", "Employee Safety Behavior Standards", and "Anti-Violation Management Methods". These measures standardize risk assessment and the implementation of control measures at the production scheduling level.
- We have strengthened the internal "whistleblower" mechanism, utilized video surveillance, and regularly reviewed and highlighted typical violations to reinforce warning education.

Developing management and control platforms

- We have strengthened the top-level design of relevant modules in the management and control platforms in accordance with the overall requirement of "integrated management and
- Adopting a methodology of "institutionalizing management, standardizing systems, streamlining standards, routinizing processes, and real-time information", we have implemented a

safety risk control model focused on "task-driven initiatives, dynamic benchmarking, deviation control, constrained operations, and continuous improvement". This approach has enhanced the development of modules including outsourced projects, two key lists, and education and training, significantly improving overall control



△ CDT convened the 2024 first expanded meeting of the Safe Production Committee

Work safety

We have continuously improved our work safety responsibility system and risk management and control system. Meanwhile, we organized the entire system to carry out the Three Year Action Plan for Fundamental Governance, focusing on equipment governance. The unplanned outage rate was the lowest among central energy SOEs, and the overall work safety situation has steadily improved.

Year-on-year unplanned unit outages decreased by

Focusing on safety in key areas

Conducting regular on-site inspections

- We conducted on-site supervision to advance the implementation of daily work plans, using standardized achievements as a foundation to enhance management standardization and operational compliance.
- We focused on the implementation of the "eight stringent measures" to strengthen the proactive management of disasters such as water ingress, gas hazards, and slope instability.
- We strengthened flood control, sand management for long-distance coal chemical pipelines, and the rectification of coal transportation systems.
- We organized inspections of pipe supports and hangers, as well as metal supervision surveys, for self-owned power stations.

Strengthening hazard identification and rectification

Standardizing the management of the Two Lists

- We have revised the Management Measures for Dual Prevention Mechanisms and established a dynamic management mechanism for the Two Lists of risks and hazards at all levels, spanning all levels from teams to the Group.
- We have issued the Criteria for Identifying Major Power Hazards and developed control modules to effectively manage various risks and hazards, promoting their dynamic elimination.
- We organized spring and autumn inspections, conducted follow-up safety supervision reviews for 30 branches and subsidiaries, performed external audits on risk control, and provided guidance to 127 small and medium hydropower stations and three overseas thermal power enterprises.
- We have established a performance evaluation mechanism for rectification to promote the resolution of issues.

Strengthening oversight of problem rectification

Innovating problem analysis methods

- To address the persistent issue of "repeated inspections, repeated corrections, and repeated offenses", we developed the "Seven-Step Method" for problem analysis and rectification.
- We analyzed issues in small and medium hydropower stations and gas turbine operations to guide solutions to specific problems from the perspective of capability enhancement.
- Through interconnected co-construction of party branches, we analyzed common issues, promoted advanced practices, and enhanced the understanding and quality of problem rectification through theoretical discussions.

Adhering to source control

- In accordance with the requirements to strictly control "minimum coefficient limits and negative material deviations" and ensure "bolt loosening prevention", we have systematically coordinated efforts to improve the bidding templates.
- Drawing lessons from typical industry accidents, we conducted comprehensive accident simulations and research discussions, and issued the Key Safety Control Requirements for Wind Power Hybrid Tower Lifting Operations.

Refining the expert support system

- We have formed an expert team for intrinsic safety and quality supervision of construction projects to carry out comprehensive inspections.
- We have strengthened the implementation of prohibited practices in steel structures and the quality control of welding for ordinary steel structures, while refining the Guidelines for Intrinsic Safety and Quality Management of Electric Power Construction Projects.





Emergency response capability

We continue to strengthen our mission as an energy SOE, balancing work safety with the supply of electricity and heating. Also, we have improved emergency systems, steadily advanced various emergency drills, and significantly enhanced emergency response capabilities. This ensures effective responses to the impacts of extreme weather and flood disasters, maintaining safe and stable production operations.



Investment

Emergency drill coverage

235,660

participants

Enhancing disaster prevention, mitigation, and relief capabilities



- We have revised the Rules for Emergency Management, Regulations for Emergency Response Plan Management, and Standards for Fire Safety Management, while improving the Natural Disaster Risk Early Warning and Response Mechanism.
- We have solidified the "three-layer protection" flood prevention infrastructure and the "one map, one manual" control model, while promoting the "hydropower station radial gate inflow monitoring and automatic lifting" control technology.
- We have conducted a review of natural disaster events from the past three years, thoroughly examining "manmade factors behind natural disasters" to identify and address gaps in standards.
- We conducted group-level emergency drills for multiple scenarios involving earthquakes and flood control at hydropower, wind power, and solar power stations, forming an observation team to systematically summarize and evaluate the outcomes
- We advanced live-action drills for fires, earthquakes, typhoons, and flood control and conducted specialized inspections on earthquake and disaster prevention in regions such as Yunnan, Xinjiang, and Qinghai.
- We enhanced early warning, coordination, and guidance for extreme weather, effectively responding to major natural disasters such as Typhoons Yagi and Bebinca, earning recognition from local governments, including Hainan Province.



emergency response capabilities

Strengthening escape skills training



- We have designated responsible individuals to ensure clear life safety passages in all types of premises and implemented a regular inspection mechanism.
- During the Safety Month activities, we organized 68,988 participants in escape skill drills.
- Drawing lessons from accidents, we have improved quality control, daily maintenance standards, and safety requirements for traffic on enterprise-built roads.
- We conducted a focused inspection of escape routes in crowded places and the fresh air intakes of centralized air conditioning systems in such locations.



Safety culture

We have deepened our safety culture by regularly conducting safety education and training. Through various forms such as hosting safety knowledge lectures, distributing educational materials, and organizing safety knowledge competitions, we have widely disseminated knowledge about work safety. By integrating safety culture into daily operations, we encourage employees to share safety experiences, fostering an environment of mutual learning and collective improvement, thus effectively enhancing employees' awareness of work safety practices.



• Investment in safety

RMB 70.897

million

Number of safety training

23,039

Safety training coverage

1,056,063

participants

Safety Month signatures





Safety training

Refining the safety training system



- We completed two phases of training for 194 production leaders, four phases for 365 team leaders, four phases for 440 certified safety engineers in continuing education, and one phase for 115 occupational health management personnel.
- We established a tiered and categorized safety skills certification system for all employees, developed a management module, and organized certifications for 107,268 participants.

Diversifying safety training methods



- We organized an "educate those around us with stories from our surroundings" campaign and compiled a case study textbook titled Incidents Happening Around Us.
- We promoted knowledge of safety psychology and behavioral science, exploring concrete measures to advance health care and life support.
- We developed a safety warning education short video platform, compiling over 1,150 accident-related videos. We published the Coal and Coal Chemical Personal Injury Accident Cases (2024) and produced an educational film titled Employee On-Site Safety Behavior Standards. Additionally, we innovatively conducted system-wide collective "Safety Day Learning"

Sci-tech for safety

We adhere to the principle of "Sci-tech for Safety", issuing the Guidelines for Smart Security System Construction and Typical Case Studies of "Five Small" Solutions for Coal Transportation System Management. Meanwhile, we continuously release key projects for promoting safety through Sci-tech, fully implementing applications such as "Smart Fuel", the construction of "Unmanned Hydropower Stations", and automated (robotic) inspection systems to build an intrinsically safe enterprise. In 2024, our "Geological Disaster Monitoring and Control System" won the first prize for Safety Sci-tech Progress awarded by the China Association of Work Safety.

Sci-tech for safety at CDT





The "Quadruped Inspection Robot Dog" at Nanjing Thermal Power Company boasts exceptional adaptability to various terrains, capable of walking, crawling, climbing stairs, and traversing slopes. Equipped with customized algorithms and logic development, it performs high-precision "automatic inspections", further enhancing the digital and intelligent capabilities of the power plant.



Tingzikou Company's "5G+ Smart Power Plant", a pilot demonstration project of the Ministry of Industry and Information Technology (MIIT), officially launched its intelligent inspection system for trial operation on December 18. This marks another major breakthrough following underwater robot inspections, dam surface drone inspections, and intelligent video inspection projects. The system enhances workforce efficiency and quality while achieving dual improvements in safety and operational benefits.



The Jilin New Energy Division has applied inspection robots and drones, referred to as "aerial inspectors", in the development of new projects and the construction of stations. These technologies inspect, photograph, and measure the temperature of equipment within the station, alerting employees to conduct corresponding equipment checks. This initiative establishes a digital and intelligent integrated system framework for wind farms combining "control, maintenance, and management", maximizing economic benefits throughout the entire lifecycle of wind farms.



Suzhou Thermal Power Company has implemented a system that verifies equipment through QR code scanning, confirms personnel via photo checks, and records ticket recitations. This approach eliminates the risk of entering incorrect intervals, prevents skipped or missed steps, and significantly reduces the error rate in operation tickets, effectively enhancing safety management.



Green **Transition**







The Third Plenary Session of the 20th CPC Central Committee made significant arrangements for establishing a green and low-carbon development mechanism, emphasizing the need to develop green and low-carbon industries and accelerate the energy strategy transition under the vision of carbon peaking and carbon neutrality. To achieve high-quality development in the energy industry, it is essential to steadfastly implement new development concepts and adhere to a systematic approach. Guided by the comprehensive green transition of economic and social development, with a focus on green and low-carbon energy development, efforts should be made to expedite the formation of an industrial structure, production methods, lifestyles, and spatial patterns that conserve resources and protect the environment and unwaveringly follow a high-quality development path prioritizing ecological considerations and green, low-carbon practices.



We firmly embrace the concept that "lucid waters and lush mountains are invaluable assets" and uphold our corporate mission of "Providing Green Energy For A Better Life". We strive to become a world-class energy supplier characterized by "green and low-carbon development, multi-energy integration, efficient synergy and digital intelligence", as well as a leader in building a Beautiful China. Meanwhile, we are committed to simultaneously reducing carbon emissions, cutting pollution, expanding green spaces, and promoting growth. Our rapid transformation from a traditional power company to a green and low-carbon energy enterprise is unfolding like a series of "green" masterpieces, showcasing our accelerated shift towards green and low-carbon transition and development in the energy and power industries.



Environmental protection

Share of clean energy

- Built Inner Mongolia's first "zero-carbon" data center by a
- Datang Environmental Equipment has become the first certified zero-carbon factory within CDT
- Enhancing ESG Governance to Empower Green Sustainable Development was selected as an outstanding case in the "Comprehensive ESG" section of the 2024 Environmental. Social, and Governance (ESG) Blue Book of State-Owned Enterprise Listed Companies
- The Mangrove Planting Project: "Comprehensive ESG" section of the 2024 Overseas Environmental, Social, and Governance (ESG) Blue Book of State-Owned Enterprise Listed Companies



Accelerating the Energy **Transition**

We deeply implement the new energy security strategy, firmly adhering to the central government's major initiatives on accelerating the construction of a new power system and developing new quality productive forces based on local conditions. Moreover, we actively promote the clean and efficient use of coal, vigorously develop clean energy, systematically advance sci-tech innovation in the energy and power industries, and orderly promote the integrated development of "sourcegrid-load-storage-digital" and "green electricity-hydrogen-ammoniaalcohol". Additionally, we make allout efforts to advance the green and low-carbon transition, contributing to national energy security and the building of a Beautiful China.

> Ensure that clean energy installations account for more than

Clean energy development goal



New energy projects

14.43

New energy projects

15.11

Upgrading and transformation of traditional industries

CDT advances a focused campaign to optimize and upgrade coal-fired power, promoting the efficient construction of advanced coal-fired power. We have fully completed the "Three Coordinated Transitions" - energysaving and carbon reduction, heating upgrades, and flexibility enhancements - reducing coal consumption by 0.51 g/ kWh, increasing regulation capacity by 822 MW, and boosting heating capacity by 1,469 MW. These efforts have significantly improved the efficiency and environmental performance of coal-fired units, effectively advancing the clean and efficient use of coal. In national energy efficiency benchmarking competitions, 12 gas turbines and 50 coal-fired units from CDT were awarded prizes.

	Unit	2022	2023	2024	
Total annual energy consumption	10,000 tons of standard coal	7406.6774	7667.1975	7744.80	
Comprehensive energy consumption per unit output	10,000 tons of standard coal/ RMB 10,000	3.3860	3.5099	3.24	

Zhuzhou 2×1 GW capacity expansion and upgrade project

Yuncheng 630° C national power











Boluo 2×460 MW gas-fired thermal power project



Power supply coal

294.23

g standard coal/kWh

Proportion of installed capacity for ultra-low emission units

Nine "First-Time Successes" — China's first integrated clean coal-fired and grid-parity solar project achieves full operation!



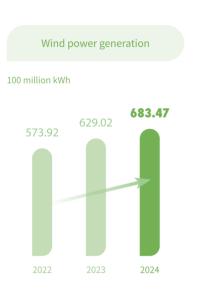


plant power reception, turbine casing closure, chemical water production, boiler integrated hydrostatic testing, boiler acid washing, boiler



Wind power

We continue to strengthen our focus on wind power, enhancing technological levels and development capabilities in this sector. Meanwhile, we optimize wind farm layouts, improve the reliability and efficiency of wind power equipment, and actively engage in offshore wind power technology R&D and project development, opening up new frontiers for wind power growth.



CDT's 2024 Highlights Wind power installed • Wind power generation 68.347

Venturing to where the wind blows — Full grid connection of Datang Baxoi Wind Power Project, the world's highest-altitude wind power project



Tibet, the world's highest-altitude wind power project—the Datang Baxoi County 100 MW Guaranteed Grid-Connected Wind Power in high-altitude regions globally. The Baxoi Wind Power Project stands out as the highest-altitude operational wind farm and features the largest single-unit capacity in ultra-high altitude areas. This milestone signifies a significant breakthrough in China's wind power technology and provides valuable experience and a model for developing wind power projects in ultra-high altitude regions worldwide.



Power from the sea — Successful initial commissioning of the Datang Danzhou 1.2 GW offshore wind power project

power project — the Datang Danzhou 1.2 GW Offshore Wind Power Project — successfully completed commissioning. As one of the first batch of offshore wind projects in Hainan to receive national approval during the 14th Five-Year Plan period, and the largest investment in an offshore wind project by CDT, the Danzhou project has attracted significant attention since its groundbreaking earlier in the year. Here completely the project is connected to generate





Solar power

CDT adheres to a development strategy that emphasizes both centralized and distributed projects, as well as onshore and offshore developments. We increase our investment in solar PV projects and actively explore integrated models that combine solar power with agriculture, fisheries, and ecological restoration to maximize the comprehensive benefits of solar power generation.





The first stand-alone shared energy storage

station by Henan Power Generation

Company—the Yaoyang Energy Storage

Station of Sanmenxia Power Generation

Company—has successfully achieved its

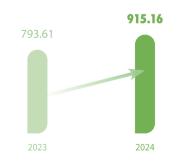
Hydropower

CDT focuses on the development of key river basins, such as the Hongshui River, leveraging its technical and resource advantages. We implement a series of ecological restoration and protection measures, actively promoting the integrated utilization of hydro, wind, and solar power to ensure coordinated development between hydropower projects and environmental conservation.



Hydropower generation

100 million kWh





Surpassing 100 TWh — Witnessing the power of green energy



Datang Zala Hydropower Station, forging a pearl of plateau hydropower

Strategic emerging industries

We aggressively advance our strategic emerging industries with the release of the Strategic Emerging Industries Development Plan of CDT (2023-2025-2030) and the 2024 Strategic Emerging Industries Development *Initiative.* Key projects include: The Tangshan integrated photovoltaic, hydrogen, and storage project, along with a comprehensive hydrogen application demonstration project, is now operational; the Duolun 150 MW wind-solar-hydrogen integrated demonstration project aims to achieve production within the year; the Haikou Jiangdong New Area integrated smart energy project's energy substation has been successfully launched; three virtual power plant platforms, including Beijing, Tianjin and Tangshan, have been preliminarily established; the Qinghai Xinghai clean energy heating project is now in operation. These initiatives highlight CDT's steady progress in developing strategic emerging industries.

CDT's first stand-alone energy storage station in Sichuan, and a provincial-level new energy storage demonstration project the Yibin Xuzhou District 100 MW/200 MWh electrochemical energy storage station—has been successfully launched





 Ningxia Branch ramps up efforts and accelerates
 The Sanmenxia Power Generation Company's the construction of the Zhongning 100 MW/400 under-construction stand-alone shared MWh compressed air energy storage project



energy storage station in the Sanmenxia Demonstration Zone has an initial capacity of 100 MW/200 MWh

China's first 100 MWh-class sodium-ion energy storage station achieves commercial operation, marking the world's first large-scale commercial application





Addressing Climate Change

CDT's 2024 Highlights Environmental protection RMB 2.162 billion

Strengthening the environmental protection system

Environmental management system

CDT adheres to the guidance of General Secretary Xi Jinping's thought on ecological civilization, viewing environmental protection as a critical corporate responsibility. We strictly comply with environmental laws and regulations, including the *Energy* Conservation Law, Environmental Protection Law, and Circular Economy Promotion Law of the People's Republic of China. To enhance our environmental management, we have revised our Environmental Protection Supervision and Management Measures and Headquarters Environmental Protection Responsibility System. Additionally, we have also formulated a Beautiful China Construction Implementation Plan, detailing 20 key measures across five areas. These efforts aim to meet the specific requirements for ecological protection and rectification in the Yellow River and Yangtze River basins.

Meanwhile, we integrate sustainable, low-carbon principles into our organizational structure, setting scientifically sound environmental management goals and enhancing our environmental management system to continuously improve ecological protection capabilities. Moreover, we conduct theoretical advocacy, education and training on energy conservation and low-carbon practices to boost environmental awareness among all employees. In 2024, we successfully avoided any general or higher-level environmental incidents, safeguarding both energy supply security and ecological protection standards. This performance underscores our commitment and responsibility as a

Building a green supply chain

We take the lead by leveraging the support of CWEME and the China Datang Group Green and Low-Carbon Development Co., Ltd. to establish a robust green and low-carbon supply chain management system. Meanwhile, we focus on enhancing carbon management, conducting carbon accounting, promoting carbon reduction, and improving carbon performance to drive collaborative decarbonization across the industry's supply chain. In November 2024, our project titled Carbon Initiatives for Green Operations and Chain-Building for Ecological Win-Win received the CSR Whale and Bull Award for Responsible Supply Chain.

Promoting green procurement We progressively incorporate green and low-carbon performance criteria into our procurement processes for materials and services and expand the scope of green procurement. During supplier selection, we include positive assessment factors related to "green and low-carbon" practices and have established incentives within the supply chain to encourage suppliers to adopt "green and low-carbon" principles throughout the product lifecycle.

We offer services to develop a green and low-carbon supply chain management system. These services guide supplier companies in enhancing their green and low-carbon management capabilities by focusing on areas such as green development plans, greenhouse gas emission calculations, production process emission reductions, and collaborative carbon reduction efforts with upstream and downstream partners. In this way, we aim to promote coordinated emission reductions across the supply chain and lower overall carbon emission levels.

We have developed a standard system and evaluation criteria for green and low-carbon supply chains in the power equipment industry, alongside creating a carbon footprint calculation database specific to this industry. Our efforts aim to localize these databases to support the establishment of a national carbon footprint database.





■ We advanced carbon emission online monitoring pilots and industrial implementation, with data from **five pilot units surpassing industry standards**

Strengthening pollution prevention and control

We continue to refine our longterm ecological and environmental protection mechanisms by revising our environmental supervision and management measures, as well as our headquarters' ecological responsibility system. Also, we have updated the environmental assessment manuals for thermal power, hydropower, and renewable energy enterprises, completing environmental inspections for 36 companies and addressing 676 identified issues. Meanwhile, we remain committed to strengthening pollution prevention and control, strictly managing pollutant emissions to meet regulatory standards, and implementing comprehensive pollution control measures, thus ensuring the successful completion of air quality assurance tasks during major events, including the two sessions.

	Unit	2022	2023	2024
Annual freshwater consumption	10,000 tons	46672	47384	46015.27
Freshwater consumption perRMB 10,000 of output	Tons/RMB 10,000	21.337	21.692	19.24
Wastewater discharge	Tons	1080.09	654.36	542
SO₂ emission	g/kWh	0.095	0.085	0.078
NO _x emission	g/kWh	0.145	0.139	0.133
Dust emission	g/kWh	0.013	0.0128	0.012



- Facing the increasingly severe challenge of water scarcity, Fuping Thermal Power Company innovatively adopted reclaimed water from the Fuping County wastewater treatment plant as its production water source. This significantly reduced reliance on fresh water resources while promoting water recycling. To ensure the reclaimed water met industrial standards, the company built an advanced reclaimed water treatment system, effectively removing organic matter, suspended solids, and reducing water hardness. During industrial operations, the treated water was creatively utilized for mist eliminator flushing in the desulfurization system and absorption tower replenishment, achieving internal wastewater recycling and zero discharge.
- Wulong Hydropower Development Co., Ltd. conducted three rounds of debris cleanup in front of the dam, collecting, transporting, and processing approximately 94 tons of floating waste across 25 truckloads. This effort significantly enhanced water resource protection in the reservoir area and ensured safe navigation and power generation. In addition, the company completed the treatment of sewage and wastewater equipment, achieving zero discharge of sewage. As a result, the reservoir area now meets the goal of "clear rivers, clean water, and beautiful scenery".



- The long-distance heating retrofit project at Datang International Tuoketuo Power Generation Co., Ltd. utilized four heating methods: high back-pressure exhaust steam heating from air-cooled units, extraction steam heating from medium-low pressure connecting pipes, low-pressure cylinder cutting heating, and emergency bypass heating. These upgrades contribute to improving urban air quality and advancing the development of a green, eco-friendly city.
- The Qinghai Xinghai and Da Qaidam clean energy heating projects utilize a system combining "electrode boilers/gas boilers + air-source heat pumps + energy storage + smart control systems". By leveraging userside monitoring configurations, including boiler cluster control, climate compensation, time-and-zone-based control, and cloud computing technologies, the projects deliver clean, high-quality heating with minimal energy consumption and establish a green, efficient, and safe heating system that is energy-saving, coordinated, and well-suited to local needs.

To address the disposal of solid waste from renewable energy sources, Datang Environment Industry Group Co., Ltd. independently developed an intelligent cutting device for wind turbine blades. This device integrates smart control and tracing-based cutting technology, significantly improving cutting efficiency while addressing dust pollution. It provides an intelligent solution for on-site disposal in the field, supporting the green development and digital transformation of the wind power industry.

Suihua Thermal Power Company actively collaborates with local governments and environmental authorities to conduct waste sorting and recycling activities, establishing a coordination mechanism with surrounding communities. Additionally, the company has implemented strict waste sorting protocols, set up white waste recycling points, and employed high-temperature incineration and exhaust gas treatment technologies for non-recyclable white waste to prevent secondary environmental pollution. Since 2024, the company has recycled nearly 3 tons of white waste.





48 China Datang Corporation Ltd.



Participating in the carbon market

We have always prioritized the country's most fundamental interests, actively responding to China's green and lowcarbon development strategy while serving the broader goals of the Party and the nation. Aligned with the "dual carbon" goals, the company was among the first to develop and release a "Dual Carbon Action Plan", outlining a clear timeline and roadmap for achieving carbon peaking and carbon neutrality. By integrating green and low-carbon principles into all aspects of operations, we have established a dual-control management system for carbon emissions, strengthened emission management, and vigorously promoted large-scale, intensive development of renewable energy. Meanwhile, we actively drive the green and low-carbon transformation of traditional industries and expand our investments in green and low-carbon sectors to contribute to achieving China's "dual carbon" goals and building a Beautiful China.



In December 2024, the China Federation of Industrial Economics released the list of 2024 China's Top Runner for Industrial Carbon Peaking at the 3rd China Industrial Carbon Peaking Forum. We earned our place as a 2024 Top Runner for our outstanding performance in green and low-carbon transition.

100% completion! CDT excels in carbon market obligations





Following the Ministry of Ecology and Environment's issuance of the quota allocation and settlement notice on October 15, 2024, CDT faced tight compliance deadlines and a complex market environment. Building on experience from the first and second compliance periods, we proactively planned and meticulously organized our efforts, further optimizing our carbon asset management system and coordinating compliance trading operations. Enterprises at all levels strengthened their accountability, actively engaging in trading and settlement activities. Leveraging its expertise, China Datang Group Green and Low-Carbon Development Co., Ltd. efficiently managed compliance trading, successfully completing the third compliance period's quota settlement in the national carbon market. By December 20, all key emission units under CDT had achieved 100% compliance for the third cycle, marking the third consecutive cycle completed ahead of schedule.



Providing environmental services

CDT expands into new green development arenas by actively fostering emerging environmental industries. We focus on providing systematic solutions to environmental challenges and integrated energy solutions. Datang Environment Industry Group Co., Ltd. serves as a platform for eco-friendly and energy-saving businesses, covering operations such as environmental services, technology R&D, product manufacturing, engineering construction, and investment. Meanwhile, we make significant strides in areas like solid waste recycling, gypsum products, new energy-efficient technologies, and renewable energy projects. We also advance the research, development, and manufacturing of innovative catalyst products, aiming to establish ourselves as a benchmark enterprise that uses special and sophisticated technologies to produce novel and unique products in the catalyst industry. These efforts enhance the modernization of China's environmental protection supply chain.



SO₂ emission reductions from franchise operations

1.7809

million tons

NO_x emission reductions from franchise operations

215,700

tons

 Cumulative production of denitrification catalysts

44,722.68

m³

After years of dedicated research, Nanjing Environment Protection Company successfully overcame a series of technical challenges, developing proprietary manufacturing and regeneration technologies for denitrification catalysts. These innovations were included in the SASAC's *Product Manual of Sci-tech Innovation Achievements of Central SOEs.* Thanks to its continued focus on core business development, the company's product now holds a 20% market share, ranking first in China's plate-type catalyst industry. The company has also been awarded the national title of "Little Giant" enterprise that uses special and sophisticated technologies to produce novel and unique products in the catalyst industry.





Datang Environment Industry Group Co., Ltd. has been awarded the China Certification for Environmental Products (CCEP), becoming the first enterprise within the Group to achieve this certification. The company's self-developed continuous CO₂ emissions monitoring system integrates advanced technologies and equipment to optimize production processes. By addressing issues in equipment and system operations through continuous updates and iterations, the system significantly enhances monitoring performance and operational stability. These products not only provide critical monitoring support for carbon asset management in thermal power plants, aiding in their green, low-carbon, and digital and intelligent transformation, but also demonstrate significant advantages in energy conservation, emission reduction, and resource recycling. They offer strong support for advancing China's national "dual carbon" strategic goals.

50 China Datang Corporation Ltd.

Safeguarding the Beautiful Ecology



Promoting green working practices

CDT has fully implemented national requirements for energy conservation and resource efficiency in public institutions, steadfastly advancing green working practices. We comprehensively promote fuel, gas, water, and electricity savings across administrative operations, while embracing eco-friendly practices such as paperless work, double-sided printing, video conferencing, and centralized

heating. We have also strengthened the management of official vehicles to reduce gasoline consumption. Encouraging employees to participate in collective efforts, we actively prevent wasteful practices like constant water flow and lights left on, embedding sustainable development values into daily operations and contributing to improved efficiency and long-term green growth.







Ma'anshan Dangtu Power Generation Co., Ltd. advanced the construction of "zero-carbon buildings" by installing solar power panels and wind turbines on the office building's roof. The "self-generation and self-consumption, surplus power to the grid" model effectively met the building's normal electric power needs



The CDT Northeast Electric Power Research Institute's smart clean energy supply platform integrated multiple energy sources clean power module, multiple energy sources clean heating (and cooling) module, as well as smart control module, providing the industry park with clean electric power and heating through complementary modules

Protecting biodiversity

Committed to harmonious development between humanity and nature, CDT continues to advance biodiversity conservation with innovation and progress. We actively carry out activities

such as enhancement and releasing, plant patrols, bird monitoring, and wildlife rescue, forging a path of ecological priority and green development tailored to local conditions.

Dahua Hydropower Complex has established a center for the enhancement and releasing of rare and endemic fish species along the Hongshui River's midstream cascade (from Yantan to Letan). Leveraging sci-tech innovation to advance ecological conservation, the facility independently breeds, raises, and develops 11 species of rare fish—including the Onychostoma simus, Procypris mera, and Cranoglanis bouderius—along with supporting equipment. For three consecutive years, it has released a total of 3.96 million fingerlings into various sections of the Hongshui River basin.



Yuneng Group adheres to a strategy of high-quality development in harmony with local ecosystems. The company has completed ecological flow facility upgrades at seven reservoirs and six channel-fed small hydropower stations. Real-time data and video feeds from these facilities are now fully integrated into the government's hydropower ecological water-use monitoring network. On average, the company replenishes downstream areas with approximately 738 million cubic meters of water annually, leading to continuous improvement in riverine ecosystems.





Longtan Hydropower Station has invested dedicated funds to establish eight new conservation sites for rare wild plants, including the Longtan Rare Wild Plant Conservation Garden, relocating and protecting a total of 14,103 rare plant species. In recent years, the Conservation Garden has implemented chain-style protection measures such as labeling and structural reinforcement, while entrusting professional companies with the maintenance of rare plants and ancient trees, ensuring the maximum preservation of biodiversity.



CDT has coordinated five cascade hydropower stations along the Hongshui River in Dahua County to carry out fish enhancement and releasing, releasing a total of 1.32 million fingerlings including Procypris mera, Cranoglanis bouderius, Ptychidio jordani and rare Onychostoma simus in the Hongshui River, generating an economic value of RMB 2.3 million. In collaboration with Olympic champions, the company launched the "Guardians of the Hongshui River" public initiative in Dahua County, using concrete actions and role modeling to mobilize society at large to join in ecological conservation efforts.

If the rare animals could speak: 2024



"Even snow's purity is no match to its newly knitted cloak of feather, yet amidst the chorus of birds, egret finds a silent serenity." Hello! I'm the Egret. I hear this poem was written for me by you humans. It seems quite impressive though I don't understand! As a species protected by International Union for Conservation of Nature, I'm very sensitive to the ecological environment and take it very seriously!

I'm the Nipponia Nippon, nature's "ecological inspector." To protect my home, Datang Shiquan Hydropower Plant collected and safely disposed the floating debris in the reservoir area, invested in upgrading pollution control systems, and ensured that the daily ecological flow is no less than 40 cubic meters per second to keep the river clear. Nowadays, I can dance freely and prey by the banks of the Hanjiang River. I am well aware that this harmonious ecological scene has been diligently crafted through the collective efforts of the people of CDT.

Datang Shiquan Hydropower Plant





m the Chinese Merganser. Four years ago, I came from the distant orth to spend the winter 300 meters downstream from Datang Xi'an ydropower Plant in the Luoqing River Basin. The water quality here excellent, and the biodiversity is rich. We really like here.

I'm the national first-class protected animal, Trachypithecus Francoisi, living at the Rare Animal Emergency Protection Center of the Mayang River Basin. My life wasn't always so comfortable. Due to changes in the ecological environment, our food sources dwindled, our habitats were destroyed, and our population decreased. However, 18 years ago, Datang International Pengshui Hydropower Development Co., Ltd. established a nature reserve, creating favorable conditions for our survival and reproduction. Our family has grown larger, and life is much better now!

Datang International Pengshui Hydropower Development Co., Ltd.





Datang Western Inner Mongolia New Energy

Division's Zhuozi Wind and Solar Power Station. The Huitengxile Grassland in Inner Mongolia where I live has cold winters and cool summers with pleasant scenery. Rows of huge wind turbines and solar panels are neatly arranged, guarding this beautiful northern frontier of our country. Here, my friends and I enjoy leisurely days where we can "take a deep breath" during the day and "count stars" at night. It's very cozy.

Hi, I'm Corsac Fox, the "cute kid" of the grassland. There are rows of "big windmills" on the grassland where I live. Since CDT settled here, as a national second-class protected animal, I was protected! With the advent of towering "windmills" of CDT, the surrounding grasslands have also been safeguarded. A variety of animals returned to their homes. Our homes are becoming more and more comfortable.

Xilingol League Renewable Power Division of Datang (Inner Mongolia) Energy Development Co., Ltd.





I'm the Sparrowhawk, living in the dense, primeval forests of Central Kalimantan, Indonesia. Kalteng Power Plant of PT Datang DSSP Power Indonesia (DDPI) was constructed here in 2021. They have recently installed environmental monitoring systems for mercury fume and carbon dioxide emissions, and recycled wastewater. Like us, they cherished the blue skies, flowing waters, and lush forests here. I'm a bit tired from flying today; I think I'll visit my "nice" neighbors…

I'm the national second-class protected species Procypris Rabaudi, inhabiting slow-flowing rivers with rocky riverbeds. Due to the changes of river hydrologic conditions and natural water, we were listed as "vulnerable species." Fortunately, in 2013, Datang established a fish breeding station in the Guanyinyan Hydropower Station along the Jinsha River. Each year, a large number of our artificially bred companions are released back into the Jinsha River, returning to our original home.

Datang Guanyinyan Hydropower Development Co., Ltd.



Sci-tech **Innovation**



National call



In today's world, the once-in-a-century transformation is accelerating, reshaping global industrial and supply chains and bringing heightened uncertainty. Energy security and climate change have emerged as shared challenges for humanity. Developing new quality productive forces is essential for high-quality growth, with energy sci-tech innovation serving as a key driver. The green and low-carbon transition of the energy sector, along with its deep integration with information technology, has become the core direction of the next wave of energy-related technological and industrial revolutions. The convergence of energy and digital technologies will undoubtedly inject powerful new momentum into the development of new quality productive forces.

CDT's action



We actively embrace the "Four Revolutions, One Cooperation" energy security strategy, integrating ourselves into the national sci-tech innovation system and taking on major national strategic tasks. Focusing on the development of new quality productive forces and the construction of a new energy system and power grid, we center our efforts on high-quality growth, driven by enhanced innovation capabilities. Leveraging major scitech projects and deepening reforms, we optimize our innovation layout, strengthen our innovation ecosystem, nurture top-tier talent, and unleash creative potential. Committed to leading the way in energy sector self-reliance and sci-tech advancement, we inject strong momentum into building a world-class energy supplier featured by green and low-carbon development, multi-energy integration, efficient synergy and digital intelligence, and become a leading enterprise in building a beautiful China.





Investment in sci-tech

R&D intensity reached

3.02

The case Building the World's First Unit and Pioneering Innovation in the Power Industry was selected as an outstanding example in the "Sci-tech Innovation" section of the 2024 CSR Blue Book of State-Owned Enterprises





CDT holds the 2024 Sci-tech Innovation Conference

Strengthening Innovation Management

We continue to refine our institutional frameworks, strengthening systems, optimizing mechanisms, building ecosystems, and nurturing talent—to ignite internal innovation momentum. Meanwhile, we are committed to playing a greater role and making larger contributions in safeguarding national energy security, constructing a new energy system, and developing new quality productive forces.



 Empowering the Future with Youth Innovation - CDT hosts the Youth Innovation and **Efficiency Competition**

- We have optimized the structure and staffing of Science and Technology Innovation Department, forming an innovation framework of Three Companies and Three Institutes, continuously enhancing systemic efficiency;
- China Datang Corporation Science and Technology General Research Institute completed its institutional reform, further strengthening its research support capabilities;
- China Datang Technology Innovation Company and China Datang Digital Technology Company have clarified their roles, reinforcing their focus on cultivating future strategic emerging industries and advancing digital intelligence.

Optimizing mechanisms

Through key events such as the Sci-tech Talent Symposium, the Sci-tech Innovation Conference, and the Second Session of the second meeting of the Science and Technology Advisory Committee, we showcased the interim achievements of the first batch of major science and technology projects, launched the second batch of group-level key R&D initiatives, recognized outstanding units and individuals in innovation, and appointed additional chief experts and young leading talents.

Strengthening systems

We have improved the institutional framework for sci-tech innovation, issuing guidelines on further strengthening the Group's innovation efforts, introducing policies such as treating R&D investment as profit, rolling out a special rewards program for innovation, and implementing performance evaluations and assessments to drive progress.

Nurturing talent

Striving for Scitech Excellence

Tackling key technological challenges

We accelerate the development of core key technologies, build up national strategic scientific strength, and harness innovation to cultivate and develop new quality productive forces—making significant new contributions to safeguarding China's energy security and driving the green and low-carbon transition of the energy sector.

CDT decodes the quality productive forces in energy • 2024



Made major progress in the key manufacturing technologies for Pelton-type turbines: The world's first 500-megawatt-class high-head Pelton-type hydropower unit project — the Datang Zala Hydropower Station in Xizang— has successfully achieved river diversion, with the first concrete poured for both the power plant and dam. The project has now entered a critical phase of main construction. Collaborating with upstream and downstream partners in the industrial chain, CDT has overcome a series of core technological bottlenecks. Key components such as the runner forgings have been completed and delivered, while the distributors, spherical valve castings, and runner weldments have also been successfully developed and handed over. These achievements mark a significant breakthrough in China's independent R&D and manufacturing capabilities for critical equipment, driving major advances in global energy equipment



Achieved major breakthrough in domestic wind power control systems: A homegrown CPU-based main control system has replaced imported systems at China's largest single onshore wind farm, achieving the highest market share in the industry.



Filled a critical technology gap with high-temperature resistant materials: Yuncheng Power Generation Company drives the development of new quality productive forces through sci-tech innovation. The domestically developed new-generation martensitic heat-resistant steel G115 has achieved its first engineering application in the 630 ° C National Power Demonstration Project in Yuncheng, filling a critical gap in China's application of high-temperature materials. This milestone strongly supported two "first-ever breakthroughs" in reheat temperature and power generation efficiency at the project. The G115 steel, newly applied at the Yuncheng National Power Demonstration Project, has received trial-use approval from the State Administration for Market Regulation and is now in mass production. Its 50% thermal efficiency optimization plan has passed review by the China Electric Power Planning &



Developed flexible sealing technology for fully artificial underground gas storage: Zhongning Compressed Air Energy Storage Power Station achieves a design efficiency of over 70% using an innovative, fully artificial underground gas storage system with flexible sealing—a groundbreaking technological solution applicable to most geological conditions across China.



Achieving abundant scientific research achievements

Committed to serving national strategic goals, we have deeply implemented an innovation-driven development strategy, achieving major breakthroughs in the research and development of several key core technologies and equipment. These homegrown innovations, regarded as "national pillars", hold significant importance in ensuring energy security and driving high-quality development in China's energy sector.

Our achievements

- **ř**ĺřĺ
- Won five Chinese Society for Electrical Engineering Science and Technology Progress Awards—the highest number and quality of awards in the past five years
- Published **five** ISO international standards
- **Two** achievements were included for the first time in the pilot program on granting ownership rights for job-related scientific achievements under the SASAC's reform initiative

Protecting intellectual property rights

CDT places great importance on the role of intellectual property (IP) in driving innovation and enhancing core competitiveness. We actively engage in IP protection and utilization, continuously building our portfolio of self-owned IP in key technological fields. Meanwhile, we are committed to accelerating the commercialization

of patented technologies, transforming scientific achievements into new quality productive forces, and maximizing innovation value. In 2024, we filed two PCT patent applications and secured 315 invention patents—an increase of 17% compared to 2023—marking steady progress toward high-quality, sustainable IP development.

New patents granted in 2024

801

New invention patents granted in 2024

315

Advancing Digital and Intelligent Transformation

We fully advance the implementation of our "Digital Datang" initiative, strengthening foundational capabilities, building platforms, managing data, optimizing processes, and enhancing security. These efforts have led to significant progress in digital transformation, effectively supporting the Group's operational efficiency and high-quality development.

Our achievements



- China Datang Corporation Science and Technology General Research Institute has made significant progress in the development of industrial control chips and related industrial control products
- China Datang Technology Innovation Company has been approved to lead one national sci-tech major project and one key R&D program
- Over **4,125 sets** of Beidou terminals have been deployed at scale
- The Smart New Energy Centralized Control Industrial Internet Platform project by the China Datang Digital Technology Company won the 2024 China Digital Economy Pioneer Case Award

Strengthening foundational capabilities

- We held a conference to advance digital and intelligent transformation and organized training sessions on the topic;
- We conducted research and development on a digital mid-end platform, as well as an industrial internet platform, to provide rapid module development, deployment, and shared service capabilities for smart enterprises;
- We carried out research on digital system frameworks in work safety, using digital and intelligent technologies to enhance management and drive process change. Meanwhile, we have conducted similar research in business management and work safety domains, leveraging digital and intelligent tools to improve both management effectiveness and process efficiency.

Managing data

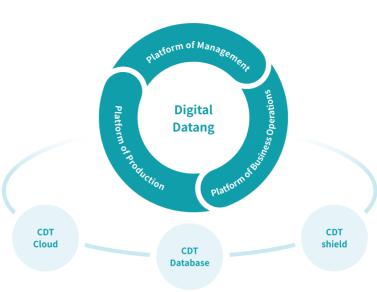
- We have initiated the construction of a unified CDT Database platform across the Group, enabling centralized aggregation, management, operation, and service of data from core business areas;
- We have established a comprehensive data management system and standards framework;
- We have developed a group-wide catalog of full-scope data assets;
- We have carried out data governance in key business domains and set up a regular governance mechanism.

Building platform

- Proceeding with the "Large Platform, Micro-Application" approach, we have refined the design of the "3+3" digital framework, identifying 11 key projects to build up core platform capabilities;
- The "CDT SmartLink" mobile office client has entered trial operation at headquarters:
- We have initiated the construction of the work safety management and control system;
- We have launched the construction of the Beido spatio-temporal service platform and completed the high-precision computing and positioning services.

Enhancing security

- The "CDT Shield" has been largely completed, establishing a cybersecurity management and control system with distinct CDT characteristics;
- We have unified internet gateways across the Group, effectively reducing the attack surface and mitigating potential risks;
- We have conducted targeted training for Chief Cybersecurity Officers, offensive and defensive cybersecurity personnel, and operations and maintenance personnel, further strengthening the Group's cybersecurity defense framework and real-world capabilities;
- We have launched an integrated cybersecurity supervision platform, breaking down data silos across security devices and achieving full visibility and unified command across the Group's network environment;
- We have built the first blockchain platform "CDT Excellent Link", and successfully piloted the uploading of factoring business data onto the blockchain.



Three major foundations and three major application platforms of "Digital Datang"



 Datang E-Commerce Company's "Xiwei Procurement Monitoring and Early Warning System" wins the 2024 Award for Outstanding Data Products

▶ CDT Northeast Electric Power Research Institute advanced technological R&D in energy digital and intelligent innovation and control system cybersecurity to empower the development of new quality productive forces



 Xilinhot Mining Company's driverless mining truck and automated battery-swapping station have been successfully deployed marking the first open-pit coal mine to achieve full-process unmanned operations in loading, transportation, dumping, and battery replacement for new-energy mining vehicles



▶ The innovation team at **Jixi Longtang Heating Company** developed a smart system that combines photoelectric switches with gravity sensors to ensure stability, using servos and ultrasonic technology for intelligent steering—enhancing the efficiency of heating pipeline inspections and maintenance



Value Creation







Upholding the overall leadership of the Party is the fundamental reason for past achievements in comprehensive deepening of reform in the new era and the fundamental guarantee for further deepening reform comprehensively to advance Chinese modernization. As a central energy SOE, CDT must ensure the Party's leadership in every aspect of reform and every part of corporate governance, improve and perfect the modern enterprise system with Chinese characteristics, achieve high-efficiency and high-caliber governance and management, continuously enhance the system of the full-fledged and rigorous Party governance, and make exemplary Party leadership guide corporate trajectory towards high-quality development.

CDT's action



CDT earnestly consolidates political stance, bears in mind the fundamental goal of making state-owned capital and SOE grow stronger, better and bigger, thoroughly learns and implements the guiding principles set forth by the Third Plenary Session of the 20th CPC Central Committee, prioritizes value creation, optimizes corporate governance, advances compliance-based operation, vigorously enhances core functions, enhances core competitiveness, exerts Three Functions (sci-tech innovation, industry leadership and safety assurance), and works hard to develop into Three-pronged Pacesetter.



Rated **A** in the 2023 assessment for business performance of central SOEs'

Rated **A** for the 2023 assessment for responsibility system of Party building in central SOEs

Rated A for the 2023 assessment for key tasks of the Central SOE Reform and Deepening Promotion Action



64 China Datang Corporation Ltd.

Following Compliance and Legal Operation

CDT always holds firm to legal operation and compliance as bottom line of enterprise development, insists on enterprise management pursuant to the law, stringently observes national laws and regulations, energy policies, environmental protection regulations and other regulations, and establishes and improves a legal affairs and compliance management system. In the project bidding and tendering process, CDT completely prohibits any violations under the principles of fairness, impartiality and transparency. CDT takes the initiative to accept supervision from governmental departments and all sectors of society, actively fulfills social responsibilities, pays taxes in accordance with the law, and operates with integrity. Regular legal and regulatory training is conducted to enhance employees' legal awareness.



Stepping up system arrangements

CDT implements system management regulations of the Group and department systems of the headquarters, and builds Four Basic Elements (basic responsibility, basic system, basic process and basic data) on firm ground. Alongside delegation of powers between the headquarters and secondary enterprises, the reform of the materials and fuel system in 2024, CDT dynamically adjusts the vertical power and responsibility interface list of the headquarters and secondary enterprises. CDT formulates *Process Management* Measures of the Headquarters, and organizes all departments to carry out process optimization, further standardizing the management system.



Deepening lawbased governance

CDT adheres to law-based and compliant corporate governance, strengthening the legal talent pool through integrated recruits and trains to address workforce gaps. Scaling new heights towards a law-based corporate, the Group has been inscribed on the list of 32 pilot enterprises designated by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council for building world-class enterprises under rule of law. CDT has promptly issued Work Plan for Foreignrelated Rule of Law. The SASAC of the State Council has spoken highly of Top10 control mechanism and other spotlights of China Datang Overseas Investment Co., Ltd. and Cambodian Hydropower Development Co., Ltd.

Intensifying risk prevention and control

CDT intensifies risk prevention and control, constantly rectifies internal control deficiencies, prints and issues the list of typical risk hazards and impacts of the Group and the list of internal control deficiencies. Practical and effective tools are available for member enterprises at all levels to identify and guard against risks and avoid violations. CDT also innovates the work approach to internal control supervision and evaluation, significantly improving the quality and efficiency of evaluation and achieving more effective risk prevention and control with pragmatic results.



66 China Datang Corporation Ltd.

Deepening Reform and Upgrading

Further deepening reform comprehensively to advance Chinese modernization is a crucial move concerning the future and destiny of the Party and China as well as the great rejuvenation of the Chinese Nation. The Third Plenary Session of the 20th CPC Central Committee sets the direction for SOEs to blaze the path of Chinese modernization in the new era. As a backbone enterprise specialized in key field and player in Chinese modernization,

CDT embraces the reform of the new era with more resolute historical confidence, promotes consolidation, deepening and improvement of SOE reform with stronger historical awareness, and advances strengthening, optimization and expansion of state-owned capital and SOEs with more proactive historical attitude. CDT writes new chapters for a central energy and power SOE in the drive towards Chinese modernization

Activating the driving force and strengthening mechanism through reform

Beginning with adaptation to the market-oriented operation mechanism, CDT focuses on enhancing core functions, deepens the reform in key fields, constantly unleashes more vitality and momentum, steadily develops new quality productive forces, and secures people's livelihood with down-to-earth and vigorous efforts. Thanks to everincreasing comprehensive strength, the construction of a world-class clean energy supplier has entered a new stage of high-quality development.

CDT holds a seminar on learning and implementing the guiding principles set forth by the Third Plenary Session of the 20th CPC Central Committee

The Party Leadership Group conducts a field visit to Dabancheng Wind Farm of Datang Wuchang New Energy Co., Ltd., a subsidiary of Datang Xinjiang Power Generation Co., Ltd., and explains the guiding principles set forth by the Third Plenary Session of the 20th CPC Central Committee

CDT holds an on-site promotion meeting for deepening reform and upgrading and building a first-class enterprise



Our practices



- We endeavor to build a scientific, rational and efficient board of directors, bring together qualified external directors with more efforts, and enhance standardized management and duty performance support for external directors.
- We strengthen tenure-based and contractual management for managers. With reference to tenure-based and contractual management mode, we assign business management responsibilities to managers. We improve job contract management for ordinary employees and performance assessment of the entire personnel. New-type business responsibility system has been basically established.
- We improve internal career fair, with turnover of **7,034 persons-time** across member enterprises, up 69.8% year on year. The number of workers per 10MW needed decreases to 3.6.
- We advance reform of compensation distribution system and optimize gross payroll determination mechanism. Employees get rapidly increasing income.
- We optimize the institutional functions of the Headquarters and secondary enterprises, and deepen the reform of systems and mechanisms in new energy, fuel, materials, audit, talent and other aspects. Systems of the Group-wide management and control, industrialized operation and lean management are increasingly improved.

Our achievements



- **98.24%** coverage rate of tenure-based and contractual management for leaders
- Nearly 92% of managers subject to tenurebased and contractual management
- **68.67%** of managers competing for positions
- **7.33%** quit rate of managers

Revitalizing through reform



Datang Harbin No.1 Thermal Power Plant: Exploring the way in the reform

Lifting the barriers of secure job, lifelong position and guaranteed wage, Datang Harbin No.1 Thermal Power Plant, with the determination to innovate and remodel, distinctly orients to putting the strivers first and letting them shine brightly. Through Four Optimizations, the Power Plant establishes the mechanism of Four Capabilities. By optimizing the institutional setting and downsizing the departments, the Power Plant forms a more professional, sophisticated and flat framework mode. By optimizing position settings, it promptly solves the problem of overstaffing. By optimizing the cadre team, it implements Open Competition For All Positions Among All Employees, seven cadres born after 1985, take up positions through open competition. The average age of cadres drops from 48 to 41. For supporting projects, the Power Plant follows the principle of recruiting for every vacant job, making the best of employees' strengths, training employees according to their aptitude, and obtaining certification on the basis of reaching the standards. The Power Plant creates an increasingly strong atmosphere of "discovering talents on competition terrain and choosing the best talents to hire and utilize".



Chongqing Branch of CDT: Making breakthroughs upwards in the reform

The Chongqing Branch of CDT has pioneered bold reforms to address long-standing systemic inefficiencies, leveraging intensive, specialized, and market-oriented management innovations to dismantle institutional and structural barriers that hinder enterprise development, stimulating the internal vitality for high-quality development. An intensive mode results in higher efficiency of human resources. Chongqing Branch of CDT establishes financial management center to not only improve professional management, but also realize the goal of no additional financial personnel for subsequent project companies. Human resources management center, hydropower and new energy innovation center, quotation center and audit center come out, improving management efficiency of various business lines. Chongqing Branch of CDT optimizes the configuration of management units through professional integration. Two regional hydropower enterprises achieve professionalized integration, while managers are transferred to such frontline positions as production and development, effectively helping loss-making enterprises reduce and control losses. A shared employment mechanism works in two regional thermal power enterprises, saving labor costs by over RMB 10 million.



Holding high the banner and promoting development through reform

CDT deepens the structural reform on the energy supply side, with unprecedentedly intense layout in strategic emerging industries. The scale of new energy commissioning has doubled for two consecutive years. The upgrading and transformation of traditional industries have been accelerated with improved quality. CDT launches retrofits in terms of energy saving and carbon reduction, flexibility and heating delivery and is transforming from "dual control of energy consumption" to "dual control of carbon emissions". All key emitters have completed their compliance and settlement ahead of schedule for two consecutive compliance periods. CDT resolutely shoulders the political responsibility for ensuring energy supply and has successfully fulfilled major power supply tasks over the years, such as the 100th Anniversary of the Founding of the Communist Party of China, the Beijing Winter Olympics, the Two Sessions, the APEC Economic Leaders' Meeting, the G20 Summit, the Belt and Road Forum for International Cooperation, energy peak load shifting for summer and winter peaks, etc.

Our achievements



- Total profit for the first time RMB 20 billion-
- 20 GW+ The annual newly added installed capacity for the first time
- Total installed capacity exceeds 200 million KW
- Breakthroughs in resolving debt risks in coal chemical industry
- Fully meeting the assessment targets of "one profit and five
- Rated A in the 2023 central SOEs value creation action of benchmarking against worldclass enterprises

Innovating and moving forward with reform posture



Datang International Tuoketuo Power Generation Co., Ltd.: Embedding reform into the grassroots level

In Datang International Tuoketuo Power Generation Co., Ltd., the only pilot power generator under the SASAC of the State Council for thematic learning and discussion of "embedding reform into the grassroots level", every Party member is infused with strong sense of responsibility and honor. Facing the development challenge for green transition of the world's largest thermal power plant, Datang International Tuoketuo Power Generation Co., Ltd. focuses on "one benchmark and four brands", vigorously sets a new benchmark for modern new SOEs with new development mode, new corporate governance, new operation mechanism and new layout structure, further embellishing four brands, i.e., the world's largest thermal power plant, 10 GW comprehensive energy demonstration base specialized in wind power, solar power, thermal power and heating, backbone enterprise of green electricity delivery to Beijing in power supply for the capital city, and the model grassroots Party organization of central SOEs. In the context of reform, changes have taken place in the role of Datang International Tuoketuo Power Generation Co., Ltd. in thermal power industry. This thermal power plant is transforming into green power plant, the role of thermal power is shifting from base-load power sources to peak shaving power sources, and thermal power enterprise is actively remodeling into comprehensive energy service provider.



Datang Longtan Hydropower Plant: Strategic navigation through reform tides

Datang Longtan Hydropower Plant spares no effort to lift bottlenecks and tough problems in key fields and critical nodes, promotes management efficiency creation in all aspects, and constantly makes progress in cost reduction and efficiency improvement. Datang Longtan Hydropower Plant strengthens comprehensive equipment management, and analyzes the trend of equipment deterioration. In the competition with 72 similar units across the country, two units of Datang Longtan Hydropower Plant rank top two in the 700 MW benchmark units of China Electricity Council, demonstrating industry-leading equipment reliability. Datang Longtan Hydropower Plant optimizes reservoir regulation with the help of big data. Accuracy of water regime forecasting has increased by 2.4%, water consumption has decreased by 1.5%, power generation has increased by 120 GWh through water conservation, and profit has increased by RMB 31 million. A safety and economic operation control mode for the entire plant has taken shape. The annual revenue of the auxiliary services under "two detailed rules" has set an all-time high, in addition to remarkable effect of improved quality and efficiency



Upholding the Leading Role of Party Building

Learning the Party discipline on solid foundation

The Party Leadership Group of CDT and all member enterprises learn the important speeches and instructions by General Secretary Xi Jinping on the Party discipline learning and education. In accordance with the work requirements of the Party Committee of the SASAC of the State Council, the Party discipline learning and education are regarded as an important political task, planned from a high stance, promoted under a high standard, and covered in all aspects. The orderly progress and in-depth implementation of the Party discipline learning and education come true in CDT.



Theoretical Learning Central Group of the Party Leadership Group of CDT conducted a specialized

▲ The Party Leadership Group of CDT visited Exhibition of the Party Discipline Learning and Education themed with Observing Discipline, Forging Loyalty, Taking Responsibility and Making New Accomplishments hosted by the SASAC of the State Council



Secondary enterprises

45

Tertiary enterprises

Learning sessions of the Party Leadership Group featuring X Jinping Thought on Socialism with Chinese Characteristics for a New Era

• Thematic learning and discussion sessions of the Party organizations at all levels in CDT

1,409

The Party organizations carried out high-standard and high-caliber Party discipline study and education campaign

The Party Committee of SASAC of the State **Council praised typical** experience of CDT

Special learning and discussion sessions & reading classes of

Theoretical Learning Central Group of the Party Leadership

briefings

News reports published by mainstream media, such as People's Daily Online and Xinhuanet

Compiled and issued

Experiences and practices were published

on the briefings, weekly reports and official website of the SASAC of the State Council, **presentations** at the symposium on the Party discipline learning and education in central SOEs were

Warning education sessions of member enterprises

1,005

Thematic tutorial

Improving the Party building with pragmatic results in full swing

CDT thoroughly learns and implements the guiding principles of the Third Plenary Session of the 20th CPC Central Committee and makes overall planning for all work tasks with main task at the core. CDT secures the stronger and more powerful Party leadership and fully gives play to the combat bastion role of the Party branches and the exemplary role of the Party members, promoting continuous new breakthroughs in the production, operation, reform and development of the Group.



Setting the Red Sail: Excellence in CDT

On November 30, 2024, "Setting the Red Sail: Excellence in CDT", the Party building brand of CDT, was formally launched, comprehensively illustrating connotation, logo and meaning of the brand. CDT creates the Party building brand of "Setting the Red Sail: Excellence in CDT" under a high standard, propels quality and efficiency improvement and upgrading of the Party building work at a high level, fully stimulates red momentum for making exemplary Party leadership guide corporate trajectory towards high-quality development, and develops into a worldclass energy supplier at a faster pace. CDT makes new contributions to comprehensively advancing the construction of a strong country and the great cause of national rejuvenation through Chinese modernization.

Overall planning for "145"

Persistently centering on political construction of the Party

Systematically promoting the "Four Enhancements" of cadre team, talent team, grassroots organization and the Party member team

Improving and perfecting "Five Mechanisms" of leadership, organization, assessment, work and system

Key measures of "34567"

Develop Three Demonstration Models of Four Strengths, Four Excellences, and Four Merits

Utilizing "Four Carriers" of breakthroughs in the "Party Building Leadership+" project, interconnection and coconstruction of the Party organizations, education and training of Party affairs workers and the Party members, and the smart Party building management platform

Highlighting "Five Orientations" to systematic promotion, brand guidance, exemplary building, frontline management, digital and intelligent enabling

Implementing "Six Projects" of casting the soul, gathering strength, establishing workstyle, strengthening the foundation, enabling and improving efficiency

Fulfilling requirements for "Seven Priorities" over grassroots Party organizations, Party branch secretaries, Party members, intra-Party activities, Party building systems, intra-Party training and guarantee mechanism



Our actions



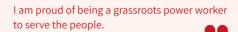
- CDT took the lead in launching and completing the 2024 Party building assessment of secondary enterprises. CDT launched and completed assessment and evaluation of the work performance of Party secretaries and full-time deputy Party secretaries of secondary enterprises.
- CDT printed and issued relevant notices about advancing "Party Building Leadership+" and "the integration of the Party building among industrial chain, supply chain and innovation chain", and guided the Party committees of secondary enterprises and the Party branches of the Headquarters to carry out joint construction and co-construction with the internal and external Party organizations.
- CDT selected and recommended "Model Primary-level Party organizations, outstanding Party members and outstanding Party affairs workers" of central SOEs. Two collectives and five individuals were commended.
- CDT conducted field research on the Party building work at CHN Energy and Sinopec, learned from the experiences and practices of peers, and collected 206 cases of innovative and efficient Party building achievements with respect to the Party building, reform, development, cadres and talents.
- CDT held demonstration training courses for the Party branch secretaries (the Party affairs cadres), training courses for the full-time Party building cadres, and online training courses for Party membership applicants and development targets.
- CDT established management ledgers for the Party organizations of mixedownership enterprises and overseas institutions.
- As **one of the seven central SOEs** selected by the SASAC of the State Council, CDT undertook the compilation of country-specific reports on the Party building for Indonesia and Uzbekistan.
- Datang International Tuoketuo Power Generation Co., Ltd., the only pilot power generator under the SASAC of the State Council for thematic learning and discussion of "embedding reform into the grassroots level", carried out thematic learning and



Strive until I make all-out efforts, and fight until I move myself. Work hard, and make a

-Yan Huanhuan, role model of Central SOE for





—Ren Jiajiong, role model of power industry for year 2024







Publicizing thoughts and making breakthroughs

CDT earnestly implements the guiding principles of the Central SOEs Publicity, Ideological and Cultural Work Conference and other meetings. In the wake of the meeting on the publicity, ideological and cultural brand work of the Group, CDT prints and issues Key Points of Publicity, Ideological and Cultural Brand Work, makes integrated arrangements for ideological and political work, develops such systems as Guiding Opinions on Strengthening and Improving Publicity, Ideological and Cultural Work, and compiles Cases of Ideological and Political Work. New improvements have been made in publicity and ideological work.



Joint media interviews themed with "Green Future Powered by Excellent CDT"

New coverages by CCTV

43

Articles on the official website of the SASAC of the State Council

International communication cases featured in Overseas Publicity Work Performance of Central SOEs prepared by the SASAC of the State Council 76

76

CCTV journalists visit the wind power station on the world's highest altitude
CCTV focuses on the commissioning and operation of CDT energy storage project

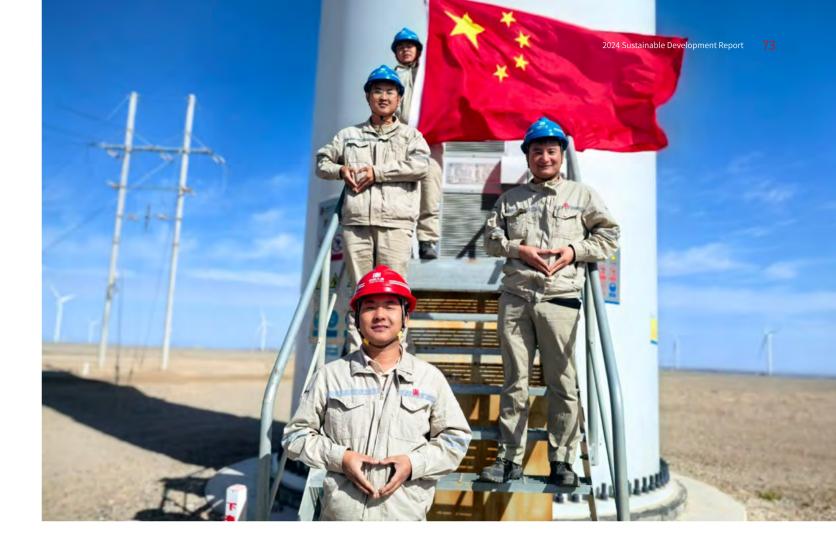


世界海拔最高风电站机组全部完成吊装



Five media outlets, namely, People.cn, Chinanews.com, CNR.cn, Qinghai Daily and Qinghai Television, visit Datang Qinghai Energy Development Co., Ltd. and give media interviews at Datang Da Qaidam Clean Energy Heating Project and Datang Haixi Prefecture Clean Heating Supporting 250 MV Photovoltaic Project.





Pushing forward united front work in an orderly manner

CDT commits to improving the overall pattern of united front work. CDT sets up a leading group for united front work of the Group, clearly defines the composition and work responsibilities of such leading group and its office, and formulates *Implementation* Plan of the Party Leadership Group of China Datang Corporation Ltd. for Undertaking United Front Work in the New Era. The first united front work training course has been held since the establishment of the Group. With focus on core technological breakthroughs, major project construction and other key tasks, CDT launches a series of activities to dedicate the wisdom and strength of united front to promoting high-quality development of the Group on the journey of making a new start.



CDT's 2024 Highlights

The Voice of CDT United Front were compiled and printed

The campaign of My Suggestions for the Development of the Group was launched among united front personnel, and

226

suggestions and opinions on work safety, operation, management, tech innovation were collected

Support was given to non-Party members who conducted field research in the leading edge of production and operation and the frontline of sci-tech innovation. A number of highquality research reports with detailed contents and distinct viewpoints were authored. A total of

44

research reports were selected and compiled into an album

Social Responsibility







Ensuring and improving people's livelihood in the course of development is a major task of Chinese modernization. General Secretary Xi Jinping stresses that "We must steadfastly uphold the people-centered development philosophy, progressively improve the livelihood security in the course of development, guide and encourage the people to build a happy life through their own efforts." CDT is required to uphold the principle of realizing, safeguarding and developing the fundamental interests of the overwhelming majority of the people, take more measures to benefit the people and win popular support, improve the basic public service system, diversify public services, enhance balance and accessibility, and steadily pursue common prosperity.

CDT's action



CDT bears well-being of the people in mind, adheres to people-oriented approach, and gives prominence to social progress. CDT contributes to the economic development and improvement of people's livelihoods in rural areas, creates more satisfying working environment for employees, advances overseas exchanges and cooperation, and continuously enhances social contributions. CDT constantly gives play to the unique competitive advantages in helping people live in peace and contentment, promoting highquality full employment, and improving people's quality of life, and doing everything possible to open up new horizons of high-quality development in the new era.



Inclusion in the Central SOEs Responsibility Management · Vanguard 30 Index initiated by SASAC (2024)

Free assistance funds for rural revitalization

million

Total amount of social donations

million



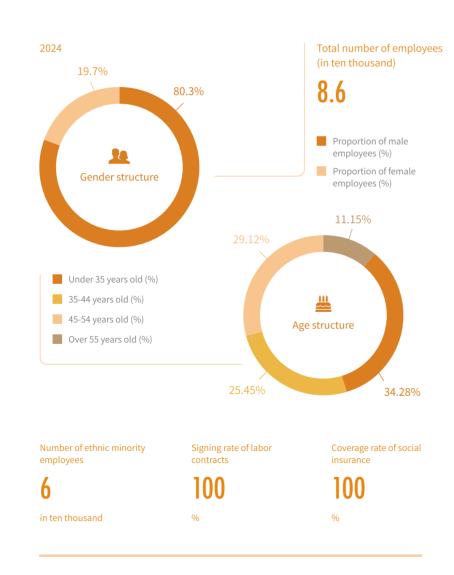
Caring for Employees



Safeguarding the rights and interests of employees

Equal employment

CDT strictly abides by the Law of the People's Republic of China on Labor and the Law of the People's Republic of China on Labor Contracts, standardizes the implementation of labor employment system, resolutely opposes employment discrimination, adheres to diversity and equal opportunities, and implements local employment. CDT firmly rejects forced labor, harassment, abuse, and the employment of child labor. CDT negotiates with employees on an equal footing, signs labor contracts in accordance with the law, and effectively safeguards the basic rights and interests of employees.



Compensation and benefit package

CDT constantly optimizes compensation management mechanism, strengthens performance-oriented compensation incentive system, increases compensation incentives, establishes a full-fledged benefit guarantee system, and continuously safeguards employees' rights and interests (such as labor remuneration and social security contributions) at a higher level. In 2024, CDT carried out compensation surveys for all levels of member enterprises on all fronts. Through multi-sample, full-coverage, multi-perspective and three-dimensional surveys, CDT got a big picture of the industry attributes and enterprise characteristics of compensation distribution, deeply analyzed the problems and deficiencies of compensation distribution in all levels of member enterprises, and formed "Six Kinds of Electric Power" in Chinese energy equipment manufacturing sector, "one industry, one summary" and "one enterprise, one report". CDT designed and formulated a reform proposal for compensation distribution, put forward 21 reform measures in four aspects, including optimizing gross payroll determination mechanism and strengthening compensation management of enterprise heads, facilitating the construction of a precise, standardized and efficient compensation distribution system and continuously enhancing sense of gain among employees.

Democratic management

CDT actively promotes democratic management, compulsorily establishes workers' congresses in all member enterprises where necessary, and fosters star-level factory affairs disclosure enterprises. All 289 grassroots enterprises are fully covered, while employees effectively exercise their rights to know, make suggestions, express opinions and supervise. Employee representatives carried out special inspections during "Work Safety Month", and 1,709 problems were resolved. A total of 275 good ideas and valuable suggestions were collected for Advice and Suggestions for 100-Day Action Plan, effectively helping realize the annual work tasks and goals.

Rest and leave

CDT, in all aspects, guarantees the basic benefits of employees, strictly enforces rest and leave system, implements paid leave on legal holidays and paid annual leave, and resolutely safeguards the legitimate rights and interests of employees.









Training for new employees

Boosting employee growth

CDT deeply implements the strategy of making enterprise strong by training competent personnel, makes greater efforts for training, expands the channels for employee growth and success, and builds a platform for employees to enhance their skills, grasp abilities and showcase their talents. CDT "Ten-Hundred-Thousand" talent pool is under construction at a faster pace. All employees are motivated to step up self-learning, improve personal capabilities, and achieve common development hand in hand with CDT.



Participating in skills competition

Introducing top-tier talents in a profounder manner



- Working out a list for overseas talent introduction, intensifying efforts to attract high-caliber individuals, and continuously introducing top-tier overseas talents.
- Developing implementation and Management Measures for Dual-hired Talents, encouraging Three Companies and Three Institutes to collaborate with universities and research institutions in "dual-hiring" and "co-construction" initiatives; inviting young experts to join the Group on temporary assignments, propelling joint research on scientific projects, and establishing shared platforms for sci-tech innovation.

Cultivate technical and skilled professionals



- Conducting diverse talent evaluations: CDT has additionally 1,637 senior professionals, 3,345 intermediate professionals, 332 senior technicians and 1,656 technicians engaged in power industry. Both composition and quality of the talent pool have been steadily improved.
- Actively participating in various professional skills competitions: In national secondary-class contests on carbon emission management, centralized control operations and other fields, three individuals have been honored with title of "National Technical Expert". The reserve of exceptional craftsmen continuously expands in CDT.

Improving talent development system



Strengthening talent development: Numerous outstanding technical and skilled professionals have been recognized by Special Government Allowance Program of the State Council, the SASAC Central SOEs' "Hundred-Ten Thousand-Million" Sci-tech Talent Cultivation Project and Manufacturing Talent Support Program of the Ministry of Industry and Information Technology. More top-tier talents continuously spring up.

Invigorating talent growth



- Improving mechanisms of "challenge-response" and "open competition to select the best candidates", preferring chief experts and outstanding young scientific talents of the Group to serve as enterprise supervisor of master student and doctoral students of Engineering Science; instructing students to participate in major breakthrough projects of the National Development and Reform Commission, the Ministry of Industry and Information Technology and other governmental authorities.
- Appraising the second batch of expert talents for the Group, and commending 71 expert talents across eight fields, including seven chief experts, 40 outstanding young scientific talents and 24 CDT Craftsmen; systematically advancing the construction of the Group-wide expert talent team and multi-channel talent pool, bringing the total size of the expert talent team to 2,041 members.

Putting employee care into practice

CDT pushes the construction of "Happiness Datang" to new peaks and launches "Six Best" livelihood projects. 522 designated projects were basically completed throughout the year 2024, enhancing the sense of belonging and cohesion among employees.



 News report on hosting the National Power Workers' Badminton Competition was published by

45

mainstream media outlets, including Xinhua News, CNR.cn and CCTV.com

Employee satisfaction rate

99

%

Our actions

- Organizing thematic activities, such as "Good Wishes of Four Seasons", "Excellence towards the Future: Happiness Refueling Station" and "Health Paradise: Expert Lecture".
- Conducting a series of cultural and sports events, including "CDT Cup" cultural and sports activities for employees in celebration of the 75th Anniversary of the Founding of the People's Republic of China.
- Hosting the choral performance themed with "Excellence in CDT as a Backbone
 of Strong China" for employees at the Headquarters and Beijing-based member
 enterprises, as well as a calligraphy and painting exhibition for the Group-wide
 employees.
- Working collaboration zone of five labor unions organized the inaugural employee basketball tournament of the Group.
- Organizing such activities as the New Year Gathering at the Headquarters, Lantern Festival riddles guessing, DIY of female employees, health walk for Beijing-based member enterprises & parent-child event on Children's Day; jointly organizing theatrical performances together with enterprises and local entities in Xiong'an New Area.
- The Communist Youth League organizations at all levels in the Group continuously organized 618 welcoming sessions under the theme of Hello! Newcomers of CDT.
- Organizing a youth social event themed with Love on Double Seventh Festival: Frisbee Party.

Perfect duo of work and daily life



Joining Hands with Partners for Win-win **Outcome**



• Registered suppliers in

206,903

• Active suppliers

44,014

 Suppliers shortlisted for framework procurement

Central SOEs benchmarking assessment of procurement and supply chain management

Enhancing supply chain management

CDT follows the principles of fairness, impartiality and transparency and working principles of integrity, trustworthiness, unified authority, hierarchical implementation, dynamic evaluation, supporting excellent ones while eliminating underperforming ones. CDT implements classified and hierarchical supplier management. In

accordance with Supplier Management Measures of China Datang Corporation Ltd. and Material Management Regulations of China Datang Corporation Ltd., CDT steps up supplier management of member enterprises and rigorously phases out unqualified suppliers through corrective measures.

■ CDT places significant emphasis on enhancing collaboration with partners across the upstream and downstream segments of the supply chain, actively puts the concept of coordinated supply chain development into practice, and strives to construct a transparent supply chain ecosystem, while fostering a favorable supply chain cooperation ecosystem.

■ In 2024, CDT, in a rolling manner, implemented framework procurement for new energy equipment across 11 bid packages under five product categories. CDT established production information sharing mechanism with supply chain enterprises, and collaboratively supplied equipment with overall capacity of over 20 GW without any risk of supply disruption. The incidence of equipment quality defects was significantly lower than industry average, effectively propping up the high-quality commissioning of new energy projects. CDT stimulated upstream enterprises in the supply chain to jointly echo with national strategic development planning and regional development layout, convincingly exemplifying collaborative cooperation of supply chain.

■ In new energy sector, CDT systematically carries out comprehensive evaluation of supplier performance on multiple dimensions, including contract fulfillment, production and operation, industrial collaboration and green supply chain construction. CDT applies evaluation results in the preliminary stages of framework procurement for new energy equipment, incentivizing suppliers to enhance service performance.

■ In line with the requirements of the SASAC of the State Council for "persisting in low-carbon development and building green supply chain", CDT applies the concept of full-life-cycle carbon footprint management, gives play to the leading role of chain initiator, and guides 16 enterprises on the chain to implement carbon footprint and carbon emission accounting and improve green and low-carbon manufacturing. In this way, two-way cycle for green and low-carbon transition of "CDT-Supplier" takes shape, setting a demonstration model for promoting the green and lowcarbon transformation of the power equipment industry chain.

Deepening cooperation with multiple parties

CDT intensifies mutually beneficial cooperation with such partners as governments, enterprises and educational institutions, actively participates in industry forums and exhibitions, achieves mutual benefit and win-win results, enjoys greater discourse power and visibility in the industry, and works hand in hand with partners to embrace a prosperous and sustainable future together.



• Cordial meetings with the Party and government leaders of

provinces (autonomous regions and municipalities directly under the Central Government) • Friendly discussions

Building a platform to pave the way for further cooperation



Signing an agreement for comprehensive deepening of strategic cooperation with the People's Government of Guangxi Zhuang Autonomous Region

Paying a visit to the CPC Provincial Committee and the People's Provincial Government of Jiangsu Province and exchanging views on further strengthening mutual cooperation





During the meeting with State Grid, the two sides exchanged views upon deepening collaborative cooperation in power industry and promoting green and low-carbon energy transition and development





 Organizing a symposium with Zhejiang University to discuss about strengthening the joint cultivation of outstanding engineers and furthering university-enterprise pragmatic cooperation

The assistance efforts have received high recognition from the superior, local

governments, and the general public. The effectiveness of assistance work has been

rated as "Good" in six consecutive evaluations conducted by the central authorities. The case study, titled "Delineating Beauty and Weaving Happiness: Order-Based

Assistance Promoting Employment" was selected as an outstanding example of

The achievements of the assistance work are covered by 48 news report of

CDT Educational Assistance for "Dream Building Project" has been selected as an exemplary brand case in Research Report on Brand Empowerment for High-Quality

In witness of collaboration between CDT and China Agricultural University, Sci-

tech Courtyard Project in Dahua County helped courtyard economy of the county

to realize production value of RMB 173 million. This initiative was highly praised

by Liu Ning, the then Secretary of the CPC Guangxi Zhuang Autonomous Region

Committee, as "small courtyard and significant income growth". During his visit

for research purposes, Deputy Secretary and Governor of the CPC Guangxi Zhuang

Autonomous Region Committee, spoke highly of this project, saying that "small

but exquisite projects can also generate high returns, and even limited space can be

Ten assistance projects have been included in White Paper on Energy and Rural

"Central SOEs' Contributions to Rural Revitalization".

Development of Rural Revitalization (2024).

utilized to offer valuable opportunities".

Revitalization.

mainstream media outlets.

Enhancing Social Contributions

Emerging as an activist in rural revitalization

CDT thoroughly obeys the decisions and plans of the CPC Central Committee and the important instructions and written comments by General Secretary Xi Jinping on the work related to agriculture, rural areas and farmers. CDT firmly assumes the mission of assisting in rural revitalization, draws on and leverages the experience in the project of "1,000 Villages in Demonstration and 10, 000 Villages in Renovation". Enabling beautiful rural areas and adding luster to Beautiful China with green electricity, CDT lays equal stress on Three-Support (support for rural construction, support for inspiration/confidence forging, and support for education), integrates Three-Assistance (sincerity, genuine care, and practical financial support), and coordinates the promotion of the Five-Sphere Integrated Plan (education, industry, livelihood, employment and the Party building). Assistance system with CDT characteristics, encompassing Three-Support, Three-Assistance and Five-Sphere Integrated Plan, moves ahead towards profound and practical landscape. CDT constantly develops "Dream Building Project" brand and props up five-pronged revitalization in assisted regions, effectively consolidating poverty alleviation achievements, powerfully supporting local economic development, helping foster an irreplaceable talent pool and immovable industrial clusters, and injecting robust momentum into highquality, efficient, and sustainable new development of designated assistance regions.

Providing designated assistance to Dahua County of Guangxi **Zhuang Autonomous Region** and Chengcheng County of Shaanxi Province, providing paired assistance to Xinghai County of Qinghai Province, and undertaking assistance tasks for

86

designated villages

• Allocating non-repayable

• Assistance projects under way

302

• Allocating non-repayable

earmarked for designated assistance to Dahua County of Guangxi Zhuang Autonomous Region and Chengcheng County of Shaanxi Province

officials to take temporary positions for designated

assistance funds to

真 心 真情 办 实 事

 Purchasing and helping sell agricultural products from

Introducing non-repayable and repayable assistance

RMB 46.53

Training talents across various fields of expertise

20,000+

Strengthening management and improving top-level design

Leadership and organization: CDT held Meeting of the Leading Group for Rural Revitalization and Summary-improvement Conference on Educational Assistance to deliberate and arrange key tasks for the year, as well as measures for educational assistance work. CDT released the annual priorities for rural revitalization work and corresponding assistance plans to effectively guide member enterprises at all levels in comprehensively advancing designated assistance initiatives. A working system has been established, comprising "the Group - branches and subsidiaries - grassroots enterprises - dispatched cadres", achieving organizational support featuring unimpeded connectivity from top to bottom and systematic implementation layer by layer.

On-site Supervision: Four principal leaders and those with shared responsibility conducted on-site research and supervision. Cheng Jianping, Secretary of the CPC Beijing Normal University Committee, was invited to jointly oversee the summary and improvement of educational assistance efforts in Dahua County. Additionally, other assistance teams paid 27 visits to designated assistance counties for field research, comprehensively supervising the execution of assistance projects.

Support for rural construction Support for inspiration/ confidence forging Support for education **Three-Support** Sincerity Education Genuine care Industry Practical financial support Livelihood Party building **Employment**

> Assistance system with CDT characteristics: Three-Support, Three-Assistance, and Five-Sphere Integrated Plan

Delegating responsibility and effectively executing the fivepronged assistance

Educational Assistance

-Building New Dreams for a Bright Future

CDT insists on sincerity, genuine care and practical financial support to help optimize educational resources and improve school facilities and teaching quality in assistance regions. These initiatives ensure that people lifted out of poverty and relocated people have access to employment opportunities, guaranteed income and the ways to get rich. A new platform is created for them to realize personal value.





In November 2024, CDT, in collaboration with Beijing StarPower Charity Foundation, successfully organized a charity activity titled "Carrying Forward the Olympic Spirit and Realizing Dream of Excellence" & "Protecting the Hongshui River" in Dahua Yao Autonomous County, Guangxi Zhuang Autonomous Region

nnovative incentive mechanisms

A total of RMB 15.35 million has been allocated through CDT program of "Dream Building Three Grants" (National Scholarship, National Encouragement Scholarship, and National Grant) across Dahua County in Guangxi, Chengcheng County, Fuping County and Fuxian County in Shaanxi, Xinghai County in Qinghai, Zuogong County and Basu County in Xizang, benefiting 11,587 outstanding teachers and students.

Organizing distinctive activities

■ Various activities have been organized to inspire the dreams of career success and cherish the aspirations for serving our country. Examples include Summer Camp of "Meeting in Beijing • Dream Journey Assistance", "College Students' Aesthetic Education Volunteer Teaching in New Era", "Digital Cloud Classroom", Voluntary Teaching for "Spring Rain Action", "Academician's Class" and "Olympic Champion's Campus Tour".

Ingrading infrastructures

 Infrastructure upgrades include constructing playgrounds, standardized laboratories and other essential facilities in remote areas, such as Dahua County, Chengcheng County, Zuogong County and Basu County.

Pioneering in grouping mode

 CDT introduces professional forces from higher educational institutions like Beijing Normal University to establish the "grouping" mode. This initiative has trained over 3,000 young and middle-aged teachers in Dahua County and Chengcheng County, creating a robust team of teaching staff.

inhancing capabilities of

Leveraging the talent cultivation system within power enterprise, CDT sends "National Master Craftsmen" "Technical Experts" and "Model Workers and Individuals" to set up the off-campus training bases for vocational schools and help improve vocational education system. The introduction of Guangxi Tangyou Protective Technology Co., Ltd. and the promotion of its collaboration with vocational and technical schools result in the explorations for clothing processing courses and internship positions. This initiative has explored a new pathway for the success and employment of eligible young people, further enhancing employment support capability, educational appeal and institutional visibility of vocational education in Dahua County.

Industrial Assistance

Fostering New Hopes for Happiness and Prosperity

CDT exerts more industrial assistance efforts, lays a solid economic foundation for rural revitalization, offering more job opportunities and incomes for the assisted people, enhancing resilience of assisted industries, and fostering new hopes for happiness and prosperity of rural areas.



With the support of CDT, Hejialou Village has formed a collective economy industry cluster. Profits are allocated to public undertakings of our village collective, benefiting the locals through practical measures. Significant changes have taken place in overall appearance of Hejialou Village.

—Han Hucang, Deputy Head of Hejialou Villagers' Committee, Siqian Town, Chengcheng County

A clean energy base in Chengcheng County, Shaanxi Province, is taking shape. Aid projects, such as cherry industry deep processing, modern grain industry park and production lines of farmers' professional cooperatives are bustling with each passing day. For the first time, collective economy of Hejialou Village has generated annual income of over RMB 5 million.

In witness of collaboration between CDT and China Agricultural University, Sci-tech Courtyard emerges in Dahua County and cultivates courtyard economy with regional characteristics. This project was highly praised by Liu Ning, the then Secretary of the CPC Guangxi Zhuang Autonomous Region Committee, as "small courtyard and significant income growth".



Construction work of Duyang Wind Farm Project in Dahua County, Guangxi, takes a faster pace. Assisted industries are increasingly growing stronger. The rooftop photovoltaic system in Banlan Village generates an additional annual income of RMB 280,000 for the village collective.



In Xilinhot, Inner Mongolia, "Photovoltaic Ranch Shared Park" is thriving with herds of cattle and sheep. In other regions, panels, used for "complementarity of agricultural land and solar energy", imply profitability and inject green momentum into the local economic development.



Tangwei Garment Factory and Tangyou Garment Factory have helped nearly 200 persons lifted out of poverty to get jobs. Two factories have been recognized as an outstanding example of "Central SOEs' Contributions to Rural Revitalization".

Livelihood Assistance

-Unveiling a Warm and Wonderful **New Life**

CDT implements clean heating in Xinghai County, Oinghai Province, "Harbor of Children's Heart" in Hebei Village, Jiangxi Province, lighting project in Niubaiyang Village, Fujian Province, and drinking water safety in Zhula Village, Xizang. Through practical measures to the benefit of people, CDT significantly arouse the stronger sense of gain, happiness and safety among the assisted people. Under consumption assistance mode of "four online platforms + one offline base", CDT has purchased and helped purchase agricultural products worth RMB 180 million from povertyalleviated areas, broadening the road to prosperity for villagers.





Since the arrival of CDT, it helps our village in many aspects. Zhula Village has seen substantial improvements in drinking water supply and field irrigation. Many thanks for the CPC and CDT.

—Villager Phuntsog from Zhula Village, Chawalong Township, Chayu County, Xizang



Employment Assistance

—Constructing a New Stage for **Value Realization**

CDT has comprehensively trained over 20,000 talents engaged in technology, management, e-commerce and other fields, recruited 62 graduates from assisted areas, Xizang, Xinjiang and other regions. Through various industrial assistance projects, CDT stabilizes and transfers over 3,000 persons to work in planting and breeding industry, forming a favorable pattern where bellwethers take the lead, young talents are nurtured, and returnees contribute to rural revitalization. Therefore, people lifted out of poverty and relocated people cherish wishes for a bright future, breathing new life into rural revitalization.

Party Building Assistance

-Stimulating New Momentum for **Rural Revitalization**

Under the guidance of "Setting the Red Sail: Excellence in CDT", the Party building brand of CDT, CDT has forged Party building partnerships with 107 designated assistance counties and villages, helping grassroots Party organizations grow well-sophisticated and strong. Joint construction activities in various forms result in stronger Party leadership, broader organizational coverage, diversified spiritual civilization initiatives, and improved cultural and living standards in assisted areas. Under concerted efforts of CDT and these assistance areas, rural revitalization will soar up with "red wings".

- In Dahua County of Guangxi Zhuang Autonomous Region, greeting event of "Warm the Dahua Yao Autonomous County" and ethnic cultural performance on the Double Third Festival were splendid and exciting. Trip shoot *The County Is on* the Move about the rural revitalization of Dahua County crystallized the power of enterprise and Dahua County to make common progress.
- In Chengcheng County of Shaanxi Province, the 2024 National Power Workers' Badminton Competition attracted about 500 badminton players from 14 teams on behalf of 11 power conglomerates, boosting sports development of power industry and effectively driving related industries, such as catering, accommodation, culture and tourism.
- In Qianjin Village, Wensu County, Xinjiang, participants took "Ethnic Unity" Bus Akesu Red Education Base for the purpose of learning and education on the CPC history. Mandarin Chinese training course and youth forum under Project of "Cultural Enrichment of Xinjiang" promoted in-depth ethnic integration.
- In Xinghai County of Qinghai, Framework Agreements on the Effective Connection for Consolidating and Expanding the Achievements of Poverty Alleviation and Rural Revitalization under the Leadership of Party Building and Paired Co-construction were signed with the CPC town and township committees across the county, adding "red wings" to precise support.
- In Qiduntai Village, Wuwei City, Gansu Province, New Era Civilization Practice Station ignited teenagers' passion for loving the CPC.
- In Fangdong Village, Yuzhou City, Henan, "Five-Star" Party Branch was established, along with CDT Rural Grand Stage and Cultural Park, improving the quality of life for villagers.

Devoting to charity and volunteer work

Disaster relief assistance

In response to natural disasters, CDT acts without delay, fully engages in disaster relief efforts, promptly sends rescue teams to rush to the disasterstricken areas, allocates emergency supplies, ensures the basic living needs of the affected people, and helps restore the production and living order in the disaster-stricken areas.



 Youth volunteer service teams of the Communist Youth League organizations at all levels

308

Youth volunteers

22,500+

Volunteer service year 2024

Charity and volunteer work

CDT actively engages in charity, conducts external donations, furnishes materials and funds to impoverished areas and vulnerable groups to improve living conditions, support education and healthcare, sheds light on the care and warmth through tangible actions, and demonstrates corporate responsibility.

CDT: CDT in face of trials and hardships



CDT Learning from Lei Feng, a Good Example





Photovoltaic energy illuminates the snow-capped plateau

Contributing to regional development

CDT always regards serving the national strategy as the paramount political responsibility and greatest developmental opportunity. CDT actively engages in the coordinated development of the Beijing-Tianjin-Hebei region, the integrated development of the Yangtze River Delta, the construction of Xiong'an New Area, Guangdong-Hong Kong-Macao Greater Bay Area, the Western Development Initiative, and the planning and establishment of Hainan Free Trade Zone. Through concrete actions, CDT contributes to regional economic and social progress, fostering local prosperity. CDT comprehensively implements the latest instructions

from General Secretary Xi Jinping on governance in border areas, constantly prioritizes the enrichment and development of border regions and border populations, aligns with and joins relevant regional development strategies and major regional strategies, and adopts "one area, one policy" approach to intensively develop new energy bases in border areas and develop offshore wind power in coastal areas. By driving economic growth through industrial development, CDT enhances the stability and security of border areas. CDT endeavors to write a new chapter on central-regional cooperative development.





- Holding talks with Bateer, Member of the Standing Committee of the CPC
 Holding Symposium on High-quality Development of CDT in Xinjiang Hainan Provincial Committee and Executive Vice Governor of Hainan Province

Strengthening commitment to fulfilling responsibilities overseas

CDT further strengthens commitment to fulfilling social responsibilities overseas. High-level exchanges have catalyzed new breakthroughs in overseas expansion, enabling the commencement of construction on our first international renewable energy project. The Silk Road Energy Joint Technology Innovation R&D Center has been established in Uzbekistan, marking an innovative milestone in international sci-tech cooperation. Brand international communication has entered a new stage, significantly enhancing the global influence of corporate brand.



- CDT has been bestowed with 16 international honors, including the Five-Star Award, the highest award for social responsibility fulfillment in Indonesia, Zero Accident Award, and Responsibility Contribution Award of Cambodia.
- CDT Phnom Penh Battambang 230kV Transmission and Transformation Project was awarded "Small yet Smart" Energy International Cooperation Best Practice Case Award in the category of improving people's livelihood at the Third Belt and Road Energy Ministerial Conference.
- Several overseas publicity cases have been recognized as outstanding examples of international communication of central SOEs by the SASAC of the State Council and included in briefings of the SASAC of the State Council on overseas publicity work of central SOEs.
- Outstanding Work Award in the Sixth Belt and Road Initiative Short Video

Boasting overseas management characterized by scientific rigor and operational efficiency

CDT consistently reinforces the top-level strategic design for overseas development initiatives. The Party Leadership Group of the Group places significant emphasis on international expansion and joins numerous international exchange activities to enable overseas development. CDT promptly implements the guiding principles outlined in the conference of the SASAC of the State Council on international business operations for central SOE leaders, convenes work conference on international business operation, and strategically plans for high-quality international business development while developing into a globally competitive world-class enterprise at a faster pace. In line with the core principles of "risk control, efficiency enhancement and intensified effort", and in conjunction with Country-Specific Investment Guide, Guiding Opinions on Green, Low-carbon, and HighQuality Development of International Business and actual business conditions, clear development pathways have been found for key regions and countries targeted for business expansion. The authorization framework for overseas subsidiaries has been successfully implemented through the efficient collaboration of all relevant divisions at headquarters, covering everything from strategic design to operational support. This seamless cooperation between the International Department, overseas units, and frontline foreign institutions has facilitated rapid breakthroughs in our international renewable energy investments.

Work safety

- CDT consistently balances development and security in a sophisticated manner. Country-Specific Investment Guide incorporates national security considerations into the overall planning at the early stage of overseas layout.
- CDT establishes and improves comprehensive personal safety guarantee system for overseas personnel. The online supervision system for overseas stateowned assets and the emergency command application system for overseas security assurance have been successfully put into service. Regular emergency drills are organized to construct an all-encompassing safety defense line for overseas assets and personnel throughout the entire process.
- DAPEIN I Hydropower Project in Myanmar was awarded "Outstanding Overseas Security Practice Award of 2024".

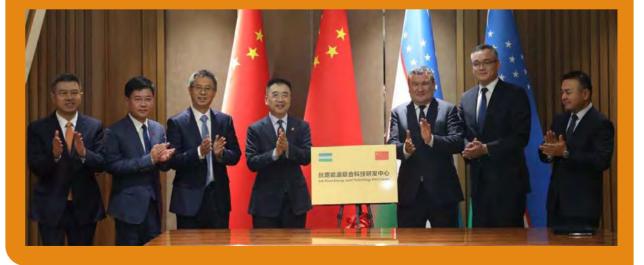
Making progress in both quantity and quality of overseas development

CDT continues to expand its global presence through overseas investments, operations, international trade, carbon asset development, and cross-border R&D collaboration. While providing clean power for the economic and social development of host countries. CDT actively fulfills the overseas social responsibilities, vigorously promotes localized operation, offers jobs for local people, and promotes the building of a community with a shared future for mankind.



Setting a Model of Multi-Party Cooperation—Unveiling of The Silk Road Energy Joint Technology Innovation R&D Center in Uzbekistan





- In Southeast Asia: The in-service projects are safe and stable with abundant returns. The hydropower and photovoltaic projects are making steady progress in Laos.
- In Central Asia and the junction of Europe and Asia: Buka photovoltaic project in Uzbekistan has commenced construction. with 60 MW photovoltaic panels installed, including 10 MW connected to the grid. The wind-solar-storage project in Uzbekistan, the photovoltaic project and gas turbine project in Kazakhstan, and the photovoltaic project, onshore wind power project and offshore power project in Azerbaijan are advancing in an orderly manner.
- In Africa: Site survey of the photovoltaic project in Zambia has been completed.

- Power technology assistance project for the Democratic Republic of Sao Tome and Principe (Phase IV), undertaken by CDT, has been successfully concluded and highly praised by both governments of the PRC and the Democratic Republic of Sao Tome and Principe.
- CDT provides operation and maintenance services for Payra Project, the largest power station in Bangladesh, strongly escorting the local safe power supply.

At the China International Import Expo, CDT has signed contracts with seven international enterprises around the construction of supply chain resilience, with gross contract value of nearly USD 265 million and cumulative procurement amount of nearly USD 1.8 billion. From January to November 2024, imports and exports of materials, fuels, environmental protection products, cross-border power transmission and other items totaled approximately RMB 16 hillion.

 CDT began to fill the market gaps in carbon assets and carbon trading of new energy projects at home and abroad. Kalten Power Plant in Indonesia sold carbon quota of 90,000 tons.

- CDT jointly initiates The Silk Road Energy Joint Technology Innovation R&D Center with the Ministry of Energy of the Republic of Uzbekistan, and Dongfang Electric Corporation. The R&D Center kicked off the first Energy Elite Program, providing training for Uzbek management and technical personnel in the energy sector, advancing the equipment, technology and standards to jointly go global, and paving the way for the implementation of new energy cooperation
- Sci-tech research and development centers and standard promotion centers sprawl in West Asia and Africa.

Achieving remarkable results in international exchanges

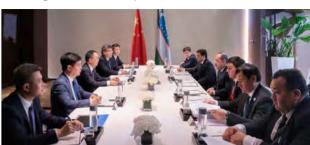
CD actively pursues breakthroughs in overseas projects and lifts development bottlenecks. CDT visits such worldclass energy enterprises as EDF, and initiates research cooperation projects. The leaders of the Group have visited and met with the heads of state, energy dignitaries and senior executives of key country-specific markets, facilitating the substantive progress in a number of overseas projects and the implementation of research cooperation.

- CDT attended multiple diplomatic events, such as the Beijing Summit of the Forum on China-Africa Cooperation, the Boao Forum for Asia, the China-Asean Expo, and the China International Import Expo. Immediately after these events. CDT gave shape to the diplomatic achievements of the heads of state and accelerated the promotion of new energy projects and research cooperation among the participating countries of the Belt and Road Initiative.
- CDT attended international economic and trade events, such as **Réunion Du** Conseil D'Entreprises Franco-Chinois, the China-Russia Expo, the Tashkent International Investment Forum, and the Kazakhstan Global Investment Roundtable. CDT tells the development story on the international stage.
- CDT jointly hosted International Symposium on "Environment, Development and Human Rights: Green and Low-Carbon Development in the Process of **Modernization"** with the China Foundation for Human Rights Development. Before the symposium, international field visit themed with Green Development in China, Green Development in CDT, co-hosted with the Publicity Department of the CPC Central Committee, received extensive attention from all sectors of society at home and abroad
- CDT jointly held a seminar on "Green, Low-carbon & Sustainable Development Capacity Building " under Capacity Building Training Program of South-South Cooperation on Climate Change with the Ministry of Ecology and Environment.
- At COP29, CDT jointly held a side event on "Green and Low-Carbon Development of China's Power Industry" at China Pavilion with China Electricity Council, representing China's power industry to showcase China's contributions to green and low-carbon development on the international stage and embellishing the international brand image of the Group.

Holding talks with Chuop Paris, secretary of state at the Cambodian











Holding talks with Parviz Shahbazov, Minister of Energy of Azerbaijan

Holding talks with Luc Rémont, Chairman and CEO of Electricité de France

Zambian President Hichilema visited CDT, marking a new breakthrough in the Belt and Road Initiative





Diversifying

Sustainable Development Management

Upholding the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, CDT implements the guiding principles of the 20th CPC National Congress in all respects, follows the new development philosophy in an integrated, accurate and allround manner, and earnestly applies the people-centered development thinking. In accordance with the Guiding Opinions on Central Enterprises' High-Standard Fulfillment of Social Responsibilities in the New Era issued by the SASAC of the State Council, CDT consistently fulfills social responsibilities under high standard, strengthens core functions, enhances core competitiveness, moves faster to become world-class outfit, achieves high-quality development, plays a more important role in economic and social development, meets the people's aspirations for a better life more effectively, and makes greater contributions to building a strong country and promoting national rejuvenation.



Social responsibility leadership institutions. management bodies and designated positions of member enterprises

45

Organized or participated

Strengthening Organizational Leadership

The Party Leadership Group of the Group places a high premium on social responsibility work and incorporates social responsibility work into the core agenda. By consolidating and continuously refining leadership structure for social responsibility work, CDT earnestly builds a governance framework and system in line with the company's current situation. A four-tiered social responsibility governance system has been established, comprising "decisionmaking level - overall planning level coordination level - execution level". Social responsibility work is part of the routine management processes of

shareholders' meeting, board of directors, specialized committees and management team, propelling the seamless integration of social responsibility concept into the corporate development strategy and daily operation. Financial resources are allocated to support social responsibility activities, coupled with rigorous oversight of fund expenditures. CDT continuously makes more efforts for responsibility capacity building, participates in internal and external training and exchange programs, and becomes more capable of social responsibility management and practice.

Improving Systems and Mechanisms

CDT develops and improves social responsibility work system, refines the system of annual planning and summary reporting for key fields of social responsibility work, and continuously makes social responsibility work increasingly standardized and institutionalized. CDT persistently seeks enterprise development while fulfilling social responsibility. In the context of actual circumstances, CDT regards fulfilling social responsibility as a critical move to establish modern enterprise system and enhance overall

competitiveness. By transforming development mode, accelerating structural upgrade and pursuing the organic integration of strategic development and responsibility assumption, CDT embeds the social responsibility concept into corporate strategy, ensuring coverage across all aspects and stages of enterprise management. CDT emphasizes key priorities, adopts a phased approach, strives for tangible outcomes, and makes high-quality enterprise development remain central to corporate mission.

Notably, led by Zhang Guimei, recipient of the July 1 Medal and recognized as "Role Model of The Times", more than 180 teachers and students visited Datang Guanyinyan Hydropower Station for study tour. This provided participants with firsthand exposure to China's pillar infrastructure and an understanding of national strength





I take the children to take a closer look at China's pillar infrastructure, understand the hardships of laborers, and learn how electricity is generated. In this way, children are motivated to respect labor, knowledge and talents from the inside, grasp more knowledge, and do something useful for the society.

—Zhang Guimei, "Role Model of The Times"

Responsibility CDT strictly upholds domestic and

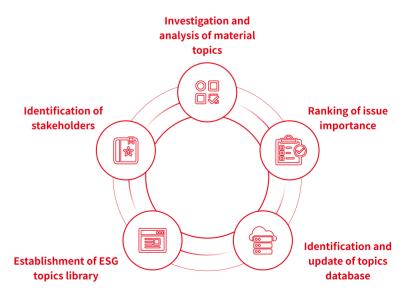
Practices of Fulfilling

international social responsibility standards and guidelines, leverages its strengths based on actual conditions, and proactively designs and implements distinctive responsibility fulfillment initiatives. Through top-down coordination and internal-external interaction, CDT has gradually established a batch of social responsibility brand projects and activities characterized by great influence, broad participation, high recognition and strong sustainability.



"Meet at Beijing Camp—Face to Face with Olympic Champions" Program is another specialized responsibility practice of CDT. The Olympic champion Gao Min shared insights on "Being Your Own Champion" to inspire young people and support their dreams. This educational assistance summer camp featured an "Olympic Champions Lecture Hall."

CDT actively engages in the identification and management of material topics, focusing on the concerns and expectations of both internal and external stakeholders, constantly improving the relevance and responsiveness of information disclosure. Based on the analysis of the materiality of the topics, relevant systems are established and implemented, goals are set, and a performance appraisal system is introduced, ensuring alignment with ESG management regulations.



Identification process of material topics by CDT

China Datang Corporation Ltd. 2024 Sustainable Development Report 97

Environmental Topics

- 1.Environmental
- management 2.Clean energy
- 3.Energy and resource
- conservation
- and control
- 5.Biodiversity

Social Responsibility

- 11.Digital
- transformation 12.Intellectual property protection 20.Employee rights
- 13.Work safety 14.Product quality 15.High quality services
- 16.Rural revitalization 17.Public welfare and charity
- 25.Corporate governance

protection services 7.Climate change 8.Green procurement 9.Green working practices

6.Environment

- 4.Pollution prevention
- 10.Sci-tech innovation 18.Supply chain management 19.Cooperation and exchange
 - 21.Development and training 22.Employee care
 - 23.Occupational health and safety

28.Anti-corruption

29.Deepening of

reform

Governance Topics

- 24.Party building
- 26.Board building 27.Compliance-based
- operation



Importance to the Company development

Materiality Matrix of China Datang

Enhancing Communication and Dissemination

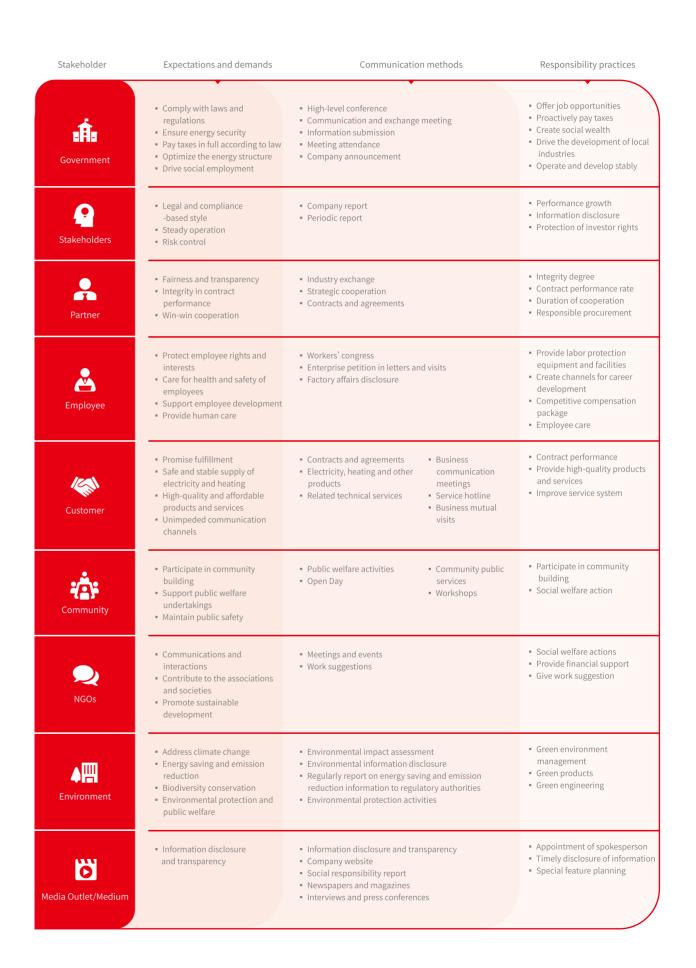
CDT attaches great importance to communication with both internal and external stakeholders, emphasizes their expectations and demands, and solicits their opinions through diverse communication channels and methods. CDT builds such communication platforms as official website and WeChat accounts, and voluntarily accepts public supervision. By the end of 2024, CDT had publicly released social responsibility/ sustainable development reports for 18 consecutive years.

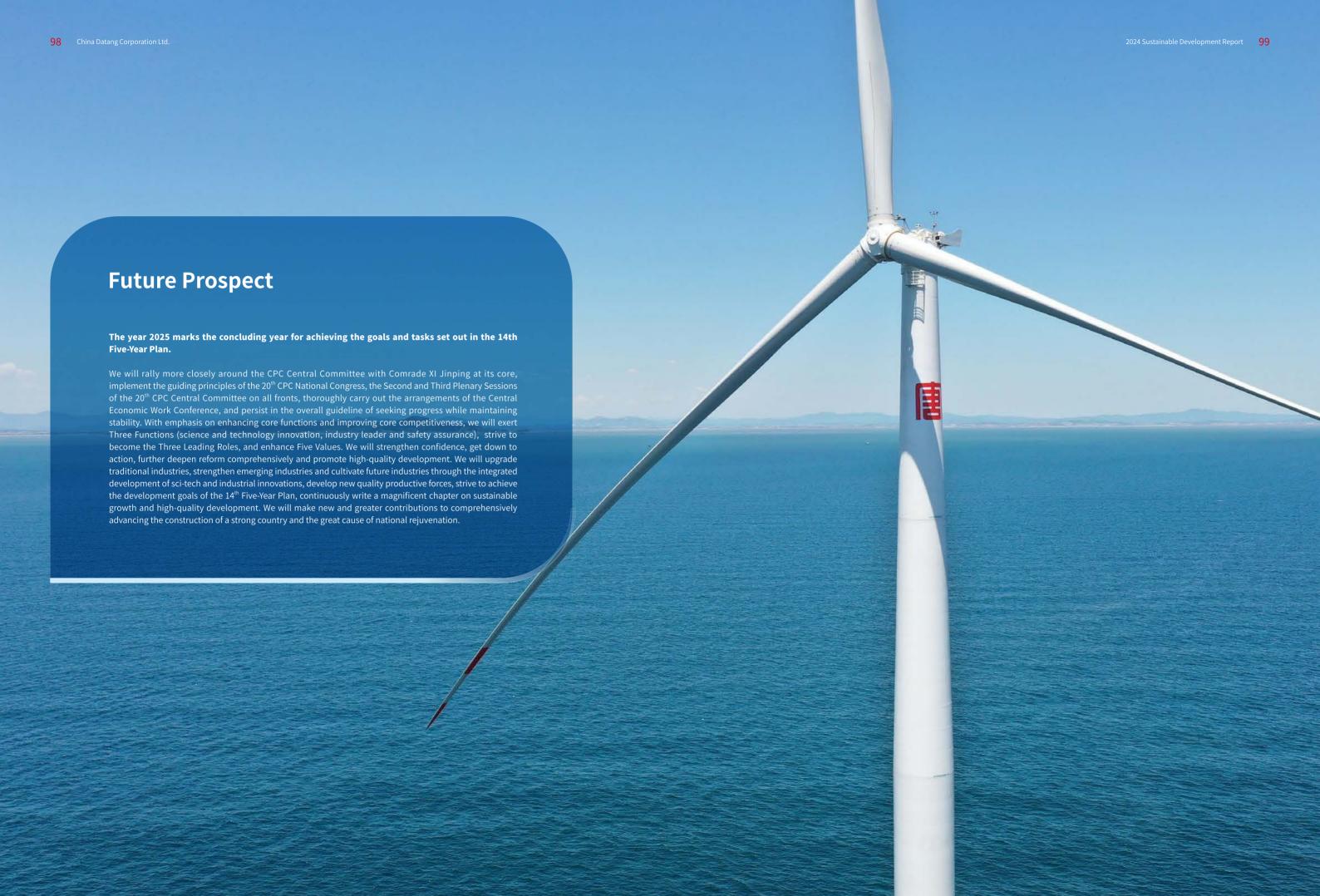
Completing **Supervision and Evaluation**

CDT develops and improves systems for supervising, managing, assessing and evaluating social responsibility/ ESG work. By incorporating social responsibility/ESG into key performance indicators (KPIs) and actively participating in external excellence evaluations for social responsibility/ESG, CDT significantly builds up capacity for social responsibility/ESG development. Furthermore, CDT identifies and evaluates potential opportunities related to social responsibility/ESG, formulates precise strategies to drive long-term growth, and continuously outreaches the value of sustainable development.

Reinforcing ESG Work

CDT places significant emphasis on ESG and related initiatives by encouraging controlled listed companies to adhere to high standards of environmental management in line with ESG principles. The efforts include actively fulfilling social responsibilities, improving corporate governance structures, stepping up high-level ESG information disclosure, continuously elevating ESG governance capability and performance, and enhancing value recognition in capital markets. Additionally, overseas business units are urged to integrate ESG considerations as a core component of international operations and major projects under way. These overseas business units are also required to align with local ESG regulatory frameworks in the host countries and regions, thereby strengthening ESG governance, practice and transparency through robust information disclosure mechanisms, and continuously sharpen the competitive edge in the international market.





Key Performance

Indicator		Unit	2022	2023	2024
	Total assets	RMB 100 million	8494	8686.43	9266.19
	Revenue	RMB 100 million	2526.74	2564.40	2585.62
	Total taxes	RMB 100 million	195.47	200.15	223.95
	Economic contract legal review rate	%	100	100	100
	Total installed capacity	10 MW	17015.46	18074.22	20112.81
	Power generation	100 GWh	5967.18	5965.26	6251.92
Economic	Heat supply	10,000 GJ	30896.35	31998	34836.40
Performance	Sci-tech investment	RMB 100 million	76.23	77.95	78.17
	Number of cumulative authorized patents	Piece	11637	12503	8345
	Number of cumulative authorized invention patents	Piece	1150	1351	1630
	Number of newly authorized patents	Piece	1155	866	801
	Number of new authorized invention patents	Piece	155	201	315
	Promotion of sci-tech innovation achievements	Item	95	120	74
	Number of new standards above industry level undertaken by CDT	Item	27	24	18
	Environmental protection investment	RMB 100 million	15.88	15.89	21.62
	Proportion of clean energy	%	42	46.24	49.66
	Total annual energy consumption	10,000 tons of standard coal	7406.6774	7667.1975	7744.80
	Comprehensive energy consumption per unit of output value	Ton of standard coal /RMB 10,000	3.3860	3.5099	3.24
	Coal consumption for power supply	g standard coal/ kWh	295.85	295.06	294.23
Environmental	Total SO₂ emission volume	10,000 tons	3.01	3.03	3.20
Performance	SO ₂ emission reduction volume	10,000 tons	2.17	-0.02	-0.17
	YoY decrease in SO₂ emission volume	%	41.8	-0.66	-5.61
	SO ₂ emission performance	g/kWh	0.095	0.085	0.078
	Total NO _x emission volume	10,000 tons	5.42	5.51	5.72
	NO _x emission reduction volume	10,000 tons	1.97	-0.09	-0.21
	YoY decrease in NO _x emission volume	%	6.55	-1.66	3.81

Indicator		Unit	2022	2023	2024
Environmental Performance	NO _x emission performance	g/kWh	0.145	0.139	0.133
	Total fly ash emission volume	10,000 tons	0.444	0.453	0.49
	Fly ash emission performance	g/kWh	0.013	0.0128	0.012
	Total wastewater discharge volume	10,000 tons	1080.09	654.36	542
	Wastewater discharge rate	kg/kWh	39	35	30
	Negative environmental incidents	Occurrence	0	0	0
	Total number of employees	Person	91272	87991	86000
	Number of female employees	Person	18599	17590	17000
	Number of ethnic minority employees	Person	6207	6108	6000
	Overall labor productivity	RMB 10,000/ person	96.83	107.76	126.03
	Employee membership rate	%	100	100	100
	Social insurance coverage rate	%	100	100	100
	Paid social insurance premiums	RMB 10,000	491893.05	492565.38	549206.7
	Number of employees undergoing training	Person-time	110000	2977915	3168866
	Employee training coverage rate	%	99.15	99.45	99.4
Social Performance	Employee training investment	RMB 100 million	1.39	2.9	2.73
Pertormance	Work safety investmen	RMB 100 million	_	26.18	27.88
	Safety training investment	RMB 10,000	_	-	7089.7
	Number of safety trainees	Person-time	796734	808925	1056063
	Number of personal accidents at relatively serious or above level	Time	0	0	0
	Number of equipment accidents at relatively level or above	Time	0	0	0
	Number of general personal accidents	Time	3	1	1
	Number of general equipment accidents	Time	0	0	0
	Free assistance funds for rural revitalization	RMB 10,000	8401	9146	9700
	Total amount of social donations	RMB 10,000	10768	12105	12485.42

Indicator Index

Contents		GRI Standards	CASS-ESG5.0	
Report Guide		102-45,102-50-53	P1.1-1.3	
Message from the Chairman		102-14-15	P2.1-2.2	
About Us		102-1,102-6,102-16, 201-1	P4.1-4.4	
Special Responsibility Topic	Paving the Way for Excellence and Reaching First-Class Achievements Through Dedicated Efforts	102-11	P3.1-3.2	
	Leading Energy Supply Assurance	102-11	E1.9、E2.4、E2.9、E2.12、E2.14	
Growing Excellence · Energy Supply Support	Optimizing Regional Energy Supply	102-11	E2.16、E2.18、E2.24、E3.3-3.4	
	Upholding the Safety Principle	203-2,416	S3.1-S3.7	
	Accelerating the Energy Transition	303-1, 306-1	E2.3、E2.7、E2.24	
Growing Influence · Excellent Green Transition	Addressing Climate Change	201-2,302-4-5,305,307	E1.1、E1.3、E1.7、E2.3、E2.11-2.15	
	Safeguarding the Beautiful Ecology	201-2W,304	E3.1-3.6	
	Strengthening Innovation Management	201-2,404	M2.4-2.7, M3.5	
Growing Precision · Sci-tech Innovation	Striving for Sci-tech Excellence	201-2		
	Advancing Digital and Intelligent Transformation	201-2, 201-2,404		
	Following Compliance and Legal Operation	102-18,102-21,102-27,102-29,102- 33,102-40		
Growing Stronger · Value Creation	Deepening Reform and Upgrading	-	M1.1-1.4, S1.1-1.2	
	Upholding the Leading Role of Party Building	-	M1.1-1.3	
	Caring for Employees	102-8,201-3,203-1-2,401-1,403- 2,404,405-1	S2.1-2.20	
Growing Beautiful · Social Responsibility	Joining Hands with Partners for Win-win Outcome	204,414-1	M3.4、M3.6	
	Enhancing Social Contributions	203, 413, 415	S4.1-4.14	
Sustainable Development Management		2-12,2-14,2-16,2-22	G2.1-2.4、G3.1-3.3、G4.1-4.3,G5.1-5.2,G6.1-6.2、A3	
Future Prospect		-	A1	
Key Performance		-	A2	
Indicator Index		-	A5	
Rating Report		2-5	A4	
Feedback		-	A6	

Rating Report

Rating Report on CDT Sustainable Development Report 2024

Entrusted by China Datang Corporation Ltd., Chinese Expert Committee on CSR Report Rating selected experts to form a rating team to rate the CDT Sustainable Development Report 2024 (hereinafter referred to as the "Report").

I. Rating Criteria

The Guidelines on Corporate Sustainability Reporting for Chinese Enterprises (CASS-ESG 6.0) for General Framework by the China Enterprise Reform and Development Society and the CSR Cloud Research Institute, and the Standards for Chinese Enterprise Sustainability Report Ratings (2025) by the Chinese Expert Committee on CSR Report Rating.

II. Rating Process

- The rating team reviews and confirms the Corporate Social Responsibility Report Process Data Confirmation Letter and relevant supporting materials submitted by the Report writing group;
- The rating team evaluates the preparation process and content of the Report and drafts the rating report;
- The Vice Chairman of Chinese Expert Committee on CSR Report Rating, the leader and the experts of the rating team jointly sign and review the rating report.

III. Rating Results

Process (****

Social Responsibility Working Group has been established and headed by the Secretary of Party Leadership Group and Chairman. Sustainability Report Preparation Team has been established. Party Building Department takes the lead in preparing the Report, and functional departments and secondary enterprises provide relevant materials and participate in the preparation and review of the Report. Final review of the Report is conducted by the Party Committee and the Board of Directors. The Report is positioned as a critical tool for fulfilling regulatory requirements, enhancing responsibility management, reinforcing stakeholder engagement, and embellishing corporate image, demonstrating clear functional value. Material topics are identified based on domestic and international social responsibility standards, industry benchmarking analyses and stakeholder surveys. Efforts are also made to encourage subordinates to prepare their own responsibility reports and enhance communication regarding responsibilities. The Report is planned to be presented in multiple formats, including bilingual (Chinese and English) electronic version, printing material and long-form graphic version, with excellent process performance.

Materiality (★★★★★)

The Report discloses critical topics within the industry, such as implementing macro policies, securing stable power supply, ensuring work safety, promoting green power development, establishing an environmental assessment system for projects, conserving resources and energy, fostering circular economy, reducing emissions of "three wastes" (waste water, waste gas and solid waste), and enhancing governance of the factory area and surrounding environment. The Report sets forth meticulous and full-fledged analysis, with excellent materiality performance.

Integrity (★★★★★)

Main text of the Report discloses 90.00% of the industry's core indicators from the perspectives of "Energy Supply Support", "Green Transition", "Sci-tech Innovation", "Value Creation", and "Social Responsibility", with excellent integrity performance.

Balance (★★★★★)

The Report discloses negative data and information, including "Number of general personal accidents", "Number of personal accidents at relatively serious or above level", "Number of general equipment accidents", "Number of equipment accidents at relatively serious or above level", "General or higher-level environmental incidents", etc. The Report also gives a concise overview of the hidden danger inspections and rectifications, with excellent balance performance.

Comparability (★★★★★)

The Report discloses comparative data of 49 key indicators over three consecutive years, encompassing "Power generation", "Heat supply", "Scitech investment", "Environmental protection investment", "Comprehensive energy consumption per unit of output value", "Coal consumption for power supply", "Total number of employees", "Employee training coverage rate", "Free assistance funds for rural revitalization" and "Total amount of social donations". Additionally, the Report makes a horizontal comparison

on "Ranked among the Fortune Global 500 for 15 consecutive years", "Selected for three consecutive years in the Pioneer 30 Index of Central SOEs Responsibility Management", "The unplanned outage rate was the lowest among central energy SOEs" and other aspects, with excellent comparability performance.

Readability (★★★★★)

The Report adopts a topic-type framework to systematically present the Company's responsibility fulfillment actions and achievements on such fronts as energy supply support, environmental protection, sci-tech innovation, compliance and legal operation, work safety, employee care, win-win cooperation with partners, and social contributions. The cover design adopts a picture splicing style, coupled with harmonious multicolor combinations. "CDT" logo in the middle radiates outward, forming visual focus and extension, highlighting the core business lines, while showcasing diverse value. The cross-page layouts of chapters employ highdefinition large images with the Company's characteristics and present the content of "National call - CDT's action - Value creation · 2024" concisely demonstrating the position of responsibility fulfillment and performance. Such columns as "CDT's 2024 Highlights", "Our Practices", "Our Achievements" and "Our Honors" help readers quickly understand and grasp. The column "If the rare animals could speak: 2024" makes the Report more interesting with greater story-telling features, with excellent readability performance.

Innovativeness (★★★★★)

Topic "Paving the Way for Excellence and Reaching First-Class Achievements Through Dedicated Efforts" focuses on achieving high-quality development and addressing challenges in the coal and coal chemical industries, actively responding to national needs and exemplifying the responsibility sense of central SOE. By embedding QR code for visual extension, CDT diversify the content of the Report and enhance communicability. Testimonies from relevant stakeholders are cited extensively to demonstrate the effectiveness of the corporate responsibility fulfillment, thereby strengthening dissemination power and credibility of the Report. In accordance with the Guiding Opinions on Central SOEs High Standard Fulfilling Their Social Responsibilities issued by the SASAC of the State Council, CDT elevate the management of sustainable development, encourage subordinates to prepare and issue reports and establish a multi-layered reporting system, with excellent innovativeness performance.

Comprehensive rating (★★★★+)

According to the evaluation of the rating team, the CDT Sustainable Development Report 2024 achieved a Five Star rating in process, materiality, integrity, balance, comparability, readability, and innovativeness. Overall, the Report is rated as "Five Star Excellence", which is a model of enterprise social responsibility reports.



CDT Sustainable Development Report received a Five Star rating or higher-level rating for the third consecutive year

IV. Improvement Suggestions

Increase the disclosure of core industry indicators to improve the integrity of the Report.



Vice Chairman of the Chinese Expert Committee on CSR Report Rating



Issuance date: April 29, 2025

Rating Team Leader Rating Team Expert



ung ream expert

to view the rating profile

Feedback

Thank you for reading the 2024 CDT Sustainable Development Report. Please give us your opinions and suggestions here for us to constantly improve our future reports.

1. Are you satisfied with this Repor	t?			
		□ Yes	□No	☐ Average
2. Do you think that this Report co	vers all aspects of soc	ial responsibility perform	ance of CDT?	
		□ Yes	□ No	☐ Average
3. Can you easily find the topics yo	u are interested in thi	s Report?		
		□ Yes	□No	☐ Average
4. Is layout of this Report reader-fr	iendly?			
		□ Yes	□ No	☐ Average
5. Which part of this Report do you	like the most?			
6. Is there any other information ye	ou need to know in th	is Report?		
7. Is there any suggestion regardin	g our CSR performand	ce and future CSR reports?	•	
Which kind of stakeholder a	re vou?			
☐ Government/regulator	☐ Investor	☐ Community resident	☐ Custome	
$\hfill \square$ Research institution/university	☐ Supplier	□ Media outlet	☐ Social o	rganization 🗆 Others
Contact Information				
Company name: China Datang Cor	poration Ltd.	Fax	: 010-66586677	

Address: No. 1, Guangningbo Street, Xicheng District, Beijing, PRC
Zip Code: 100033 Tel: 010-66586666

Company website: www.china-cdt.com Email: shzr@china-cdt.com Contact Department: Party Building Department





Address: No. 1 Guangningbo Street, Xicheng District, Beijing, China

Zip code: 100033

Website: www.china-cdt.com







RED DATANG



YOUTH DATANG



HAPPINESS DATANG