



中国大唐集团有限公司
China Datang Corporation Ltd.



2023

SUSTAINABLE
DEVELOPMENT
REPORT



Report Guide

Organizational Scope

China Datang Corporation Ltd. and its subordinates.

Period

From January 1 to December 31, 2023 (some contents hereof go beyond the foregoing period).

Issuance Cycle

This is an annual report, i.e., the 18th 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, The Chinese Academy of Social Sciences (CASS-ESG5.0)
- 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.china-cdt.com).

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Message from the Chairman

Zou Lei, Secretary of the Leading Party Group, Chairman, China Datang Corporation Ltd.



In 2023, we mark the beginning of fully implementing the spirit of the 20th National Congress of the Communist Party of China (CPC), a critical year for bridging the implementation of the 14th Five-Year Plan. It is also an extraordinary year for CDT, which, after twenty years of continuous efforts and two years of foundational work, embarks on a new journey of innovation and strength, looking forward to new achievements. We adhere to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, resolutely serving the country's major strategic goals. We stay resolute to the primary task of high-quality development and integrate into the construction of the new energy system and the new electric power system with full commitment. By focusing on leveraging the roles of central enterprise in technological innovation, industrial control, and safety support, we advance the implementation of the "1264" development strategy, strive for progress while consolidating the foundation, improving quality while achieving the advancement, and making solid developments and new breakthroughs in all areas of work.

This is a year where we have remained true to our original aspiration while fulfilled our missions, demonstrating new commitment to responsibilities in safeguarding the security and supply of energy and electric power. We have actively responded to severe challenges such as critically low water inflows for hydropower, severe impacts caused by multiple rounds of extreme weather and natural disasters. We have continued to improve production safety and establish long-term mechanisms for stable heating and energy supply, and strengthened coordination in production and management as well as resource allocation. The production volumes of energy and electricity products have reached new historical highs, with electricity generation at 596.7 TWh, heating supply at 319.98 million GJ, coal production at 22.95 Mt, and natural gas production at 1.465 billion cubic meters, representing year-on-year increases of 1.4%, 3.57%, 32.12%, and 13.21% respectively,

successfully completed major assurance tasks of peak summer season and peak winter season, highlighting the pivotal role of the central energy and electric power enterprise in the industry.

This is a year where we have forged ahead with determination, focusing on the improvement of quality and efficiency in tandem, and achieved new records in business performance. We further deepened the reform of state-owned enterprise with firm steps, setting world-class enterprises as benchmarks in value creation. We also promoted special actions such as quality improvement, efficiency enhancement, and loss-making enterprises management, and have achieved significant results in controlling the prices of thermal coal and improving the efficiency of electric heat marketing. Financing costs and scales are under prudent control, labor and employment management are effectively improved, and loss-making enterprises are being successfully handled. Despite a significant year-on-year decrease in hydropower generation that reduced profits by RMB 3.2 billion, our operating profits have reached the highest level since the establishment of the Group Company. This showcased the central enterprise's pivotal role in the phase of economic recovery and improvement following the three years of COVID-19 pandemic prevention and control.

This is a year where we have exerted efforts on both ends, and established the new before abolishing the old, reaching new heights in the development of new energy. In support of the "dual carbon" goals and the construction of the new electric power system, we have adhered to green development, vigorously promoting strategic emerging industries such as new energy and energy storage. The commencement and operation of new energy projects have reached 1.31 times and 1.39 times of their historical highs respectively. We have also launched several landmark projects, such as the largest GW-scale green energy base in plateau and mountain areas of China, the largest onshore wind turbine unit in terms of capacity of China, and

the largest photovoltaic power generation base in central and southern China. We have adhered to the principle of establishing the new before abolishing the old, systematically advanced the construction of key coal-fired power supply projects for energy security and the transformation and upgrading of existing coal-fired power plants, significantly enhancing basic support and flexible adjustment capabilities.

This is a year where we stayed pragmatic and innovative, strived for independence and self-sufficiency, and achieved significant new advances in technological innovation. With the aim of achieving high-level technological self-sufficiency and securing our core energy business, we have increased investment in research and development and efforts in technological innovation. To improve and strengthen the scientific and technological innovation system, we established China Datang Scientific and Technological Innovation Company to promote collaboration along the industrial chain. We have also formed a Joint Research Institute for Green and Intelligent Energy Technologies to foster integrated innovation of industry, academia and research. Furthermore, we have set up China Datang Digital Technology Company to advance digital industrialization and industrial digitization. Major scientific research projects in areas such as hydropower, coal-fired power, and energy storage have made substantial progress, with significant outcomes in the development and manufacturing of key components, the engineering applications of critical domestic new materials, and the breakthroughs of essential technology challenges.

This is a year where we have adhered to principles with steadfastness and practicality, seeking transformation and strength, while generated new momentum in the system and mechanism reform. A new round of deepened and enhanced reform has been comprehensively launched and advanced. The modern company governance of state-owned enterprises (SOEs) with Chinese characteristics continues to improve, showcased by actions such as standardizing the boards of subordinates through hierarchical and categorical approaches, implementing three-level revision to the pre-research and decision-making item lists, and enhancing the "three talent pools" of the two-tier outside directors and independent directors for listed companies. Management efficiency and effectiveness continue to improve as a result. We have been concentrating on strengthening core function and deepening reform in key areas, adjusting and optimizing headquarters functional institutions and accelerating the establishment of the value-creating "six functions" headquarters. Mechanisms of investment development, project construction, technological innovation, and digital intelligence have been reformed to build a governance system that is adaptable to the qualitative and high-outcome development of strategic emerging industries and the efficient and high standard growth of future industries.

This is a year where we have co-created value and shared results, seeking new opportunities through pragmatic cooperation. In service of the national strategy

and strengthening cooperation and mutual benefit, we have held cordial meetings with over 40 provincial, regional, and municipal party and government leaders, discussing major regional development plans. We have also engaged in in-depth exchanges with 14 peer companies, friends, and signed strategic cooperation agreements with more than 10 central enterprises, governments and universities to jointly explore opportunities in industry development. Particularly, on the 10th anniversary of the "Belt and Road" Initiative, we met with and signed energy-related cooperation agreements with leaders from countries along the Belt and Road, making significant progress in important power generation projects in Indonesia, Laos, Uzbekistan, and other countries. Additionally, throughout the year, we contributed RMB 91.46 million in unconditional support funds for empowering rural revitalization in the new era through the CDT's characteristic "Three-Support and Three-Assistance, and Five-Sphere Integrated Plan" assistance system.

This is a year where we have focused on cultivating our minds and wisdom, fostering integrity and diligence, achieving better quality and effectiveness of strict governance over the Party. We have adhered to leading and safeguarding high-quality development and high-level safety through qualitative Party building. We conducted two rounds of educational campaigns on Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, enhancing awareness of the "Nation Orientation and better fulfilling political responsibilities and missions in the new era. We revised the Implementation Measures for Responsibilities in Exercising Full and Strict Governance over the Party and the "Two Responsibilities" lists, advancing the comprehensive supervision system and integrity culture building, and integrating efforts to promote the "Three 'Don't' to Corruption" principle with a stringent tone. We held Party building meetings on primary levels, implemented the "Three-Year Enhancement" project, and launched the "Setting the Red Sail: Excellence in CDT" Party building brand creation and integration actions, driving high-quality development in Party building. We also convened the meeting on publicity, ideological, and cultural work, and released the "Excellence" cultural system for the new era. This system aims to forge a cohesive force among over 100,000 CDT employees for entrepreneurship and innovation. Additionally, 29 groups or individuals of CDT received national honors, including the National May Day Award.

Through diligent effort and perseverance, boundless achievements can be achieved. In the coming year, we will faithfully follow our original aspiration of "Provide Clean Energy to Light up a Better Life." We will vigorously promote the spirit of "Strive Together for Excellence" of CDT in the new era, making excellence a shared belief and a common action among our 100,000 employees. Aiming to make "Culture of Excellence" a beacon for building a world-class enterprise, stimulate new momentum for the "Second Startup," and make new and greater contributions to the country's development, national rejuvenation, and people's happiness.

About Us

Established on December 29, 2002, China Datang Corporation Ltd. (hereinafter referred to as "CDT") is a state-owned super-large energy conglomerate directly managed by the Central Government. CDT shoulders the important mission of safeguarding energy security, contributing to economic and social development, and advancing the Beautiful China Initiative.

CDT boasts ample assets in 31 provinces (autonomous regions and municipalities), Hong Kong Special Administrative Region and 10 countries and regions including Myanmar, Cambodia, Laos, and Indonesia. Focusing on core business of electric power, coal and coal chemical industry, finance, environmental protection, trade and logistics, and emerging industries. CDT includes 45 branches and subordinates (including 5 listed companies) and 3 directly affiliated institutions, and has been listed in the Fortune Global 500 for 14 consecutive years.

CDT is the pacesetter in safeguarding the electric power security of Beijing, responsible for over half of the electric power supply. We play a major role in providing heating services to the "Three-North" regions, responsible for

residential heating in more than 900 million square meters across 13 northern provinces. The red gene of China's electric power industry runs in the blood of CDT, with a number of key power generation enterprises that were established during the revolutionary wars, the construction of the China, as well as the reform and opening-up period. We are also a practitioner of advancements, reforms, and innovations of electric power technology in China, boasting a range of world-class, symbolic, demonstrative, and milestone projects. By the end of 2023, CDT's total installed power generation capacity had surpassed 180 GW, with clean energy units accounting for 46.24%.

Looking ahead, CDT will build on the new development stage, adhere to the new development philosophy, and integrate into the new development pattern, dedicating to the dual carbon goals. We will contribute new actions and shoulder new responsibilities for the construction of the new energy and electric power system, supporting the comprehensive development of our nation and the national rejuvenation through Chinese-style modernization.

Ranked 396th on the Fortune Global 500, moving up 15 places from the previous year, marking CDT's 14th consecutive inclusion in the Fortune Global 500

Received the "Overseas Performance Award" of the 2023 "CSR Award"

Selected for the "Pioneer 30 Index of Central SOEs Responsibility Management"



The social responsibility case *Group-Based Educational Assistance to Build Dreams for Children of the Yao Autonomous County* was recognized with the "Impact • Leading Enterprise" award in the 2023 GoldenBee CSR China Honor Roll, and also received the honor as an "Outstanding Case of Central SOEs Supporting Rural Revitalization"

In Indonesia, CDT received the TOP CSR Awards #Star 4, the Top Human Capital Awards #Star 4, the Zero Accident Award, and the Blue PROPER Certificate

Business Performance in 2023 (Core)

Total assets: RMB **868.643** billion

Revenue: RMB **256.440** billion

Total profit: RMB **15.088** billion

Net profit: RMB **9.025** billion

Installed capacity: **180.7422** GW

Clean energy: a share of **46.24** %

Power generation capacity: **596.7** TWh

Heat supply capacity: **319.98** million GJ

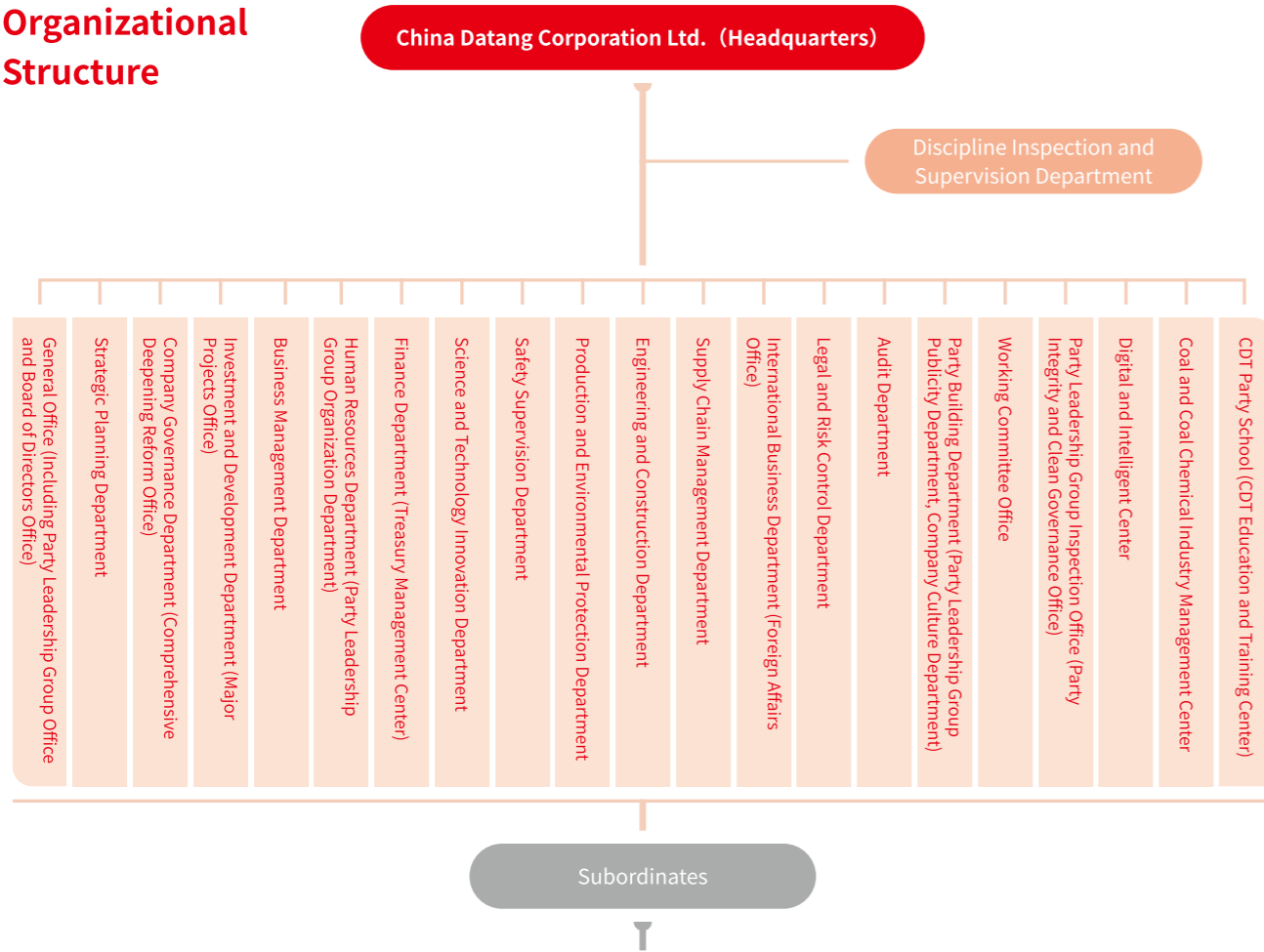
Coal production: **22.95** million tons

Natural gas production: **1.465** billion cubic meters

Newly-added power supply capacity: **14.15** GW

Newly-added new energy capacity: **11.41** GW

Organizational Structure



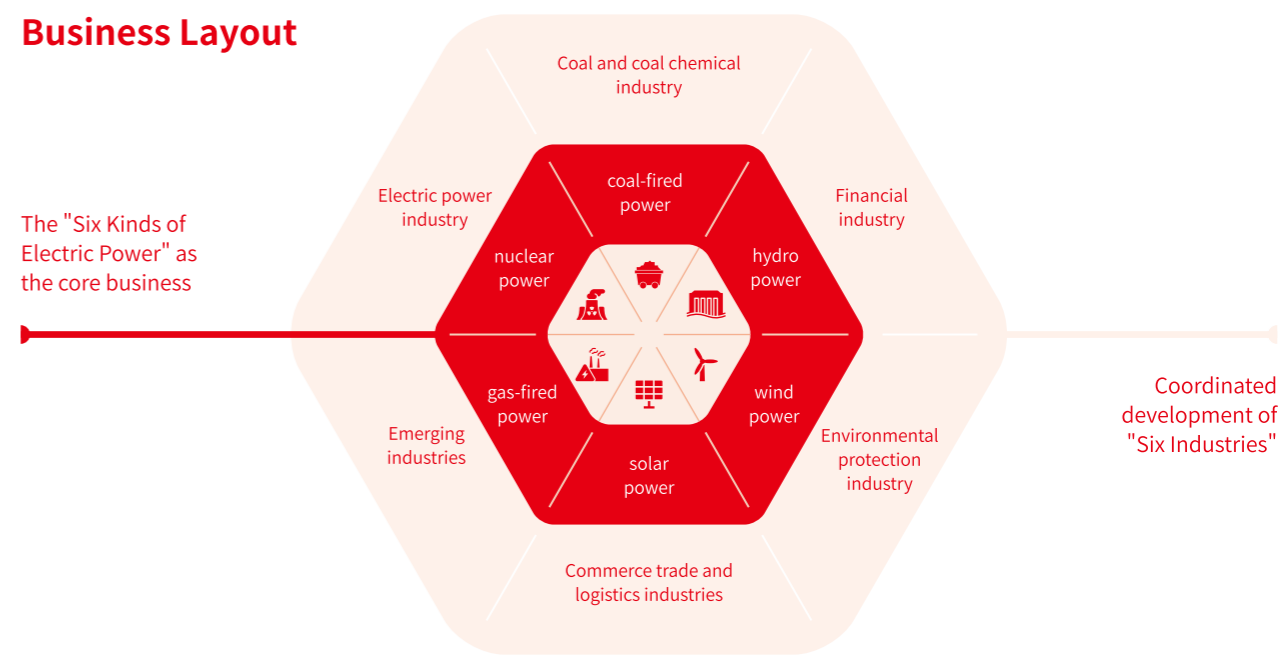
- Datang International Power Generation Co., Ltd.
- Datang Heilongjiang Power Generation Co., Ltd.
- China Datang Nuclear Power Co., Ltd.
- Datang Huayin Electric Power Co., Ltd.
- Datang Shanghai Energy Development Co., Ltd.
- China Datang Overseas Investment Co., Ltd.
- Guangxi Guiguan Electric Power Co., Ltd.
- Datang Jiangsu Power Generation Co., Ltd.
- China Datang Energy Investment Co., Ltd.
- China Datang Corporation Renewable Power Co., Ltd.
- Datang Anhui Power Generation Co., Ltd.
- Zhongxin Energy and Chemicals Technology Co., Ltd.
- Datang Environment Industry Group Co., Ltd.
- Datang Shandong Power Generation Co., Ltd.
- Datang International Fuel Trading Co., Ltd.
- The Liaoning Branch of CDT
- Datang Henan Power Generation Co., Ltd.
- China National Water Resources & Electric Power Materials & Equipment Group Co., Ltd.
- The Zhejiang Branch of CDT
- Datang Hubei Energy Development Co., Ltd.
- China Datang Corporation Science and Technology General Research Institute Ltd.
- The Fujian Branch of CDT
- Datang Hainan Energy Development Co., Ltd.
- China Datang Technological and Economic Research Institute Co., Ltd.
- The Jiangxi Branch of CDT
- Datang Sichuan Power Generation Co., Ltd.
- China Datang Technological Innovation Co., Ltd.
- The Guangdong Branch of CDT
- Datang Guizhou Power Generation Co., Ltd.
- China Datang Digital Technology CO., Ltd.
- The Chongqing Branch of CDT
- Datang Yunnan Power Generation Co., Ltd.
- China Datang Finance Co., Ltd.
- The Ningxia Branch of CDT
- Datang Xizang Energy Development Co., Ltd.
- China Datang Group Capital Holdings Co., Ltd.
- Datang Shanxi Power Generation Co., Ltd.
- Datang Shaanxi Power Generation Co., Ltd.
- Datang Xinjiang Power Generation Co., Ltd.

Development Strategy

The "1264" Development Strategy of CDT



Business Layout



Company Governance

CDT thoroughly implemented General Secretary Xi Jinping's important statement on improving the modern enterprise system with Chinese characteristics, deepened the implementation of the "Two Consistent Principles," adhered to the unification of strengthening the overall leadership of the Party and improving company governance. We optimized our systems and mechanisms, as well as strengthened guarantees and implemented to the most primary level. We continuously optimized the company governance structure, further clarified the functional positioning of the Party Leadership Group, Board of Directors, and the managers in company governance.

The "Three Importances and One Large" system were further standardized and implemented with higher efficiency, and the "First Agenda" system were strictly followed, which has standardized our decision-making procedures and improved decision-making quality. Through strengthened supervision and implementation, we continue to improve the company governance of modern SOEs with Chinese characteristics. This empowered the high-quality development of CDT and accelerated the process of building CDT into a world-class enterprise.

Company leaders



Zou Lei
Chairman, Secretary of Party Leadership Group



Zhang Chuanjiang
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 Wei
Vice President, Member of Party Leadership Group



Li Jianwei
Vice President, Member of Party Leadership Group



Wang Haiteng
Vice President, Member of Party Leadership Group

Board of directors

CDT implemented the "Two Consistent Principles," adhering to the unification of strengthening the overall leadership of the Party and improving company governance. By building a top-notch board of directors, we aimed to create a premier company governance system and governance capabilities, thereby ensuring high-quality development.

Structure and members of board of directors

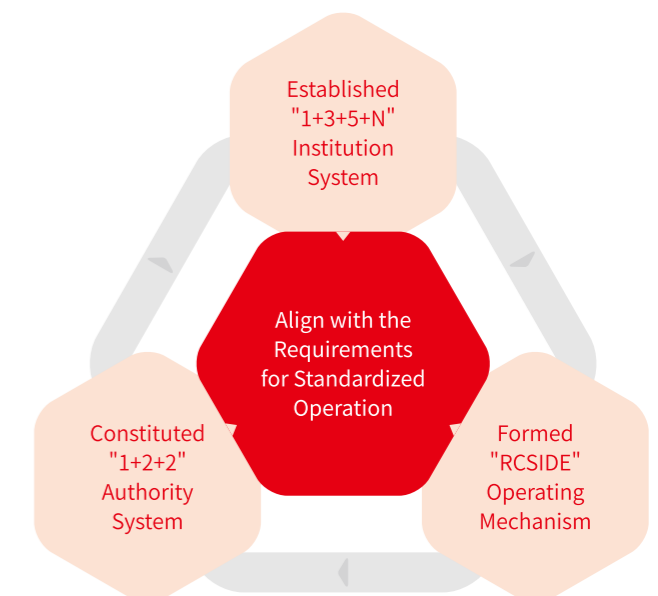
Structure of board of directors: The board consists of five specialized committees: Strategy and Investment Committee, Nomination Committee, Remuneration and Assessment Committee, Audit and Risk Management Committee, and Supervision Committee.

Members of board of directors: The board consists of 8 directors, including 3 inside directors and 5 outside directors. The board members diligently performed their duties by participating in major company decisions, safeguarding stakeholder interests, and standardizing company operations. They have put the company's high-quality development on the fast lane.



Operation of board of directors

CDT thoroughly implemented General Secretary Xi Jinping's important instructions on the "Two Consistent Principles," stringently implements the guiding principles of such documents as Working Rules of Board of Directors of Central SOEs (For Trial Implementation), standardized and revised the *Working Rules of Board of Directors of China Datang Corporation Limited (For Trial Implementation)*, and formulated the *Rules of Special Sessions of Board of Directors*. The Board fully played its role in "setting strategy, making decisions, and preventing risks," by reviewing the company's development strategy, improving decision-making quality, focusing on risk prevention and mitigation, and driving sustainable business performance. This led CDT into a period of development marked by making new achievements and innovations. In 2023, CDT held 12 board meetings and deliberated on 60 agendas. The respective specialized committees held 19 meetings and deliberated on 58 agendas throughout the year.



Leverages the role of outside directors

CDT established a board meeting mechanism that focuses on detailed feedback on issue rectification and the improvement of operational standards. For three consecutive years, we held board construction work meetings to communicate the previous year's board evaluation opinions to outside directors, formulate measures for implementing the meetings' outcomes, and convened three continuous communication sessions with outside directors. We regularly organized outside

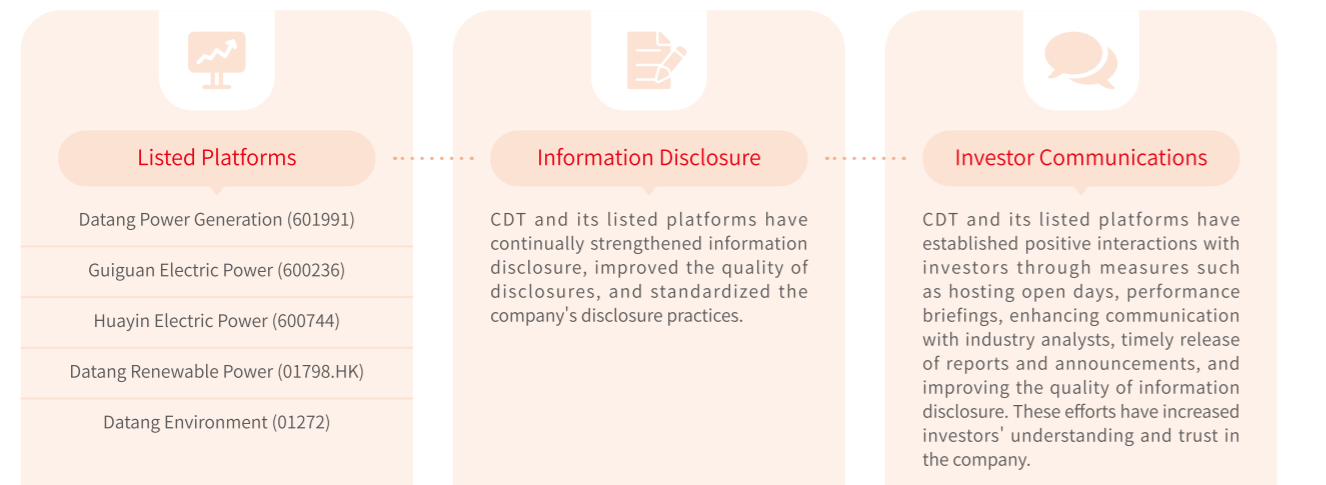
directors to attend comprehensive meetings of the Group Company and engage in primary level research, providing systematic support for outside directors to perform their duties with high quality. This enabled all directors to diligently fulfill their responsibilities, exercise their powers with independence and prudence, and promote the improvement of management standards and high-quality development at CDT.

Improves the board of directors of subordinates

CDT combined thematic education with a special research initiative "Optimizing and Improving the Development of Board of Directors of Subordinates and Continuously Developing a Modern Company Governance System". We studied and formulated the Guidance on Further Regulating the Scope of Establishing Board of Directors of Subordinates. We introduced three types of boards: regular type, risk control type, and

compliance type, and then updated our list of establishing board of directors to include 31 secondary companies and 111 tertiary companies, helping companies build their boards in scientific manner. We also developed a multi-dimensional scoring standard and a multi-layered evaluation model to ensure comprehensive annual assessments of subordinates' boards at all levels.

Investor relations

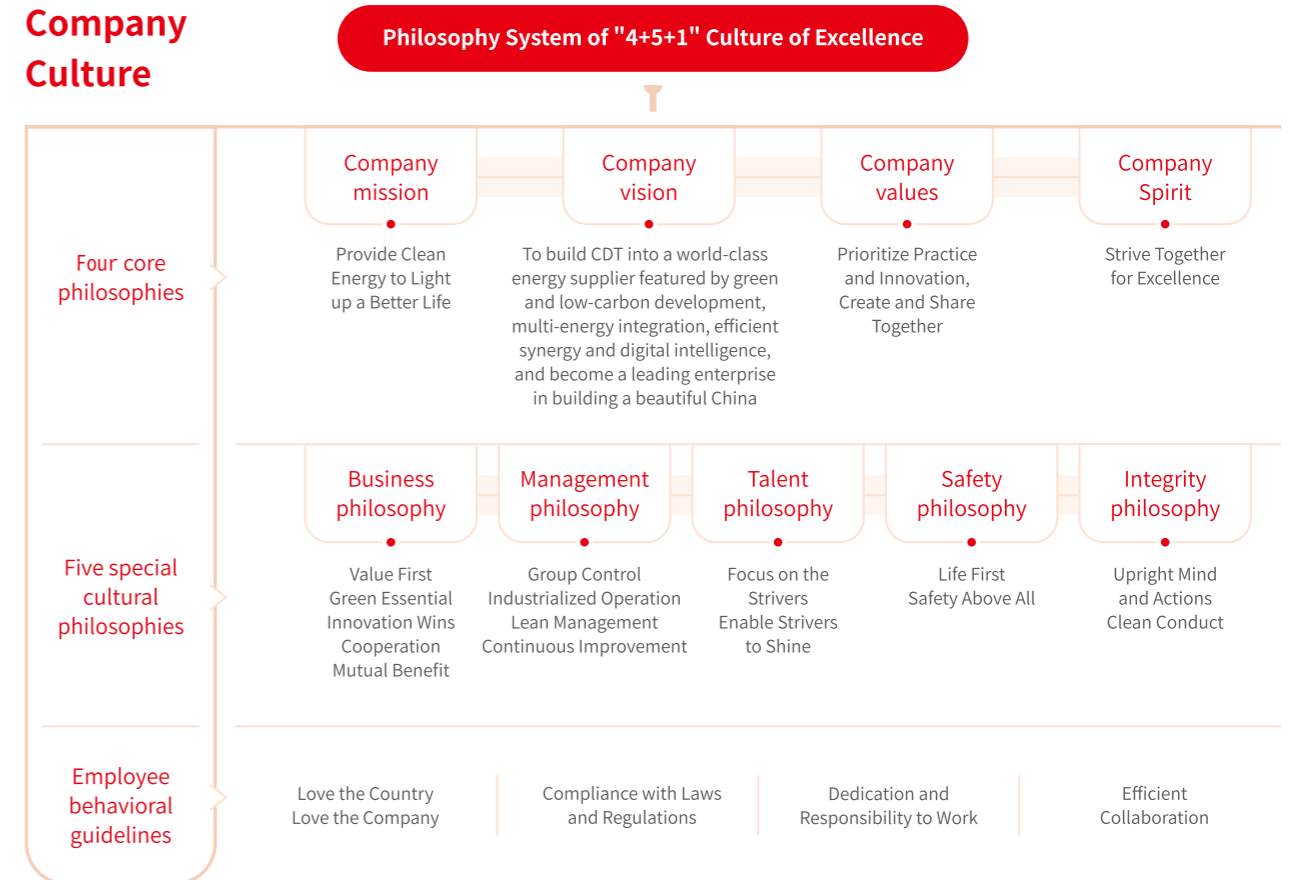


Business ethics

CDT upheld the company values of "Prioritize Practice and Innovation, Create and Share Together," practiced legal compliance, adhered to honest business practices and conducted responsible marketing. We demanded that all employees and partners must combat corruption, commercial

bribery, and any other forms of misconduct. We used our own efforts to promote alignment to business ethics throughout the supply chain and industry chain, working together to create a fair, transparent, clean, and honest working and business environment.

Company Culture



On December 19, 2023, the Launch Conference of CDT Culture in a New Era was held, officially announcing the CDT Company Culture in a New Era — "Culture of Excellence."

Let Culture Saturate the Heart and Make Excellence a Belief



Guiguan Electric Power fostered a strong atmosphere for learning and practicing through activities such as thematic presentations, specialized group study sessions, and "future self" wish cards.



The Jiangxi branch established cultural walls, cultural corridors, poster boards, and electronic displays in its office and production workshops. It coordinated a systematic media matrix for dynamic dissemination through new media channels.

Responsibility Special Report

Guaranteeing Energy Supply and Overcoming Challenges and Shouldering Responsibilities

Energy security is a strategic and overarching issue affecting national economic and social development. It is crucial for national prosperity, improving people's lives, and maintaining social stability. CDT is actively implementing a new energy security strategy, with the company mission of "Provide Clean Energy to Light up a Better Life." CDT takes a leading role in guaranteeing energy supply and safeguarding national energy security.

Premier Li Qiang Visited CDT Harbin No.1 Thermal Power Plant to Inspect Work of Guaranteeing Heating and Power Supply

Li Qiang, member of the Standing Committee of the Political Bureau of the CPC Central Committee and Premier of the State Council. From November 14 to 16, 2023, during the visit to Heilongjiang, he visited CDT Harbin No.1 Thermal Power Plant to inspect the operation of the units, review local heating supply conditions, and emphasize the need to fully guaranteeing heating and power supply. He instructed that efforts should be made to ensure heat supply for residents during the winter, promote energy conservation, and continuously improve heating efficiency.



The Country's Most Fundamental Interests: Safeguarding Energy Security

CDT always bears "the country's most fundamental interests" in mind, actively integrating into construction of the new energy system and new electric power system. CDT advanced the transformation in energy consumption patterns, built a diverse and clean energy supply system, developed new quality productive forces in the energy sector, and enhanced international energy cooperation to fully protect national energy security.



The Party Leading Group of CDT plays a key role in setting direction, overseeing major issues, and ensuring implementation. The group organized mobilization and deployment meetings for heating supply work, held special meetings on energy supply guarantee, and convened multiple meetings of the energy supply guarantee leadership team. We carefully analyzed the supply and demand situation for thermal coal, electric power, and heating, and arranged various power and heating guarantee tasks to ensure the stable and secure supply of energy.

World's Largest Thermal Power Plant in Installed Capacity — CDT Toketuo Power Plant
China's First GW-Level Wind Farm — CDT Saihanba Wind Farm

Country's Most Fundamental Interests: Key Energy Assets



A Landmark Project of the "Western Development" and a Strategic Project of the "Power Transmission from West to East" — CDT Longtan Hydropower Station



The World's First GW-Level Ultra-Supercritical, Reheated, Six-Cylinder, Six-Row Coal-Fired Power Generation Unit — CDT Dongying No.1 Power Plant Unit



CDT Guaranteeing Power Supply in Numbers

Year	Total Installed Capacity (in 10 MW)	Clean Energy Percentage (%)	Power Generation (in 100 GWh)	Heat Supply (in 10,000 GJ)
Year 2012	11380.22	22.75	5059.59	15653.88
Year 2013	11538.73	25.7	4940.42	15571.74
Year 2014	12047.96	28.05	4968.38	16308.11
Year 2015	12717.06	30.50	4787.64	17894.99
Year 2016	13037.47	31.88	4699.80	20069.52
Year 2017	13775.81	33.92	5168.99	21960.69
Year 2018	13891.83	35.57	5540.84	26283.92
Year 2019	14420.64	36.26	5453.61	28255.29
Year 2020	15859.72	38.16	5603.77	29943.23
Year 2021	16398.18	39.07	5920.91	30129.93
Year 2022	17015.46	42.09	5884.62	30896.35
Year 2023	18074.22	46.24	5967.18	31998.45

Energy Layout: Supporting Regional Development

CDT actively integrated into the construction of the new energy system and new electric power system, shifting from a coal-dominant model to one that focused on clean and diversified energy. We promoted the clean and efficient use of coal, developed non-coal energy sources, and gradually built a diverse supply guaranteeing system. Our goal is to foster a balanced supply pattern that coordinates energy development with economic, social, and ecological progress.

CDT Power Generation Installed Capacity by Region

Region	Installed Capacity (in 10 MW)	Share of the Group Company (10%)	Region	Installed Capacity (in 10 MW)	Share of the Group Company (%)
Beijing-Tianjin-Tangshan	2061.97	11.41%	Hunan	654.54	3.62%
Hebei South Grid	280.35	1.55%	Guangdong	902.81	4.99%
Shanxi	609.95	3.37%	Guangxi	1213.36	6.71%
Inner Mongolia	542.72	3.00%	Hainan	232.69	1.29%
Liaoning	384.20	2.13%	Chongqing	418.43	2.32%
Jilin	570.76	3.16%	Sichuan	841.18	4.65%
Heilongjiang	577.20	3.19%	Guizhou	405.78	2.25%
Shanghai	29.31	0.16%	Yunnan	817.68	4.52%
Jiangsu	1117.77	6.18%	Xizang	3.15	0.02%
Zhejiang	437.92	2.42%	Shaanxi	2052.55	11.36%
Anhui	398.03	2.20%	Gansu	216.53	1.20%
Fujian	291.31	1.61%	Qinghai	185.50	1.03%
Jiangxi	379.24	2.10%	Ningxia	154.65	0.86%
Shandong	793.80	4.39%	Xinjiang	203.20	1.12%
Henan	1061.58	5.87%	Abroad*	126.20	0.70%
Hubei	109.88	0.61%	Total	18074.22	100.00%

*Excluding the 240 MW transmitted from Dapein Hydropower station to Yunnan

Shouldering the key responsibility of guaranteeing Beijing energy supply

CDT is the pacesetter in safeguarding the energy security of Beijing. 18 power generation subordinates around Beijing undertake the responsibility for supplying over 50% of the electric power, thereby embellishing company brand of "devotion to Beijing with unimpeded heat supply". In 2023, we provided 78.669 TWh of electricity directly to Beijing, accounting for 57.95% of Beijing's total electricity consumption, and supplied 63.0776 million GJ of heating.

Supporting the energy guarantee and stability of North-West Regions

As the largest power and heating enterprise in Shaanxi Province, CDT leveraged the exemplary role of a central electric power SOEs, taking on the responsibility of guaranteeing energy supply, and supported Shaanxi's economic and social development and secured energy security. In 2023, we generated 68.7 TWh of electricity and provided 48.28 million GJ of heating, securing one-third of Shaanxi Province's electric power supply and covering four-fifths of the Guanzhong region's power electric needs, as well as heating for 180 key enterprises and 4 million households.

Guaranteeing energy supply in Central China regions

As a publicly listed company of CDT in Hunan, Huayin Electric Power actively participate in national and regional strategies such as the Yangtze River Economic Belt, the Rise of Central China, and the "Three Highlands and Four New Missions." We coordinated the development of wind, solar, hydro, thermal energy storages, achieving an installed capacity of 7.85 GW and contributing strength of Central China to energy guarantee.

Developing clean energy in South China Sea

As a part of CDT's effort of supporting Hainan's development as a green clean energy island, the Hainan Branch of CDT plays a leading and major role in advancing the energy structure transformation in the South China Sea and achieving green development. In 2023, Hainan Branch of CDT's installed capacity exceeded 2.33 GW, all of which were clean energy. This accounted for 16.61% of the total installed capacity in Hainan Province, contributed to increasing Hainan's clean energy installed capacity from 60.15% to 80.2%, becoming the largest clean energy supplier in Hainan Free Trade Port.

"Dual engines" of renewable energy development in Yunnan-Guangxi regions

Guiguan Electric Power and the Yunnan Branch of CDT, as leading enterprises of renewable energy in the Yunnan-Guangxi regions, constructed efficient hydropower stations, wind and solar power stations, and source-grid-load-storage projects, making a significant impact on regional energy conservation, emission reduction, environmental protection, economic development, and energy structure adjustment.



Political Responsibility and Commitment to People's Well-being

CDT has deeply implemented General Secretary Xi Jinping's important instructions and strictly adhered to the decisions and deployments of the CPC Central Committee and the State Council. We strengthened organizational leadership, established long-term mechanisms, and implemented supply guarantee measures. We coordinated various tasks such as safe production as well as electric power and heat supply, shouldering the political responsibility for supply guarantee, lighting up countless homes, and safeguarding people's well-being.

Raising awareness and demonstrating political responsibility of a central energy SOE

National Two Sessions

Datang International's energy matrix in the Beijing-Tianjin-Hebei and Inner Mongolia regions, consisting of 48 coal-fired units, 5 gas turbine units, and numerous wind turbines from a total of 21 electric power generation companies, served as the "absolute main force" in guaranteeing electric power supply.



China-Central Asia Summit

As the power supplier for the summit, Shaanxi Power Generation Company meticulously planned and prepared in advance. Shaanxi Power Generation Company rigorously implemented safe production measures at every level and ensured the full accomplishment of tasks. With combined efforts from "thermal, hydro, wind, and solar" power generation companies, a steady flow of electric power was supplied to the grid, ensuring a reliable electric power source for the summit.



The 31st FISU World University Games

The Changheba and Huangjinping power stations operated their 10 units at full capacity for days, and the four units at Tingzikou maintained optimal operating conditions. Baoji No.2 Power Generation Company ran its six units at 2.52 GW in all modes, while Guiguan Chuanhui Hydropower Generation Company ensured safe and stable supply in face of multiple challenges including "the event, flood control, and peak summer season," lighting the path of dreams for young people from around the world.



The 19th Asian Games Hangzhou

Zhejiang Branch of CDT ensured energy supply safety and stability to the highest standards, greatest effort, and most practical approach. During the Asian Games, Zhejiang Branch of CDT generated 618 GWh of electricity and supplied 49,900 tons of heat, successfully completing the power guarantee task for the 19th Asian Games Hangzhou.



Protecting livelihoods: central SOE responsibility for social welfare

Energy supply

CDT coordinated efforts to improve energy supply guarantee, solidifying our role as the main responsibility bearer of energy supply, and developed scientific, effective, and practical energy supply plans and emergency response measures. We rigorously enforced supply guarantee responsibilities, laying a solid foundation for safe production, stable operation, and reliable electric power and heat supply, striving to meet people's needs for energy and demonstrating the "commitment and strength" expected of a central SOE.



CDT's 2023 Highlights

Electric power generation reached **596.7** TWh, an increase year-on-year of **1.4** %.

Heating supply amounted to **319.98** million GJ, an increase year-on-year of **3.57** %.

We ranked the 1st among central energy SOEs in many aspects, including unscheduled shutdown coefficient of coal-fired units, national electric power reliability gold medal units, excellent energy-efficient units, and fault-free wind farms over **one hundred days**.

The world's largest coal-fired power plant, the Tuoketuo Power Plant, achieved long-distance heat supply to Hohhot City, with a heating capacity of **20** million square meters.

Huayin Electric Power's Xihuangshan Wind Farm ensured safe operation of transmission lines



Shanxi Branch developed emergency plans for extreme weather in advance and deployed measures to prevent risks caused by cold and frost



The Eastern Inner Mongolia New Energy Division's operations and maintenance staff conducted safety inspections



Jiangxi New Energy Company ramped up efforts to meet peak season demands, focusing on equipment management to ensure maximum and stable power generation

Fuel supply guarantee

With the principle of "seeking more efficient coal and generating more effective electric power," CDT coordinated the fuel, electric power, and carbon markets, focusing on enhancing operational efficiency. We emphasized fuel supply guarantee and price control, increased effective electric power generation, strengthened marketing of electric heat, and improved fundamental management. These efforts ensured the achievement of our company's profit targets.



CCTV News reported CDT's energy supply guarantee efforts



CDT's 2023 Highlights

Coal production reached

2,295

million tons

increase year-on-year

32.12

%

Natural gas production totaled

1.465

billion cubic meters

increase year-on-year

13.21

%

Management improvement

We revised and introduced 19 fuel-related policies and 13 marketing policies to standardize business management.

We addressed issues raised by central inspections and audits, focusing on fuel supply guarantee, price control, and standardizing coal trading and production management.

We strengthened dynamic supervision and promoted improvements in benchmarking efforts through daily operational reports, monthly benchmarking reports, and fuel supervision updates.

We enhanced professional training, with five teams from our group winning first prizes in national electric power trader and fuel analyst skill competitions.

We deepened strategic partnerships with major coal enterprises and ensured the successful implementation of the "Three 100%" objectives.

Efficiency improvement



We implemented staggered coal storage, ensuring that thermal coal inventories exceeded 18 million tons before the peak summer and winter periods, surpassing the same period by 6.04 million tons and 4.6 million tons, respectively, thus successfully completing supply assurance tasks.

We optimized the classification management of long-term thermal coal contracts and carried out special actions to enhance their quality and efficiency.

We explored management indicators such as coal blending, unit coal price differences (calorific value differences), and claim rates to reduce fuel costs.

In 2023, CDT thoroughly implemented President Xi Jinping's important instructions on energy supply guarantee and the work deployment from the CPC Central Committee and the State Council. We adhered to long-term mechanisms, fulfilled responsibilities at all levels, and implemented various measures effectively, while tackled severe challenges such as critically low water levels and multiple extreme weather events. The Tuoketuo "Long-Distance Heat Supply" project achieved its goal of "supplying electricity to Beijing and heat to Hohhot," with the first phase providing safe and stable heat of 20 million square meters. We also completed energy guarantee tasks during peak summer season and peak winter season. Throughout the year, our unscheduled shutdown rate of coal-fired units and output obstruction rate both exceeded the targets set by the National Development and Reform Commission for energy supply guarantee.

We balanced the relationships between quantity and quality, short-term and long-term goals, and supply guarantee and efficiency, optimizing procurement schedules, strategies, and marginal efficiency control standards.

Prioritizing Values to Stimulate Indigenous Motivation



Opportunities and challenges

The Central Economic Work Conference emphasizes the need to better balance the effective improvement of quality and reasonable growth of quantity in China's economy. It prioritizes quality as the key of winning, with incremental changes to realize qualitative transformations. A strong enterprise contributes to a strong nation. By deepening reform and enhancing supply quality, CDT aims to better fulfill people's aspiration for a better life, support the national economy's qualitative improvement and quantitative growth, and promote high-quality development.



Calling of the nation

Implementing more effective quality enhancement measures and strengthening the foundational aspects of value creation are crucial for SOEs to achieve high-quality development. The report to the 20th National Congress of the CPC pointed out that "We will improve the modern company system with distinctive Chinese features, encourage entrepreneurship, and move faster to cultivate more world-class enterprises," providing clear directions and goals for the reform and development of Chinese enterprises.



CDT action

Guided by the spirit of the 20th National Congress of CPC, CDT remained focused on strengthening, optimizing, and expanding state-owned capital and enterprise. We centered on value creation as a key approach to improve efficiency, enhance quality, adjust structure, control cost, reduce leverage, and address loss. As we optimized company governance, deepened compliance operations, maintained strict safety standards, strengthened our core energy business, we moved faster towards achieving effective qualitative improvement and reasonable quantitative growth. Our aim is to inject more confidence and momentum into the development of economy and society.

Value creation in 2023

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

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 Enterprise Reform and Deepening Promotion Action

Electric power generation reached **596.7** TWh

increase year-on-year **1.4** %

Heating supply amounted to **319.98** million GJ

increase year-on-year **3.57** %

SDGs contributions





Upholding Safety Redlines

Safety management

CDT learned and implemented General Secretary Xi Jinping's important statements on safe production. With "life first, safety foremost" principle at heart, we balanced development with safety, and implemented the "Three-Year Action Plan for Fundamental Governance," as well as reinforced the "Five Key Areas of Rectification" to maintain consistent safe production. In 2023, we invested RMB 2.618 billion in safe production measures.

Innovated responsibility implementation mechanism

We piloted a "responsibility list" that "specified duties and negligence and corresponding accountabilities", as well as improved the "inspection and rectification responsibility" mechanism, conducted comprehensive safety inspections and external reviews to achieve high-level problem rectification.

Optimized supplier management

We evaluated safety and quality supervision responsibilities of design, review, supervision, and inspection units. We also established strategic cooperation models for outsourced maintenance and repairs and promoted standardized management practices among outsourced teams.

Improved systematic control capabilities

We established a safety development evaluation system to coordinate development and safety requirements, addressing common and trending issues in a systematic approach.



Enhanced team building

We promoted vocational trainings to the staff to improve their competence to the positions, which include formulating training outlines for all levels and types of positions, and carry out hands-on training and position drills.

Strengthened team conduct

We ensured the implementation of the "Three Measures, Two Plans" and "Major Dangerous Project Construction Plans," addressing the "Last Mile" issues.



CDT held the Safe Production Committee's second meeting in 2023

Safe production

CDT holds tight to the safe production red line with "genuine awareness, robust discipline, and stringent responsibility," deepening the "Five Key Focuses," and enhancing the foundations of safety. In 2023, CDT organized a system-wide action to reinforce safety management and investigate potential hazards. The safe production situation continuously improved.

CDT's "Five Key Focuses" in safe production

Focus on key points for stability

- Concentrating on key areas, enterprises, risks, and links, we identified pivotal items for improvement and determined the primary areas for comprehensive management enhancement to firmly safeguard the redline.

Focus on closed-loop mechanism for implementation

- With the focus on "enhancing supply guarantee capacity to Beijing," we explored and perfected a closed-loop control mechanism for regular scheduling and effectiveness evaluation.

Focus on effective investment for outcomes

- We strictly supervise the allocation and use of safe production funds to ensure the necessary resources for "human, technical, engineering, and management prevention measures".

Focus on benchmarking for improvement

- We conducted evaluations and competitions for safety models (sites), and professional management standards (departments).

Focus on the workgroup level for cultivating safety culture

- We conducted performance assessments for the workgroup leader's "Security Integrity Compliance." On Safety Themed Day, we leveraged accident cases to enhance safety awareness.

CDT Production Dispatching Center was awarded the National Youth Safe Production Demonstration Post



CDT Qinghai Delingha Solar Power Station was awarded the National Youth Safe Production Demonstration Post

Safety culture

CDT advanced its safety culture initiatives by guiding employees to enhance their self-protection abilities and fostering a widespread culture of "everyone talks about safety and everyone can handle emergencies." This approach ensured a high standard of safe production, supporting CDT's high-quality development. In 2023, our safety training covered 808,925 employees.



Employees from Huangdao Power Generation Company improved safety awareness and skills through immersive training in VR Safety Experience Center. Technicians from the Suzhou Thermal Power Company's relay and automation protection team used an infrared thermometer to check if the casing temperature was normal.

The CDT "Youth Cup" Safe Production Knowledge Competition was launched

Pilot Practice of CDT

To further guide the youth League members in enhancing safety literacy and contributing to improve fundamental safety level, from June 26 to 29, 2023, the "Youth Cup" Safe Production Knowledge Competition during the 22nd National Safe Production Month was held by CDT in Taiyuan, Shanxi, and Kunming, Yunnan. Representatives from 34 secondary companies within CDT participated, displaying youthful enthusiasm and competitive spirit, embodying the pledge of "safe production starts with the youth."

Since the call to the "Youth Cup" Safe Production Knowledge Competition, the Youth League organizations at various levels within CDT actively mobilized their members and organized events. Youth League members eagerly participated, with 170 preliminary competitions held within CDT's tertiary companies and 32 quarter-finals conducted by secondary companies with production tasks, involving over 22,000 participants.



Strengthening Reform and Advancing Initiatives

With the new round of deepening and enhancing SOEs reform actions as an opportunity, CDT leveraged key reform measures and brought out the potential of reform to remove the barriers to value creation, creating a favorable environment for the

dynamic value creation. In 2023, CDT concluded the three-year action plan for SOEs reform, with the new round of reform deepening and enhancement actions fully launched and continued to progress.

Deepening and enhancing reform

CDT implemented the *Action Plan for Deepening and Enhancing State-Owned Enterprises Reform (2023-2025)* by developing and issuing the *Group Company's Action Implementation Plan for Deepening and Enhancing State-Owned Enterprises Reform (2023-2025)* and the work ledger, outlined 111 key reform tasks and 174 specific reform measures. On August 25, 2023, CDT held a mobilization and deployment

meeting for the deepening and enhancing reform actions at all three levels. The meeting featured a special training session conducted by leaders from the SASAC's Action Promotion Team for Deepening and Enhancing SOEs Reform. Secretary of Party Leadership Group and Chairman Zou Lei set example of learning and presenting, promoting the dissemination of knowledge to the primary level.



CDT held the mobilization and deployment meeting for the deepening and enhancing reform actions



Benchmarking against world-class enterprises

CDT launched value creation action of benchmarking against world-class enterprises. After thorough research and wide consultation, we compiled the Value Creation Action Plan for CDT Benchmarking against World-Class Enterprises, which received high recognition from SASAC and scored the highest 99 points in the central SOEs plan evaluation. Among 528 "Double Hundred Enterprises" and "Reformed Scientific and Technological Enterprises", Datang Environment Industry Group Co., Ltd., two "Double Hundred Enterprises" from Datang Jingjinji Energy Development Company, and China Datang Corporation Science and Technology General Research Institute, the Reformed Scientific and Technological Enterprise achieved the "Two Benchmarks and One Excellent" in SASAC's special project assessment.

A task ledger for CDT's value creation action was established, detailing 86 work tasks and 189 specific measures. Guided secondary companies to develop the value creation action plans and task lists and provided direct one-on-one feedback through official letters after review.

Issued the *Overall Plan for Building CDT into a World-Class Enterprise* to guide secondary enterprises to aim at regional or industry top-tier level and to develop their own action plans for becoming a top-tier enterprise.



Established and improved the mechanisms for monthly schedule, quarterly benchmark, and annual assessment. *CDT formulated the CDT Quarterly Value Creation Benchmark Evaluation Implementation Plan (For Trial Implementation)* and held four monthly schedule meetings and normalized the promotion of value creation action, continuously enhancing the value creation capabilities of each enterprise.

Market-oriented mechanisms in practice

In line with our development strategy, CDT optimized the organizational structure of its enterprises at their early establishment stage, and strengthened the allocation of development resources to move faster in the development of new energy projects. We also promoted regional and industrial chain integration within CDT's enterprises and implemented streamlined management.

Flexible Institution Establishment

Flexible Employee Management

CDT established an internal human resources market with a "unified information platform and six arrangement methods," facilitating 4,142 cross-enterprise movements in 2023. We deepened the management of "two contracts" and full performance evaluations, issued management measures for employee exits, improved standby management, and actively and prudently advanced market-oriented employee exits.

CDT implemented the tenure system and contractual management model among new energy station leaders in its enterprises, continuously enhancing specialized management levels through contract. By the end of 2023, this model was covered over 60% of management personnel. The proportion of management personnel exiting by the end of 2023 reached 6.88%.

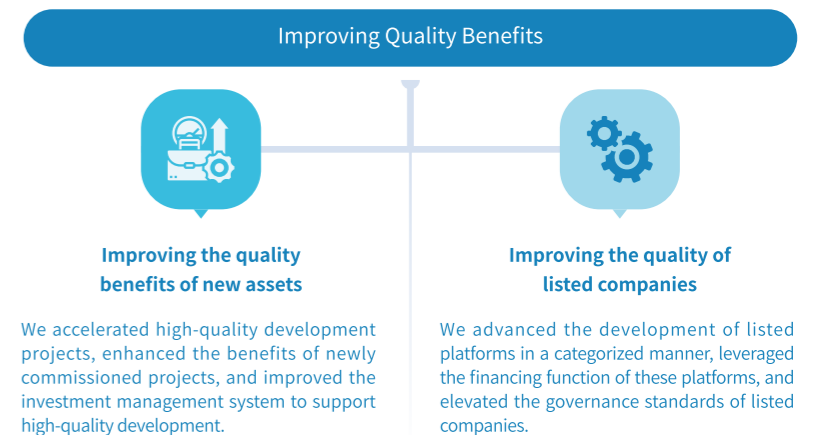
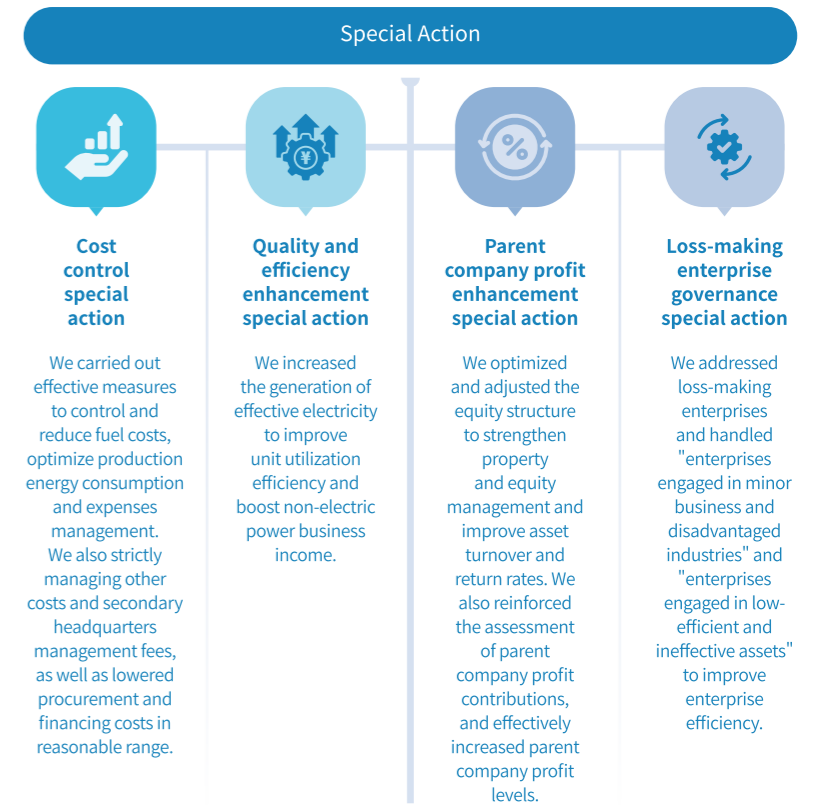
Flexible Promotion Mechanism

Flexible Remuneration Method

We continued to regulate remuneration for leaders, creating income disparities based on performance contributions, ensuring rigid payment, and breaking egalitarianism in remuneration to stimulate incentives of leaders. We also established a specialized reward mechanism and improved the incentive system covering key areas such as development, benefits, and reform.

Focusing on Improving Efficiency and Effectiveness

CDT prioritizes enhancing efficiency and effectiveness by firmly establishing the concept of "all costs under controllable." We optimized and improved resource allocation, focused on increasing total factor productivity, shifted the enterprise development model towards intensification, and ensured that profit in revenue, cash flow in profit, and continuous improvement of asset return levels.



On December 27, 2023, CDT Xi Wangzhai coal and electric power integrated power plant project commenced construction. This project is a key initiative in Shaanxi Province's 14th Five-Year Plan and a significant measure for advancing the integrated development of coal and electric power joint venture, as well as promoting coal and electric power integration at the mining site. Located in the core area of the Northern Shaanxi coal-fired power base, one of the nine major national coal-fired power bases, the first phase of Xi Wangzhai project included 2x660MW units were incorporated into the Northern Shaanxi and Hubei ±800KV ultra-high voltage direct current transmission project as one of its thermal power sources. The project's coal consumption design is advanced compared to domestic counterparts and includes a ten-stage reheating system, flue gas waste-heat utilization technology, and capabilities for deep peak shaving and frequency regulation. It also features high-efficiency desulfurization, denitration, and dust removal equipment, embodying a new generation of coal-fired power plant that integrates high performance parameters, large capacity, green low-carbon technology, efficient synergy, and digital intelligence.

Compliance and Legal Operation

Enhancing management

CDT committed to upholding legal governance principles and enhancing top-level design. We bolstered the role of the Chief Compliance Officer by issuing the Regulations on the Integrity Management of the Chief Compliance Officer (For Trial Implementation). These regulations standardized the compliance oversight, review procedures and responsibilities of business departments, compliance management departments, and the Chief Compliance Officer. This initiative enhanced accountability and marked a significant step forward in developing compliance management system. Consequently, our legal operations and management capabilities have seen substantial improvement, and our proficiency in legal governance continues to upgrade.



Fostering compliance culture

CDT placed significant emphasis on fostering compliance culture. We reinforced legal and compliance training, conducted a variety of compliance culture activities, and created a strong compliance culture atmosphere throughout CDT.



On December 21, 2023, the final round of the first "CDT Cup" Legal Compliance and Risk Management Knowledge Competition, themed "Promoting Rule of Law, Strengthening Compliance, and Supporting High-Quality Development," was held in Beijing.



Risk prevention and control

Enhancing risk control

CDT adopted a problem-oriented approach to advance systematic treatment of risks. We maintained leadership support of supervision mechanism on major risk and tracked risk prevention and control quarterly. Our efforts in handling significant business risk events yielded new results, as we continuously conducted procedural compliance reviews for project investment risk assessments, reviewing a total of 207 projects throughout the year without encountering systemic or disruptive risks.



Strengthening internal control and audit

CDT firmly implemented General Secretary Xi Jinping's important instructions on auditing work. We enhanced the Party's centralized and unified leadership over auditing, successfully completed key tasks such as preparing for national audits, and conducted 537 auditing projects that covered various items including economic responsibility, financial revenue and expenditure, and internal control evaluations. We focused on "investigating major cases, monitoring high-risk areas, and addressing tough problems", diligently handling clues related to compliance violations. Our project post-evaluation processes were also improved through enhancing investment decision-making capability and ensuring effective management throughout all stages. We leveraged and applied the rectification outcomes to improve our work, strengthened the audit team, and utilized high-quality auditing to drive CDT's high-quality development.

Building a Beautiful China by Going Green



Opportunities and challenges

Green transition is a fundamental aspect of Chinese modernization. We are currently at a pivotal moment in a new wave of energy, technological, and industrial revolutions. Breaking the bottleneck of low-carbon economic development, clearing green investment and financing channels, exploring new forms, new models, and new industries for green and low-carbon development, and contributing CDT's power to China's green development of economy has become a core mission.



Calling of the nation

The report of the 20th National Congress of the CPC pointed out that Chinese modernization is harmony between humanity and nature. Respecting, adapting to, and protecting nature are inherent requirements for a socialist modern country. General Secretary Xi Jinping emphasized the need to accelerate the green and low-carbon transition of development methods, making green and low-carbon development a fundamental strategy for addressing ecological and environmental issues. We need to quickly adopt green production methods and lifestyles to build a solid foundation for high-quality development.



CDT action

CDT has deeply implemented Xi Jinping's Thought on Eco-Civilization, firmly established and practiced the idea that lucid waters and lush mountains are invaluable assets, and resolutely supported the construction of new energy systems and new power systems. We have worked collaboratively to reduce carbon emissions, decrease pollution, increase green spaces, and promote green growth. On the path to building a Beautiful China and advancing green development, CDT has been unwavering and persistent, striving to contribute significant contribution to the Beautiful China Initiative.

Value creation in 2023

We led the joint establishment of the Hainan International Carbon Emissions Exchange, achieving a breakthrough in China's participation in and development of the international carbon market.

By the end of 2023, clean energy installed capacity accounted for 46.24% of CDT's total capacity

46.24
%

SDGs contributions





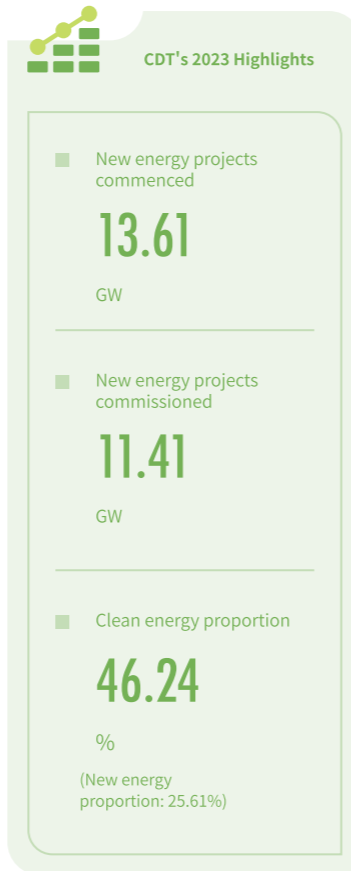
Clean energy development goal

By 2025, the proportion of clean energy installed capacity reaches over

50
%

Committing to Green Development

CDT resolutely implemented the new energy security strategy and the dual carbon goals, adhering to the approach of "exerted efforts on both ends." We made more efforts to authorize and delegate power for new energy development, allocated more resources to the development institutions and personnel, and achieved a doubling of new energy production capacity for two consecutive years. We made new breakthroughs in the construction of the "5+20" power bases, and commissioned symbolic projects such as the largest GW-scale green energy base in plateau and mountain areas of China in Jinpingxi, Yunnan, and largest onshore wind turbine unit in terms of capacity of China in Wengqi, Inner Mongolia. These efforts marked new milestones in new energy development.



Upgrading and transitioning of traditional industries

CDT strictly followed national requirements for improving and enhancing the efficiency of coal-fired power units. We organized 29 "Three Coordinated Transitions" projects throughout the year, developed and implemented customized transition plans for each unit. By these actions, we reduced our coal consumption by 0.113 grams per kWh, increased peak-shaving capacity by 920.5 MW, expanded heating area by 22.02 million square meters, and increased industrial steam extraction volume by 150 tons per hour. The experiences of "Three Coordinated Transitions" were compiled into typical cases and issued to enhance transition results. 170 of the 236 coal-fired power units in CDT met coal consumption standards, and 196 of them met flexibility standards.

	Unit	Year 2021	Year 2022	Year 2023
Total annual energy consumption	Tons of standard coal	77284004	74066774	76671975
Total energy consumption per unit output value	Tons of standard coal/RMB 10,000	3.6214	3.3860	3.5099



CDT Dongying 2×1GW New Construction Project Won "National Quality Engineering Gold Award"

Pilot Practice of CDT

On December 9, 2023, CDT Dongying 2×1GW New Construction Project won the National Quality Engineering Gold Award. This project is the world's first ultra-supercritical, double reheat, six-cylinder, six-row coal-fired power generation unit. CDT has consistently adhered to the coal-fired power units development concept of being "efficient, energy-saving, environmentally friendly, and low-carbon", empowering green development through technological innovation. We actively explored and applied new technologies, including one technology applied for the first time worldwide, eight technologies applied for the first time nationwide and 11 industry advanced technologies. We optimized 120 achievements, obtained 140 utility model patents and 33 invention patents, and set multiple world records, including the lowest indicators for unit back pressure and power supply coal consumption.

Baoding 2×350 MW Thermal Power Project (Phase IX) Officially Launched Commercial Operation

On December 22, 2023, the 12th unit of Baoding 2×350 MW Thermal Power Project (Phase IX) successfully completed 168 hours of full-load trial operation and officially went into commercial operation. This project is a key livelihood project in Baoding aimed at combating air pollution and addressing heating gaps. As a major heat source in Baoding, Unit 12 has entered heating mode upon commissioning to meet public needs.

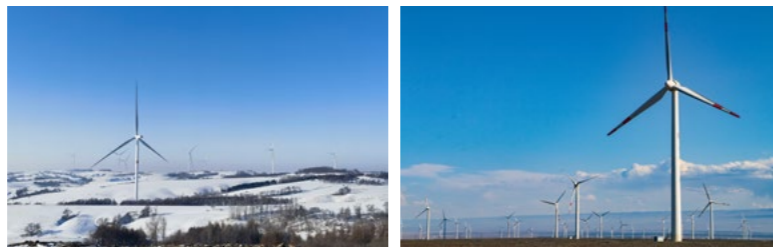
This project is the first new heat-power cogeneration project in China that used the LP-ZO technology for both 350 MW steam turbines. It can meet the winter heating needs of over 10 million square meters of residential space, significantly easing the heating pressure in Baoding City after fully operation. The Phase IX project adhered to the "green and low-carbon" concept, aimed to build clean coal-fired power, and is expected to generate 3.5 TWh of electric power annually, with an average annual coal consumption for power generation at the leading level among similar domestic units. The project employed full-load denitration, desulfurization, and zero wastewater discharge technologies, with all emissions meeting national ultra-low emission standards, achieving green, low-carbon, and efficient operation.

Wind power

CDT took the opportunity of wind power development. We obtained a pre-selected quota of 3GW offshore wind farm in Guangdong National Marine Management Area, and also commissioned several symbolic projects, including the largest onshore wind turbine unit in terms of capacity of China in Wengqi, Inner Mongolia and the largest GW-scale green energy base in plateau and mountain areas of China in Jinpingxi, Yunnan. Additionally, the distributed wind farm project in Suixian was recognized as a national benchmark and demonstration project of the electric power industry for 2023.

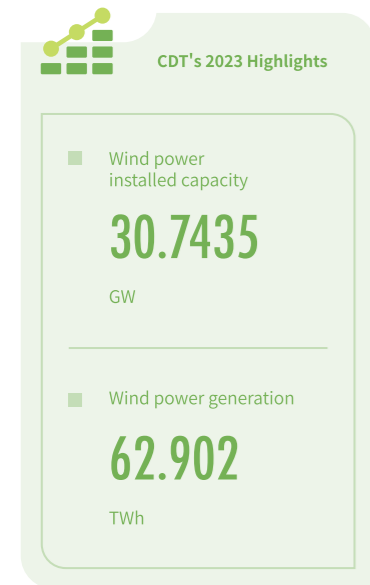


CDT Danzhou 1.2 GW Offshore Wind Farm Project was among the first batch of offshore wind farm projects approved by the Ministry of Natural Resources during the 14th Five-Year Plan and the first batch to commence construction in Hainan. This project relies entirely on a smart platform supported by digital technology and represents CDT's first offshore wind farm project in China based on BIM data and powered by artificial intelligence for comprehensive lifecycle smart management. Furthermore, it is China's first offshore wind farm project that highlighted features including onshore switching station, offshore booster station, zero carbon emissions capability, and large-scale suction bucket foundations in deep silt layers. This project will serve as a crucial technical support for the future development of offshore wind power resources in China.

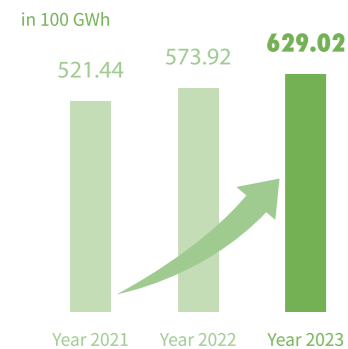


Heilongjiang New Energy Company Binxian Phase II 150MW Wind Power Project

Xinjiang Tuokexun Wind Farm



Wind Power Generation



China's largest wind power base in plateau and mountain areas completed construction

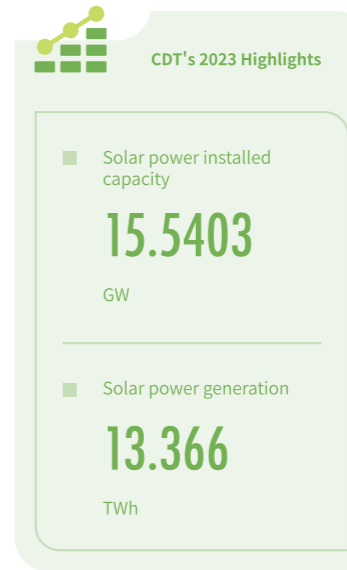
Pilot Practice of CDT

On December 23, 2023, with the operation of the "Ethnic Cultural Painted Turbine," all 172 wind turbines of the Jinpingxi Wind Power Project of Eastern Yunnan New Energy Division were successfully connected to the grid. This marked the completion of China's largest GW-scale wind power base in plateau and mountain areas, which will sufficiently meet local electric power demand. Located in Qiubei County, Wenshan Zhuang and Miao Autonomous Prefecture, Yunnan Province, this wind power base installed 310 turbines with a total capacity of 1.103 GW. The project is expected to generate 2.6 TWh of green electric power annually after commissioning, saving approximately 806,500 tons of standard coal every year. This will lead to reductions of 2.165 Mt of carbon dioxide, about 416.28 tons of sulfur dioxide, and approximately 83.26 tons of smoke dust. Based on an average annual household electric power consumption of 2,400 kWh, this project can provide electric power for 1.08 million households for one year.

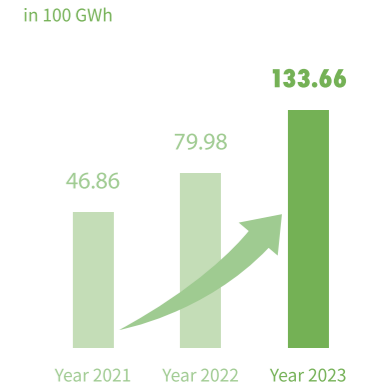


Solar power

To promote the high-quality development of the solar power industry, CDT endeavored to enhance the management of solar power project construction and strived to build first-class solar power stations. In 2023, the eco-governance solar PV power base of Loudi, Hunan, was commissioned to operation, and the solar PV projects in Sanlifan Town, Luotian County and Changdatu tidal flat in Xiangshan County were recognized as national benchmark and demonstration projects of electric power industry.



Solar Power Generation



Utilizing Sunshine in the Plateau: Successful Commissioning of CDT Largest Solar Power Station

Pilot Practice of CDT

On December 15, 2023, one of the first batch of national large-scale wind and solar power base in "Desert, Gobi, Barren land" area, CDT's largest solar power station, the Qinghai Xinghai Solar Power Project was successfully commissioned. Located in Hekatan of Xinghai County, Qinghai Province, this project can provide around 1 TWh of clean electric power to the Qinghai power grid annually, saving approximately 328,700 tons of standard coal and reducing carbon dioxide emissions by about 988,700 tons. This is of great significance for Qinghai's efforts to build the "Four Bases" of industries, as well as for CDT's green transition and aspiration of becoming a world-class energy supplier.



Covering Mines with Green Energy: GW-scale Solar Demonstration Project of Datang Huayin Electric Power Co., Ltd. of Loudi City Connected to the Grid

GW-scale Solar Demonstration Project of Datang Huayin Electric Power Co., Ltd. for Ecological Governance of Loudi City, one of the first large-scale solar power projects in China, has connected 800,000 kW of capacity to the grid. As the largest mountain area solar power project in central and southern China, it adopts a unique model that integrates "solar power development, eco-governance, and energy storage". By transforming areas in Loudi City affected by heavy metal pollution, mining subsidence, and rocky desertification into a base for ecological, green, and clean energy, it effectively promotes the transition of local economies from resource depletion to green and low-carbon development. This project plays a pioneering and exemplary role in accelerating the construction of a new energy system and driving the green transition of the eco-governance key areas such as Tin Mine, known as antimony hub of the world.



Hydropower

CDT focused on the construction of hydropower stations in major river basins, scientifically developing hydropower resources in the Hongshui River, Wujiang River, and other basins. In June 2023, the main construction of the CDT Xizang Zala Hydropower Station officially commenced.

CDT Sets a New Record Exceeding 100 TWh!

Pilot Practice of CDT

With drifting clouds over Yushu and the roaring Jinsha River as witnesses, Guanyinyan Hydropower Station, the largest hydropower station in the middle reaches of the Jinsha River had generated over a total 100 TWh of electric power as of August 29, 2023. This is equivalent to saving approximately 30 Mt of standard coal and reducing carbon dioxide emissions by about 81 Mt.

Located in the Jinsha River Gorge on the border of Huaping County in Lijiang City, Yunnan Province, and Panzhihua City in Sichuan Province, the Guanyinyan Hydropower Station is the eighth cascade in the "one reservoir, eight cascades" development plan for the middle reaches of the Jinsha River. It is a key project in the national "Western Development" and "Power Transmission from West to East" initiatives. The station is equipped with five turbine-generator units, each with a capacity of 600,000 kW, totaling 3 GW. Construction began in May 2012, with the first unit commissioned six months ahead of schedule in December 2014. The project successfully commissioned three batches of units in 2015, and the final unit was connected to the grid in May 2016, continuously providing green energy to support the country's dual carbon goals and benefit national and public interests.



▼ Tingzikou Hydro Project



CDT's 2023 Highlights

Hydropower installed capacity

27.7324

GW

Hydropower generation

79.361

TWh

Pumped storage

CDT has systematically advanced pumped storage projects, reserving high-quality energy storage resources and progressing preliminary work for pump storage projects such as Chongqing Yinpan, Henan Ruyang, Hunan Dawangmiao, and Xinjiang

Wudaogou. In 2023, the Ruyang 1.2 GW Pumped Storage Project was successfully approved, and the feasibility report for the Hunan Hengnan Dawangmiao Pumped Storage Project passed the review.



▼ The Feasibility Report the Hengnan Dawangmiao Pumped Storage Project in Hunan province was approved

Multi-energy complementary energy base construction

CDT actively advanced the development of an integrated and complementary multi-energy supply system, and constructed multi-energy complementary base integrating "wind power, solar power, hydropower, thermal power and energy storage". On September 12, 2023, the Guangxi Zhuang Autonomous Region Commission of Development and Reform released the *Bulletin of the Evaluation of Integrated Source-Grid-Load-Storage Pilot Projects*. CDT secured 4.62 GW of new energy capacity (comprising 3.08 GW of wind power and 1.54 GW of photovoltaic power). The project is planned for completion and commissioning around 2026. It is currently the largest integrated source-grid-load-storage project in China, and one of the first projects in Guangxi.

Multi-Energy Complementarity, Thermal Power Plants Transforms into "Green Power Plants"

Pilot Practice of CDT

Datang International Tuoketuo Power Generation Company in Inner Mongolia developed a 10 GW-level demonstration base of multi-energy complementary project integrating "wind power, solar power, hydropower, thermal power and energy storage", with the establishment of an integrated control platform that addresses the technical gaps in the coordinated operation and integrated dispatch of wind power, solar power, thermal power, and energy storage. The first batch of units has been officially connected to the grid, capable of generating over 5 TWh of green electric power annually, saving more than 1.7 Mt of standard coal and reduce carbon dioxide emissions by over 4 Mt. This initiative promoted green and low-carbon development of China Datang and provided a technical path for large-scale wind-solar bases and the green transition of coal-fired power plants, ensuring national energy security.



CDT Supports Inner Mongolia's Comprehensive Endeavor of Building National Key Energy Bases

On November 22, 2023, the 150 MW Datang Duolun Demonstration Project which combines the wind, solar and hydrogen and the 175 MW Renewable Energy Substitution Project of the Datang Duolun coal-fired self-provided Power Plant officially commenced in Duolun County, Xilin Gol League. The wind-solar-hydrogen production project is China's first middle-large scale demonstration project that deeply coupled off-grid hydrogen production by wind-solar power with coal chemical technology. This green power substitution project does not rely on grid power for peak shaving or consumption. These two projects, with their clear demonstration and technological advantages, will initiate CDT's new phase in high-quality development in Inner Mongolia and advance the strategic cooperation between both parties. They will also effectively promote the low-carbon and zero-carbon transition of coal chemical industries and support Inner Mongolia's comprehensive endeavor of building national key energy bases.



Developing strategic emerging industries

CDT has resolutely implemented the directives from CPC Central Committee and SASAC, and prepared for the New Industry Development and Expansion. We formulated and issued the *Implementation Plan Development and Expansion of New Industries (2023)* and the *Plan for Developing Strategic Emerging Industries of China Datang Corporation (2023-2025-2030)*. We organized various tasks related to development and expansion of new industries, developed specialized implementation plan for energy storage, hydrogen energy, comprehensive smart energy, green low-carbon technologies, energy digitalization, environmental protection, and green finance. We set clear development goals, defined implementation paths, and planned advancing mechanisms, aiming to promote the launch of key demonstration projects in each emerging sectors. In 2023, the energy substation of the Jiangdong New Area Comprehensive Smart Energy Project in Haikou City was successfully put into operation.

New energy storage sector

- We commissioned three 300b MW energy storage projects in Shandong Huangdao District, North Shandong, and Chongqing Tongliang District. We planned over 60 projects with a total capacity exceeding 8 GW.

Comprehensive smart energy sector

- As the first centralized cooling project in Haikou City, the energy substation of the Jiangdong New Area Comprehensive Smart Energy Project in Haikou City was successfully put into operation.

Virtual power plants sector

- 16 marketing companies expanded into virtual power plant (demand response) services, aggregating 859 users with a maximum adjustable capacity of 2.47 GW, which participated in peak shaving auxiliary services and demand side response market, promoting complementary development between electric power sales and comprehensive energy services.

Catalysts sector

- Datang Environment Industry Group Co., Ltd. successfully rolled out the first batch of 10,000 cubic meters of cellular denitration catalysts, achieving a new breakthrough in arsenic resistance market.



First in China: 100 MW Artificial Underground Gas Storage Demonstration Project of CDT in Zhongwei City, Ningxia Hui Autonomous Region under Construction

Pilot Practice of CDT

On October 20, 2023, the construction of the main part of China's first 100 MW artificial underground gas storage demonstration project, Datang Zhongning 100MW/400MWh Compressed Air Energy Storage Project commenced. This marks the beginning of a new journey where "technological innovation" empowers new energy and supports the dual carbon goals, signifying significant progress in the research and application of new energy storage technologies in China.

The Datang Zhongning Energy Storage Project, as a key national technology breakthrough initiative for advancing green and low-carbon transition and development, has significantly expanded the application of new technologies and processes in compressed air energy storage. It provides new paths for China's green and low-carbon energy transition and the development of new power systems, marking a solid step forward in implementing the innovation-driven development strategy.



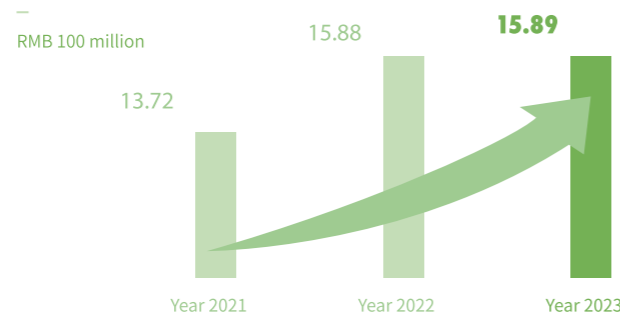
Strengthening Environmental Governance



Environmental management

CDT recognizes the importance of effective ecological and environmental protection work, strictly adhered to environmental protection laws and regulations, fulfilled the responsibility for ecological and environmental protection, and ensured strict compliance with environmental protection redlines. We made continuous progress in advancing environmental impact assessments, established a supervision mechanism for major environmental protection issues, implemented the latest national environmental protection requirements, and standardized the environmental management. Our foundation of environmental management has been strongly solidified, and our ability to manage ecological and environmental risks has been further strengthened.

Environmental investment



Leading by demonstration projects, CDT Boost Green and Low-Carbon Supply Chain Management

Pilot Practice of CDT

As a "chain leader" company in the industry, CDT proactively played a leading role. We established China Datang Green and Low Carbon Development Co., Ltd. to support the development of a green and low-carbon supply chain management system, focused on "strengthening carbon management, conducting carbon accounting, promoting carbon reduction, and improving carbon performance," driving the electric power equipment industry chain towards a collaborative approach to carbon reduction.

Promoting green procurement

We gradually incorporated green and low-carbon performance requirements into the procurement of materials and services, and expanded the scope of green and low-carbon procurement. By adding positive assessment factors for "green and low-carbon" in supplier admission processes, and establishing a "green and low-carbon" incentive mechanism in supply chain, we encouraged suppliers to embrace the "green and low-carbon" concept throughout the entire product lifecycle.

Empowering supplier green transition

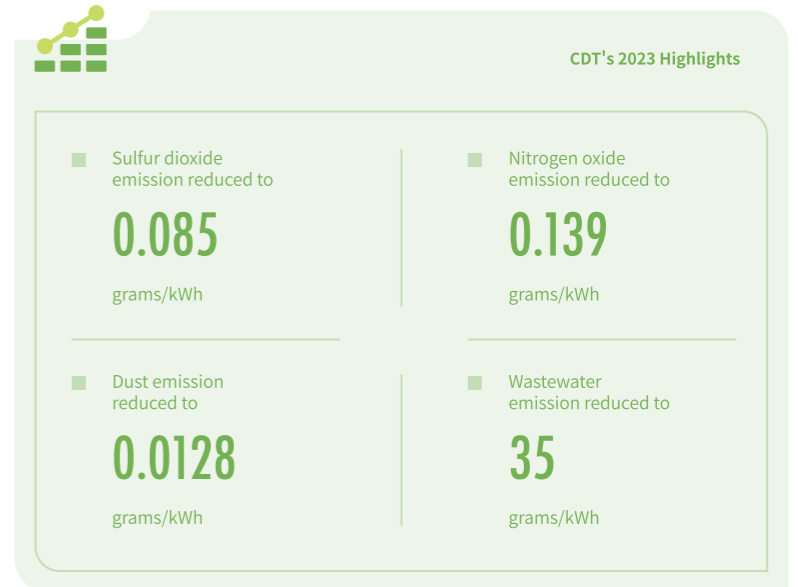
We worked with leading industry companies to provide services for developing green and low-carbon supply chain management system. By guiding suppliers to enhance the green and low-carbon management capabilities around green and low-carbon planning, greenhouse gas emission reduction accounting, production and operation emission reduction, and collaboration with upstream-downstream companies. CDT promoted reduction collaboration with the supply chain partners, and lowered carbon emission levels.

Developing standard system and data base

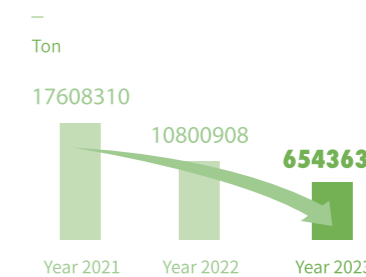
We initiated the development of standards for green and low-carbon supply chains and carbon footprint assessment in the electric power equipment sector, as well as the development of a carbon footprint accounting database. We also promoted the localization of the database, aiming to provide support for the development of a national carbon footprint database.

Pollution prevention and control

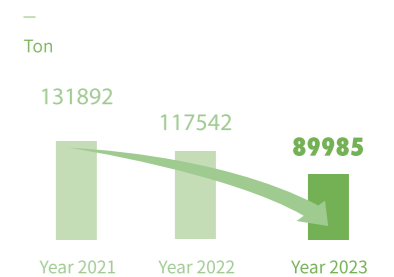
CDT rigorously implemented the instructions and requirements set forth by the CPC Central Committee and the State Council regarding ecological and environmental protection. We adhered to precise, scientific, and law-oriented pollution control practices, enhanced pinpoint management of air pollutants, and actively engaged in regional ecological restoration to achieve synergistic reduction of pollutant and carbon emission. CDT also made significant strides in combating pollution, as well as safeguarding blue skies, clear waters, and clean lands. In 2023, we bolstered the management of environmental protection equipment, meticulously controlled unit start-up and shutdown operations, and applied detailed control and pinpoint management practices to minimized instantaneous exceedance and further reduced total pollutant emissions, ensuring stable compliance with emission standards.



Wastewater emission



Waste gas emission



Waste gas emission management	Wastewater emission management	Waste management	Dust control
<ul style="list-style-type: none"> CDT comprehensively upgraded and modernized environmental protection equipment. The installation rates for desulfurization, denitration, and dust removal systems in thermal power units reached 100%, with ultra-low emission units now representing nearly 99.7% of our capacity, maintaining our position at the forefront of the industry. 	<ul style="list-style-type: none"> CDT implemented wastewater zero discharge modifications at generation companies including Datang Gongyi Power Generation Co., Ltd. and Datang Ma'anshan Dangtu Power Generation Co., Ltd. Datang Haikou Power Generation Company repurposed recycled water and wastewater as the water source for chemical water production, which generated high-salinity wastewater that was subjected to secondary concentration and then evaporated and crystallized using an MVR system, producing industrial by-product salt and achieving genuine zero wastewater discharge. 	<ul style="list-style-type: none"> Datang International Tuoketuo Power Generation Co., Ltd. spearheaded the implementation of Kuluetu Vally Watershed Comprehensive Management Project, effectively resolving issues related to ash and slag disposal. This project stands as a benchmark for environmental management in the Inner Mongolia Autonomous Region. 	<ul style="list-style-type: none"> We actively advanced the construction of coal yard enclosures. Enclosure projects for coal yards in the Beijing-Tianjin-Hebei region and surrounding areas, as well as in Shaanxi, Henan, and Shandong, achieved complete coverage.



Responding to Climate Change

CDT adhered to the new development philosophy and aimed to become a world-class energy supplier characterized by "green, low-carbon development, multi-energy complementary, efficiency, synergy, coordination and digital intelligence." We contributed to the stable operation and development of the national carbon market and supported the achievement of China's dual carbon goals.

Achieving the dual carbon goals

CDT resolutely executed the dual carbon initiatives, championing green development, innovation-driven strategies, establishing the new before abolishing the old and intelligent integration. We continually increased the proportion of clean energy in our operations, developed advanced coal power projects in a scientific and orderly manner, and intensified our carbon reduction efforts. We endeavored to set an example and lead the way in realizing the dual carbon goals, thereby contributing to the harmonious coexistence of humanity and nature, as well as the creation of a beautiful China and a clean, beautiful world.

CDT's dual carbon goals

**Achieve carbon peaking emissions by 2030
and realize carbon neutrality by 2060.**

Energy and resource conservation



CDT's 2023 Highlights

Thermal coal consumption

294.17

grams of standard coal per kWh

Annual fresh water consumption

473.84

Mt

Fresh water consumption per RMB 10,000 output value

21.692

tons/RMB 10,000

CDT maintained a harmonious balance between business development and the pursuit of energy conservation and emission reduction. We proactively advanced the conservation of energy and resources by optimizing operational efficiency, implementing energy-saving measures, and significantly enhancing resource utilization. This commitment consistently generated green value within the industry. We coordinated the governance of water resources, the water environment, and water ecology, promoted the use of water-efficient equipment, and adopted innovative water-saving technologies and processes. To ensure sustainable water supply and improve water use efficiency, we implemented effective strategies for the coordinated operation of hydropower reservoirs at different stages in the river basin, thereby reducing both water consumption and waste.

	Unit	Year 2021	Year 2022	Year 2023
Annual fresh water consumption	10,000 tons	50119	46672	47384
Fresh water consumption per RMB 10,000 output value	RMB 10,000	23.485	21.337	21.692

Hosted the First National Ecological Day Event in Xizang Autonomous Region



Organized carbon trading work in alignment with contractual objectives and timelines

Integrating into the carbon market

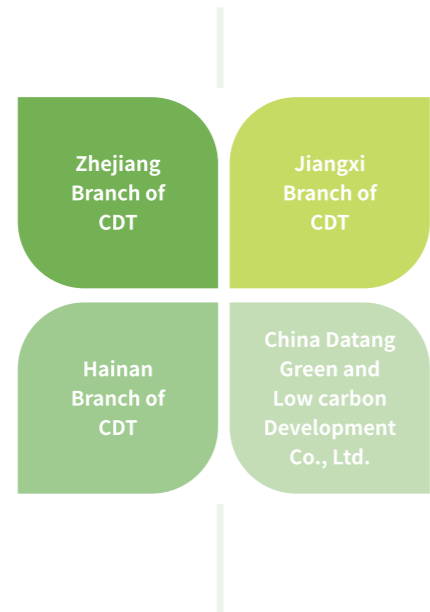
Externally, as a major entity in the carbon market, electricity market, and voluntary emission reduction market, CDT took an active role in market development. We played a pivotal part in quota allocation calculations, market research, and the formulation of voluntary emission reduction methodologies, and spearheaded the redaction and monthly publication of the *Monthly Survey Report of China Carbon Market* by the Power Generation Industry Carbon Trading Working Group (China Electricity Council). Additionally, CDT, as the primary compiling organization, finalized the offshore wind power CCER methodology, which was officially released by the Ministry of Ecology and Environment.

Internally, we reinforced our commitment to green and low-carbon development. We examined and implemented the transition from dual control of energy consumption to dual control of carbon emissions, and issued key documents such as the *Instructions on Green and Low-Carbon Business Operations of CDT* and the *Work Plan for Implementing the Instructions on Gradually Transitioning from Dual Control of Energy Consumption to Dual Control of Carbon Emissions*. We accelerated the establishment of a carbon emission dual control management system, promoted comprehensive green and low-carbon transition, and advanced high-quality development. We also guided enterprises at all levels to

intensify efforts in energy conservation and carbon reduction.

We leveraged our international carbon trading experience to co-establish the Hainan International Carbon Emissions Exchange, marking a groundbreaking milestone in China's involvement in the global carbon market. We diligently met our carbon market compliance obligations and, by November 15, 2023, ensured that our key emission units had fully completed the quota clearing for the second compliance period of the national carbon market, achieving early compliance for two consecutive periods.

The Datang Wushashan Power Generation Company donated 40,000 tons of international carbon reduction credits to the Asian Games Organizing Committee and completed the transaction on the United Nations platform.



The Jiangxi Branch continued to enhance its green carbon marketing efforts, quadrupling the annual number of green electricity customers year-on-year. We strategized carbon management indicators, completed the province's first large-scale carbon emission rights transaction, and led the way in fulfilling the annual carbon compliance tasks.

This company led the development of three industry standards: *Technical Guidelines for Carbon Footprint Accounting and Evaluation of Electric Power Equipment Products*, *Technical Guidelines for Carbon Footprint Accounting and Evaluation of Wind Turbine Products*, and *Technical Guidelines for Carbon Footprint Accounting and Evaluation of Solar Power Module Products*, supporting the advancement of standards related to carbon emissions and carbon footprints.

Hainan Branch of CDT targeted the Green Electricity Certificate trading market, becoming the first company in Hainan to engage in Green Electricity Certificate trading and the first batch of companies in the Free Trade Port to hold both Green Electricity Consumption Certificate and Green Electricity Certificate. In 2023, it was approved for 258,000 Solar Power Green Electricity Certificate, accounting for 45% of the province's total.



The first Green Electricity Certificate transaction in Hainan Province was successfully carried out by Hainan Branch of CDT



CDT's Zhejiang Branch, as a donor, was invited to the Carbon Offsets Donation Ceremony of the Hangzhou Asian Games and the Asian Para Games

Practicing green operations

Green office operation

CDT adhered to the principles of green office operations and fully implemented national requirements for energy and resource conservation in public institutions. We conducted comprehensive measures in administrative offices to reduce oil, gas, water, and electric power consumption. We promoted energy-saving office practices such as electronic documentation, double-sided printing, video conferencing, and centralized heating. We also focused on regulating the management of official vehicles to reduce gasoline consumption. Employees were engaged in preventing wasteful practices like "long-running taps" and "always-on lights," embedding the concept of green development into daily operations and contributing to improved quality, efficiency, and sustainable 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



Liaoning Huludao Heat Supply Company's office building featured a building-integrated photovoltaic (BIPV) project. Following the "self-generation and self-consumption, surplus power to the grid" model, we added cadmium telluride photovoltaic glass to the 288 square meters glass curtain wall of the building, achieving a clean energy goal by reducing energy consumption and carbon emissions through photovoltaic technology. It is estimated that this system will deliver 22,000 kWh of green electric power annually



Western Inner Mongolia New Energy Division

Datang Yantan Hydropower Company



Scan to explore <CDT's "Garden-Like" Power Plants>



Experience CDT's "garden-like" power plants and embark on a carbon journey through the landscapes of CDT depicted in traditional Chinese paintings

Sichuan New Energy Branch

Datang International Pengshui Hydropower Development Co., Ltd.

Environmental awareness and education

CDT advocated green and low-carbon principles with vigor, integrating various environmental awareness and educational activities into key events such as World Environment Day, Week-Long National Campaign to Promote Energy Conservation, and Earth One Hour. Through these extensive efforts, we firmly entrenched and actively practiced the idea that "lucid waters and

lush mountains are invaluable assets" within CDT. This approach fostered a supportive public opinion environment for ecological conservation and low-carbon energy initiatives at our facilities. Consequently, our employees became more attuned to the new development philosophy, and their commitment to actions grew increasingly resolute.

National Tree Planting Day Poster



Earth One Hour Poster



Environmental protection for public welfare

CDT steadfastly adhered to the principles of respecting, adapting to, and protecting nature. While pursuing high-quality development, we consistently emphasized the protection and respect for the natural environment. We advocated for low-carbon, healthy

lifestyles and actively organized public welfare activities such as "Clean Beaches: A Shared Responsibility", and "Protect Water Together", along with waste sorting initiatives. These efforts contributed to fostering a new trend of green and environmental awareness.

Organized "Tree Planting for a Greener Homeland" activity

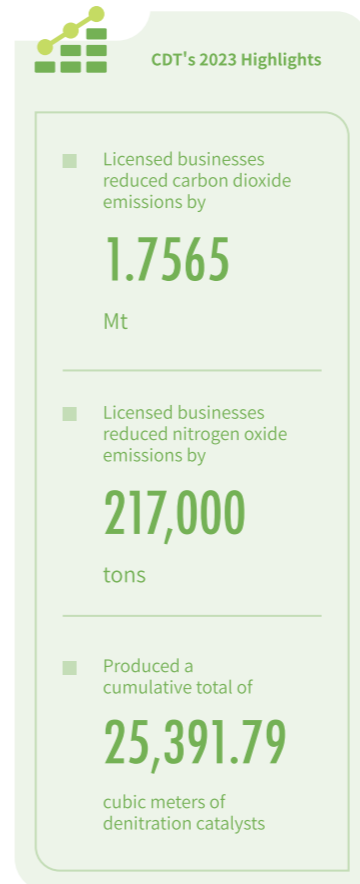


Conducted "Protecting the Mother River: Youth in Action" beach cleanup and water protection activity



Advancing Environmental Services

CDT broadened the green development horizons by actively nurturing new environmental industries. We dedicated ourselves to providing comprehensive solutions for environmental challenges and integrated energy needs. We made notable progress in solid waste recycling, gypsum products, new type of energy-saving and environment protection, and new energy engineering projects. We also spearheaded the development and manufacturing of new catalysts products, positioning ourselves as a "specialized and sophisticated enterprises that produce new and unique products" in the catalyst field and contributing to the modernization of China's environmental industry chain.



Environmental Services Safeguard Lucid Waters and Lush Mountains

Pilot Practice of CDT

Nanjing Environment Protection Company has fully embraced the philosophy that "lucid waters and lush mountains are invaluable assets." It actively supported key national strategies, including the coordinated development of the Beijing-Tianjin-Hebei region, ecological preservation in the Yellow River basin, and high-quality development, and worked diligently to enhance its core strengths, improve efficiency, and expand its range of denitration catalysts products. Nanjing Environment Protection Company also advanced its hazardous waste treatment capabilities, continually strengthening and expanding its green environmental protection industry, with renowned domestic energy enterprises including China Huadian Corporation Ltd., China Huaneng Group Co., Ltd., China Resources, and GX Energy.

By integrating into both domestic and international markets, Nanjing Environment Protection Company leveraged the Belt and Road Initiative to advance its catalyst products abroad and disseminate cutting-edge energy-saving and environmental technologies and clean power to Belt and Road countries. Since its inception, Nanjing Environment Protection Company has delivered green environment-friendly products to over 300 power plants, more than 600 thermal power units, and 170 GW of installed capacity, facilitating hazardous waste recycling and making a distinctive contribution to the Beautiful China Initiative with CDT's efforts.



Datang Environment Industry Group Co., Ltd. successfully rolled out the first batch of 10,000 cubic meters of cellular denitration catalysts, achieving a new breakthrough in arsenic resistance market



Protecting Biodiversity

CDT accorded significant importance to the preservation of biodiversity, steadfastly moving forward with our conservation efforts to keep abreast of the times and to foster innovative solutions. We involved in a variety of activities, including stock enhancement, plant surveillance, bird observation, and wildlife assistance. Through these endeavors, we have blazed a trail of biodiversity protection that prioritizes ecological integrity and green development.



Scan to explore
Developing CDT in the
Beautiful World

If the rare animals could speak: 2023

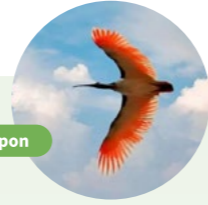


Egret



Datang International Ningde Power Generation Co., Ltd.
Datang International Chaozhou Power Generation Co., Ltd.
Datang Longtan Hydropower Plant

"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!

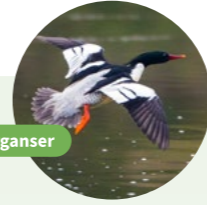


Nipponia Nippon



Datang Shiquan Hydropower Plant

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.



Chinese Merganser



Datang Xi'an Hydropower Plant

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

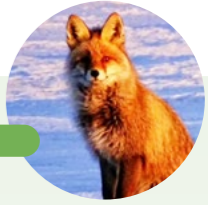


Trachypitecus Francoisi



Datang International Pengshui Hydropower Development Co., Ltd.

I'm the national first-class protected animal, Trachypitecus 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!



Red Fox



Datang Western Inner Mongolia New Energy Division

I'm the Red Fox, living at 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.



Corsac Fox



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

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.

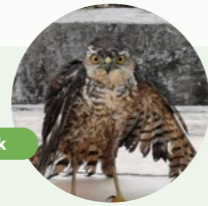


Mandarin Duck



Datang Shuhe Hydropower Plant

I'm the Mandarin Duck, the bird that you human wrote in poem "I envy the life of a couple of mandarin ducks but not a lonely and immortal life." I remember when I first came to CDT's reservoir area, there were only a few of us. Now our numbers have grown significantly. This is thanks to CDT Shuhe Hydropower Plant's consistent focus on environmental protection. They clean the reservoir area daily to protect the water quality, providing us with a very comfortable living environment.



Sparrowhawk



Kalteng Power Plant of PT Datang DSSP Power Indonesia (DDPI)

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...



Procypris Rabaudi



Datang Guanyinyan Hydropower Development Co., Ltd.

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. advanced ecological civilization construction, investing RMB 113 million to build a 45-acre fish propagation station, which became a new home for nearly 100 species of rare domestic fish. It also made breakthroughs in the artificial breeding technology of Onychostoma, Procypris Rabaudi, and Elongate Loach, and successfully bred and cultivated the Triplophysa Anterodorsalis, filling a domestic gap in this field.

Innovation for Success to Pursue Excellent Development



Opportunities and challenges

Developing new quality productive forces is an inherent requirement and a key focus for driving high-quality development. As the world's leading energy producer, China benefits from a rich array of applications that integrate information technology with the energy industry. CDT must align with trends in energy transition and digital revolution, and advance the digital and intelligent transition of the energy industry, which is essential for meeting national Dual Carbon goals and promoting high-quality development of the energy industry.



Calling of the nation

The report to the 20th National Congress of the CPC emphasized that "we must regard science and technology as our primary productive force, talent as our primary resource, and innovation as our primary driver of growth. General Secretary Xi Jinping stressed that "speeding up efforts to achieve greater self-reliance and strength in science and technology is a crucial way to drive high-quality development," and that "Central government enterprises and other state-owned enterprises must have the courage to shoulder the responsibility and take the lead in turning themselves into the source of original technologies and the head of the modern industrial chain."



CDT action

As a major SOE in the energy sector and a leading player in national science and technology innovation, CDT made "strong innovation capability" a top priority among the "Four Strengths and Four Excellences" in advancing the "Second Startup" strategy, enhanced the technology innovation system with "224" (two tiers R&D, two institutions support, four mechanisms) at its core, focused on cultivating and attracting innovative talent, achieved breakthroughs in key technologies, and developed new quality productive forces suited to local conditions. In the mission to build a strong energy nation, CDT demonstrates the responsibilities and commitments of a central SOE.

Value creation in 2023

R&D investment: RMB

7.795
billion

Number of new authorized invention patents

201

Number of new standards above industry level

24

Number of innovation studios for employees: over

940

Among the seven innovation consortiums approved by SASAC, CDT has joined four based on projects.

SDGs contributions





Honors

The Innovation and Application of Anti-Wear and Anti-Explosion Production Management System for Thermal Power Plants of Datang International Zhangjiakou Thermal Power Co., Ltd. received the **Grand Prize for Innovation Achievement of the China Electrical Equipment Management Association**.

The Energy Storage Project of Zhaoqing Thermal Power Co., Ltd. earned the **Grand Project Award for Innovation Achievement of the China Electrical Equipment Management Association**.

The Research and Application of Wind Turbine Technologies in the Complex Meteorological Conditions of the Panxi Plateau of The New Energy Branch of Datang Sichuan Power Generation Co., Ltd. won the **First Prize for Electric Power Equipment Management and Technological Innovation Projects in 2023 from the China Association of Plant Engineering**.

Three projects were awarded the **First Prize for Electric Power Innovation Award in 2023 by the China Electricity Council**:

Application Research on the Comprehensive Performance and Safety Evaluation Technology of Austenitic Heat-Resistant Steel in Ultra-Supercritical Boilers

Research and Demonstration of Key Technologies for Autonomous and Controllable Wind Power Control Systems Across Different Architectures

Research and Application of Situational Awareness Technology for Distributed Collaborative Control Systems Based on Federated Learning

Enhancing Innovation System

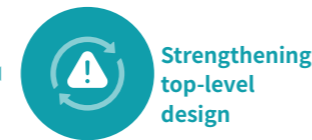
- We refined our "two tiers" R&D system that featured innovation at both the Group Company and primary levels, adjusted the setup of our headquarters' innovation department, and improved the management of major technology projects.
- We partnered with Dongfang Electric Corporation to establish the China Datang Scientific and Technological Innovation Company, collaborated with Tsinghua University to establish the Joint Research Institute for Green and Intelligent Energy Technologies, and formed the China Datang Digital Technology Company. These efforts built a robust "Three Companies and Three Institutes" innovation system, significantly boosting our role as a main player in innovation.

Enhancing project management

- We developed and implemented methods to evaluate scientific and technological innovation, updated our reward management systems for innovation, and continued enhancing our innovation institution framework.
- We introduced CDT mid-to-long-term incentive plans, piloting methods such as recognizing R&D expenses as profits in evaluation and additional points for scientific and technological innovation in assessments, to actively explore various forms of mid-to-long-term incentives.

Innovation management

CDT actively enhanced the top-level design for technological innovation by establishing the China Datang Scientific and Technological Innovation Company and the China Datang Digital Technology Company. We meticulously developed technological innovation plans, focused on improving the innovation system, and built a scientific and efficient innovation framework to support technological advancement.



- We introduced a management system for technological innovation demonstration projects and improved our management processes for project decision-making and development.
- We set up a dual-responsibility system for project teams, with both administrative and technical leaders, and created a long-term mechanism, "achievement tree", for tracking project outcomes.
- We established a regular project scheduling system for prompt oversight for project implementation and quick resolutions to issues.
- We piloted an "open bidding for selecting the best candidates" approach for virtual power plant technology in user-side scenarios.



Innovation platform

CDT embraced an open and collaborative approach, focusing on optimizing the allocation of technological resources. We carefully planned collaborative innovation efforts, steadily advanced the development of R&D platforms, and worked with various partners to create a high ground for innovation, thereby boosting core competitiveness in technology.

Among the seven innovation consortiums approved by SASAC, CDT has joined four based on our projects:

China Electronics Technology Group Corporation's Core Electronic Components Innovation Consortium	China Electronics Corporation's Advanced Computing Innovation Consortium
China Mobile's 5G Innovation Consortium	China National Machinery Industry Corporation's Major Equipment Key Basic Components Innovation Consortium

- We established research platforms for new energy industrial control and smart systems, source-grid-load-storage integration technology, and new energy storage.
- We supported the development of provincial and ministerial-level external platforms, including a demonstration platform for the production and application of ultra-supercritical thermal power unit materials, the Jilin Provincial Power Station Materials Key Laboratory, and the Jilin Provincial Smart Clean Energy Scientists' Studio.

- We actively contributed to developing joint R&D platforms, co-founded the Sharing Laboratory of Battery Energy Storage Technology with China Electric Power Research Institute, and participated in the "Innovation Platform for New Power Grid that Features Source-Grid-Load-Storage Interactive Collaboration" led by Harbin Institute of Technology. Additionally, at the Tsinghua University-CDT Energy Innovation Joint Research Institute, we, together with Tsinghua University, carried out joint research on renewable energy, carbon neutrality technologies, new power systems, new energy storage, hydrogen energy, and digital and smart energy.

Innovative talent

CDT is dedicated to building an outstanding technological innovation team, fostering a nurturing environment for talent development, guiding a wide range of tech professionals to fully realize their potential, and steadily enhancing technological innovation capabilities.

Talent development

We implemented the CDT "Hundred-Thousand-Ten Thousand" Talent Implementation Plan to advance the development of technology and high-skilled talent teams. Two overseas high-level talents were selected for national programs. We appointed the first batch of chief experts and outstanding young sci-tech talents, introduced the Excellent Engineer and CDT Craftsman series, and promoted the training of engineering master's and doctoral students, formulating a system-wide team consist of 1,913 experts.

Promoting industry, academia, and research collaboration

We organized China Datang Corporation Science and Technology General Research Institute to conduct joint research efforts with Tsinghua University, North China Power Engineering Co., Ltd., North China Electric Power Research Institute, and Beijing Sifang Automation Co., Ltd.

Encouraging employee innovation

We set up eight "CDT Women's Innovation Workstations," led by female role models and tech leaders like Yan Huanhuan, Han Yong, Yang Yinjuan, and Qiu Guizhi.

Employee Competitions

We hosted the first "CDT Cup" Employee Innovation and Effectiveness Competition and Exchange Events.

Strengthening innovation incentives

We introduced an expert talent allowance and continued long-term incentives for excellent talent and rewards for innovation.

Ten employees received the "Top Ten Innovation Talent" award at the first "CDT Cup" Employee Innovation and Effectiveness Competition



26 tangible models of achievements from various fields and specialties within the system companies were exhibited at the competition

CDT's 2023 Highlights

- Over **940** innovation studios for employees at different levels
- 41** CDT-level innovation studios for employees, the fifth batch of this initiative, were designated
- 64** awards were claimed by CDT employees at the All-China Federation of Trade Unions' Professional Skill Competition
- Over **90** achievements were awarded at the Chinese Workers' Technical Association QC Achievement Conference

Insisting on Original Innovation

Self-reliance and strength in science and technology

To bolstered our technological innovation system, CDT held the inaugural meeting of the Science and Technology Advisory Committee, set up the Engineering Master's and Doctoral Students Development Center, founded China Datang Digital Technology Company, and established China Datang Scientific and Technological Innovation Company, a joint venture with Dongfang

Electric Corporation. CDT also partnered with Tsinghua University to set up the Joint Research Institute for Green and Intelligent Energy Technologies. These initiatives enabled CDT to advance the integration of industrial, innovation, and financial chains and make profound progress in major scientific research projects.

Pilot Practice of CDT

Self-Reliance and Strength in Science and Technology: CDT Unleashed New Quality Productive Forces in Energy Sector

Domestic wind power control system

CDT made significant progress in developing China's own wind power control systems through collaborative innovation, achieving the industry's first type approval for a domestically-developed wind power main control system, and completed the independent development and grid integration testing of a wind power main control system using domestically-produced CPUs. This milestone confirms CDT's full capability in developing wind turbine control systems with domestic technology, overcoming key "bottleneck" challenges. On May 7, 2023, the Tongxin Wind Farm of the Ningxia Branch of CDT launched the large-scale renovation of Phase IV 100 wind turbine units with domestically-developed wind power main control system, marking the largest single-unit wind power main control system upgrade project in China to date.

Key technology for impulse turbine manufacturing

The world's first 500 MW high-head impulse turbine research and demonstration project, the Xizang Zhala Hydropower Station, has fully commenced construction. As the project owner, CDT actively supported national strategies, addressed gaps in energy technology and equipment, and organized the entire industry chain to advance research in project design, equipment manufacturing, material processes, operational maintenance, and high-altitude construction. CDT conducted seven research topics focused on tackling key technology challenges in impulse turbine manufacturing. Once completed and operational, this project will achieve full domestic intellectual property rights for the entire industry chain, effectively enhancing the overall level of impulse hydropower units in China.

Research of high-temperature resistant materials

CDT's Yuncheng project brought together top resources from China's coal-fired electric power equipment industry. It set benchmarks with a reheat steam temperature of 630 °C and a power generation efficiency exceeding 50%. The unit design included a main steam pressure of 35.5 MPa and a coal consumption rate of 256.28 grams per kWh. The project introduced ten major innovative technologies, including the first application of the domestically-developed G115 martensitic heat-resistant steel in electric power equipment. This achievement filled China's gap in high-temperature material technology and was crucial for speeding up equipment self-reliance, promoting the design, manufacturing, materials, and processes innovation in coal-fired electric power equipment in China.



Strengthening intellectual property protection

CDT placed great emphasis on intellectual property protection and realized its potentials in driving original innovation. By leveraging our creation activities such as research, digitalization, engineering, and production technology upgrades, as well as innovation platforms like

studios and labs, we actively work on protecting and utilizing intellectual property. Our goal is to increase our ownership of key and self-developed technologies and boost the application of patents, thereby advancing the high-quality development of intellectual property work.

CDT's 2023 Highlights

Accumulated number of patents

12,503

piece

Accumulated number of invention patents

1,351

piece

Number of new authorized patents

866

piece

Number of new authorized invention patent

201

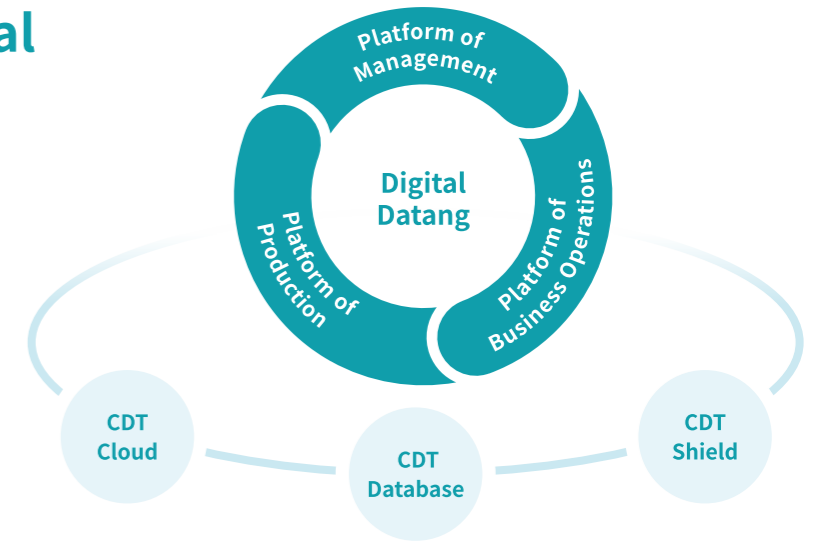
piece



The Central Control Center of Guangxi Guiguan Electric Power Co., Ltd. (Hongshuihe) developed a smart power generation operation system that provides real-time monitoring across the entire basin, by using advanced technologies such as big data, general AI models, and visual recognition to integrate offline and online data, and combining mechanistic and mathematical algorithms with expert knowledges. This system has transitioned our operations from traditional manual methods to intelligent automation, allowing one operator to manage multiple plants efficiently and safely. This innovation is driving significant changes in hydropower production management.

Speeding Up Digital Transformation

CDT harnessed technological innovation as a driving force and launched the "Digital Datang" development plan, achieving significant progress. We established three major application platforms and three major foundations, creating an application architecture centered around the large platforms. Our organizations, including the Digital and Intelligent Center, the China Datang Digital Technology Company, and China Datang Corporation Science and Technology General Research Institute, actively fulfilled their roles, leading to remarkable results in digital transformation.



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



Honors

- The Big Data Center for New Energy underwent a comprehensive upgrade, integrating full-scale new energy data to support the development and improvement of new energy projects. The technology reached an internationally advanced level.
- The research on key technologies of industrial big data and their application in smart power plants received the First Prize for the China Electric Power Innovation Award.
- Longwanggou Coal Mine was recognized as one of the first national intelligent demonstration coal mines.
- Datang Yunnan Power Generation Co., Ltd. was designated as a pilot company for digital transformation by SASAC.

Enhanced Business Digitalization Capabilities

- We defined the "Digital Datang" development plan, outlining a "3+3" framework comprised of three major application platforms of management, production, and business operations, and three major foundations of CDT Cloud, CDT Database, and CDT Shield. This framework provided the overall blueprint for CDT's digital development. We also issued a three-year action plan for the large-scale application of the Beidou system, outlining work goals, key tasks, and plans to promote Beidou's application across the CDT's "Six Kinds of Electric Power" and "Six Industries."
- We actively promoted project construction based on the "large platform, micro-application" architecture. Several digital key projects and systems went online, including the Smart Party Building Platform, Treasury Management System, Budget System and Financial Reporting Upgraded System, Inspection and Supervision Information System, Foreign State-owned Assets Online Supervision System, Electric Power Spot Trading Decision Support System, Phase II of the Scientific Innovation Management System, Material Supply Chain Coordination Platform, Digital Archives System, and Cloud Video Conference System. These initiatives gradually improved working models in relevant business areas, with initial signs of increased quality and effectiveness.

Strengthened "Digital Datang" Foundational Support Capabilities

- We completed the renovation of the headquarters data center and conducted site research for the "Two Locations, Two Centers" construction. We addressed CDT's internet risk exposures and enhanced the communication and security capability of key networks, providing essential computational and network support for the "Digital Datang" initiative.
- We held the 2023 Cyber Security Work Meeting, strengthening the three major cyber security systems. We appointed a Chief Cyber Security Officer, optimized cyber security staff configuration in secondary and tertiary companies, and refined the accountability system to standardize cyber security management. We also organized training for Chief Cyber Security Officers and management personnel to enhance their awareness and improve overall cyber security management capabilities.
- We successfully guaranteed cyber security during key national events such as the "Two Sessions," the China-Central Asia Summit, the World University Games, and the Asian Games. In the National Cyber Security Vocational Skills Competition, CDT's two teams won the Group Third Prize, one employee won the Individual Third Prize, and three team members won Individual Excellence Awards. CDT also received the Excellent Organization Award. Our outstanding performance in cyber security received full recognition from higher authorities.

Promoting Commercialization of Achievements

CDT actively facilitated the deep integration of industry, academia, and research, addressing the "last mile" challenge to promote the effective commercialization and widespread application of scientific and technological achievements. This effort accelerated the transformation of scientific results into practical economic and social drivers, providing robust technological support for high-quality development.

Achievements

- 91 innovative achievements awarded at national and provincial level.
- Results from 9 projects in the New Energy Innovation Studio Alliance were successfully transformed into applications, with over 20 patents granted.
- The "Large Impulse Turbine Generator Unit" was recognized by the Ministry of Industry and Information Technology and the SASAC as a **Key Product for the 2023 "All-in-One" Application Demonstration**, with Datang Tibet Energy Development Co., Ltd. became a key promotion organization.
- The Jieyang Empirical Research Base of the New Energy Storage Innovation Center was selected as a **Pilot Energy Storage Project Demonstration by the National Energy Administration**.
- 3 scientific and technological innovations were included in the SASAC's recommended directory of scientific and technological innovation achievements for central SOEs (2022 edition).
- 4 scientific and technological innovations were shortlisted for and published at the China Electricity Council's First Electric Power Industry Science and Technology Innovation Conference.
- Research and Application of the Electric Power Generation Security Monitoring and Diagnostics at Group-Level Industrial Control were recognized as the **Typical Case of Digital Transformation of SOE by SASAC**.

Making Greater Industry Contributions

Setting standards: leading industry development

CDT actively participated in the formulation of domestic and international industry standards, leveraging scientific and technological innovations to drive continuous improvement of industry standards and contributing to the industry's stability and prosperity.

- Released one international standard:** The international standard *ISO Guidelines for Wastewater Treatment and Reuse in Thermal Power Plants*, jointly led by CDT companies, has been published.
- Participated in the selection for the 2023 Central SOEs QC Group Achievement Presentation:** Three QC results advanced to the finals, with one QC result winning first prize and two receiving second prizes.
- Completed comprehensive planning standards and patent indicators:** Secured 201 invention patents and completed 46 standard project approvals.
- Conducted 2024 electric power industry standard solicitation:** Recommended eight industry standards for submission to the China Electricity Council.

Building platforms: promoting industry exchange

CDT established platforms for industry exchange, bringing together industry elites to discuss development plans, promote technological experience sharing, and facilitate knowledge transfer to support industry transformation and upgrading.

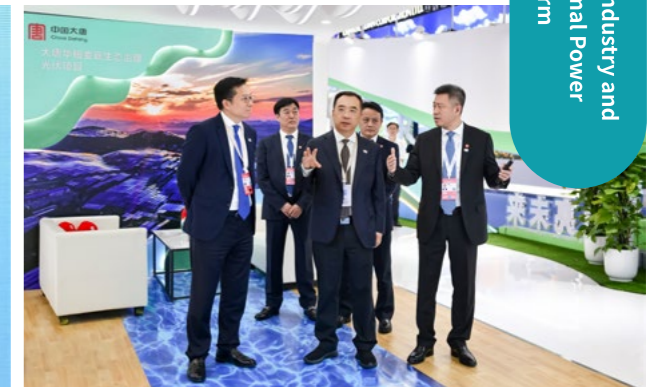
We planned and designed four test rigs for assessment, including a test rig for material performance under high-temperature and corrosive environment.

We led the development of a public service platform for new thermal power materials and participated in the development of a virtual simulation platform, with 85% of the assessment and verification tasks initiated.

We conducted welding process evaluations and actual service condition verification tests for new materials such as G115, C-HRA-5, and SP2215, providing strong support for projects.



Zou Lei, Secretary of the Party Leadership Group and Chairman attended the 24th Association of the Electricity Supply Industry of East Asia and Western Pacific CEO Conference themed "Low Carbon Energy Powering a Green Future" and delivered a keynote speech titled *Promoting Green and Low Carbon Development, Building a Clean and Beautiful World*



CDT accelerated the development of the Ministry of Industry and Information Technology's Ultra-Supercritical Thermal Power Materials Application Demonstration Platform

Centering on innovation: introducing new industry capabilities

CDT focused on scientific and technological innovation, deepened research and development efforts, and aimed for breakthroughs to lead the industry's upgrading process with internationally leading and pioneering projects.

- The New Energy Storage Empirical Base in Guangdong Province and the Sodium-Ion Energy Storage Project in Hubei Province were recognized as the Pilot Energy Storage Project Demonstration by the National Energy Administration.
- Five national projects, including the *Application Demonstration of Organic Pollutant Emission Control Technology in Large Coal-Fired Power Plant Boilers*, passed expert acceptance organized by the Ministry of Science and Technology, completed all research and development tasks, and met the expected results.

- The Ministry of Industry and Information Technology's pilot demonstration project *Smart Power Plant Safe Production Solution Based on Industrial Internet Platform* completed all construction tasks, passed acceptance of the Ministry, and provided a pioneering pilot solution for the electric power industry and the CDT's smart hydropower station construction.

Win-win Cooperation to Create a Better Life



Opportunities and challenges

Livelihood is the foundation of people's happiness and social harmony. Ensuring and improving people's livelihood rely on solid promotion of sustainable development. We strive to make people's sense of gain, happiness, and security more fulfilling, secured, and sustainable. As a central SOE in energy sector closely related to people's life, how to better focus on ensuring and improving people's livelihood, practicing high standards of social responsibility, and continuously enhancing people's livelihood and well-being in the company development, have put forward higher responsibility requirements in the new era for SOEs, especially central SOEs.



Calling of the nation

President Xi Jinping has pointed out in the report of the 20th National Congress of the Communist Party of China that we must adhere to safeguarding and improving people's livelihood in the process of development, encourage joint efforts to create a better life, and continuously realize the people's aspirations for a better life. We need to achieve, maintain, and develop the fundamental interests of the people, take more measures that benefit people's livelihood and warm people's hearts, focus on solving the urgent and difficult problems of people, improve the basic public service system, enhance the level of public services, strengthen balance and accessibility, and solidly promote common prosperity.



CDT action

CDT cares about the well-being of people and concerns about the social progress. We bravely assume the responsibility of the era, actively participate in rural revitalization, help rural economic development and improve people's livelihood. In addition, We participate in public welfare charities, contribute to the society with practical actions and regard the well-being of employees as our own responsibility. Besides, we also strive to create a better working and living environment for employees, and constantly contribute our strength to the great journey of people-oriented Chinese path to modernization.

Value creation in 2023

Invested unconditional assistance fund of RMB

91.46

million for rural revitalization

Donated RMB

2,000

million to the earthquake stricken area in Jishishan County

Total amount of social donation was RMB

121.05

million

Signed strategic cooperation agreements with more than

10

central SOEs, governments and universities

SDGs contributions





Facilitating Rural Revitalization

CDT's 2023 Highlights

Conducted paired assistance to Dahua County of Guangxi Zhuang Autonomous Region and Chengcheng County of Shaanxi Province, and provided pairing assistance to Xinghai County of Qinghai Province, along with

76

villages

Invested unconditional assistance fund of RMB

91.46

million

Deployed

164

officials to serve temporary positions

Trained a total of

12,324

individuals across various fields of expertise

In the paired assistance to Dahua County of Guangxi Zhuang Autonomous Region and Chengcheng County of Shaanxi Province, invested unconditional assistance fund of RMB

41.2

million

allocated compensated assistance fund of RMB

934

million

introduced assistance capital and investment of RMB

64.43

million

procured and assisted in the procurement of agricultural products, amounting to RMB

53.92

million

Implemented

268

assistance projects

CDT consistently views rural revitalization as our glorious mission and political responsibility. We conscientiously implement the spirit of the No.1 Central Document, bear the country's most fundamental interests in mind, and carry forward the inheritance of Red CDT culture. We adhere to the "Three-Support" (support for rural construction, inspiration, and education), integrate the "Three-Assistance" with sincerity, genuine care, and practical financial support, coordinate and promote the Five-Sphere Integrated Plan of education, industry, livelihood, employment and Party building, aiming to deeply and solidly implement CDT characteristics "Three-Support and Three-Assistance, and Five-Sphere Integrated Plan" in facilitating comprehensive rural revitalization. In 2023, we obtained a great evaluation comment in the assessment of the effectiveness of assistance work among state-owned companies that offered paired assistance.

The assistance work was recognized by higher-level authorities and local governments, and we received 22 thank-you letters and banners throughout the year.

12 rural revitalization stories, including *As You Wish! Spring Breeze Brings Warmth to the "Three-River-Source" Region*, were selected as excellent stories for the 6th Central SOEs Awards.

7 cases, including *Promoting the Characteristic Development Mode of Hejialou Village, Chengcheng County*, were selected as excellent cases of social responsibility for power companies in 2023.

The case of *Group-Based Educational Assistance to Build Dreams for Children of the Yao Autonomous County* was selected as *Outstanding Case of Central SOEs Supporting Rural Revitalization*.

28 dispatched officials and 15 dispatched groups were given commendations by local governments.

The effectiveness of the assistance was reported 365 times by mainstream media.

[Stakeholders' Comments]

“CDT has contributed a lot and has created extensive good experiences in Chengcheng County revitalization. SASAC has promoted CDT's good practices, which are very impressive to us.”

—Zhao Yide
Secretary of the CPC Shaanxi Provincial Committee

“CDT has assisted Dahua County with its expertise, passion, dedication and strategy.”

—Lan Sheng
Mayor of Dahua County

“CDT has devoted deep passion and efforts in the assistance work.”

—Zhang Xu
Mayor of Chengcheng County

Strengthen management and stabilize the development direction of rural revitalization



Optimize a sound leadership system

The leadership group meeting of rural revitalization work clarified the work direction, while the annual rural revitalization work meeting and dispatched officials symposium listened to the voices of dispatched officials to jointly study and promote the annual key assistance work.



Build the work system

The leaders of the Group went deep into the front line of rural revitalization, conducted research and supervision in paired assistance counties, strengthened work coordination and implementation, and improved work quality and effectiveness.



Improve the institutional system

We formulated management measures, annual key work arrangements, and funding plans for the rural revitalization work, adhered to improving the standardization and institutionalization level of rural revitalization work, and enhanced the sense of gain of the people in the assisted areas.

CDT Rural Revitalization Leadership Group held the 1st meeting in 2023 to study and implement the spirit of No.1 Central Document in 2023, deploy and promote rural revitalization



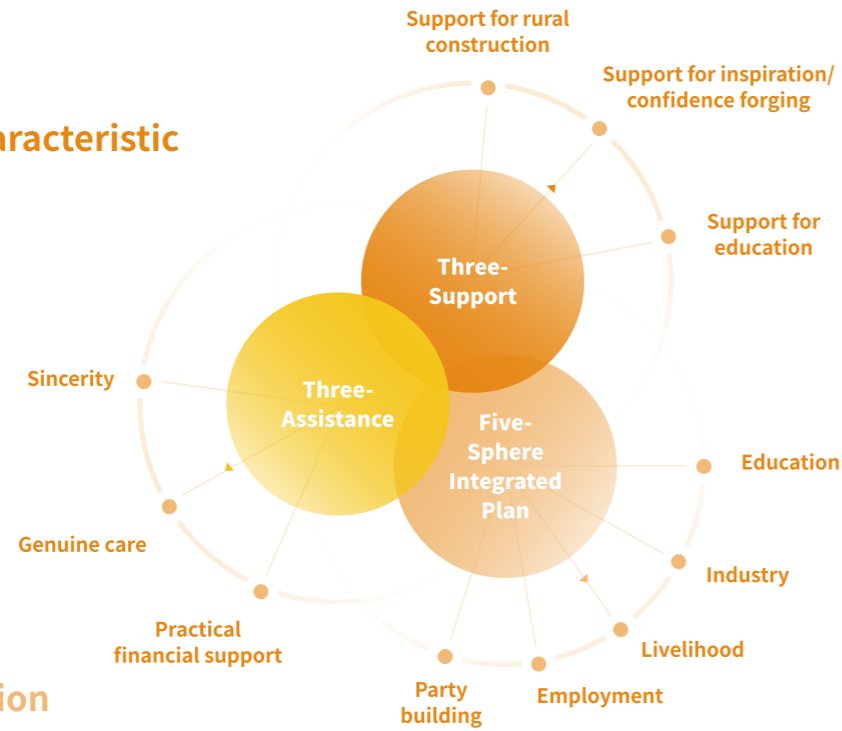
Zou Lei, Chairman, Secretary of Party Leadership Group investigated the development of rural revitalization in Dangui Village, Dahua County, Hechi City, Guangxi Province, and attended the unveiling ceremony of Science Courtyard in Dahua



Convened the 2023 Rural Revitalization Work Conference and Dispatched Officials Symposium

Promote and facilitate the implementation of the characteristic assistance system

CDT has consolidated its responsibility for rural revitalization, and promoted the implementation of education, industry, people's livelihood, employment, and Party building assistance.



Educational assistance, consolidating the foundation of common prosperity

- The education assistance brand "CDT • Dream Journey Assistance" continued to carry out the "Excellent Teachers to Promote Education • Build Dreams Together" education assistance action in Dahua County, provided training for 3,016 teachers and parents, and distributing RMB 3.6 million "Dream Building Three Grants" (National Scholarship, National Encouragement scholarship, and National Grant) for three consecutive years to stimulate a good atmosphere of respecting teachers and valuing education.
- "Meet in Beijing • Dream Journey Assistance" allowed students from the assisted areas to come to Beijing and experience the infinite charm of patriotism, technology, and ethnic integration. The Summer Camp of "Film Going to the Countryside" for aesthetic education, and the "Digital Cloud Classroom" planted seeds of hope and empowered dreams for children.
- The Venus Summer Camp of "Dream Assistance • Dream Fulfillment" in Xinguan Village, Huquan Town, Hunan Province enabled students to establish the concept of integrated development of new energy and ecological industries from an early age.
- The "Golden Autumn Education Assistance" caring and comforting activities in Qianjin Village, Qiagelake Town, Xinjiang Uygur Autonomous Region enabled more students to step out of their homes and fulfill their college dreams.



Industrial assistance, implementing effective strategies for common prosperity

- Give full play to the advantages of the main business and enhance the green growth of economic development in the assisted areas

Dahua Duyang Wind Power Project, Banlan Village Rooftop Solar Power Project, Chengcheng County Clean Energy Base, Hubei Luotian Sanlifan Project, and Hainan Wanning Heshan New Energy Project combining solar energy with agriculture to achieve ecological governance, win-win situation between company and local government and benefit the public, transforming lucid waters and lush mountains into invaluable assets.



- Create a new model of characteristic industry in agricultural cooperation based on resource endowment

Dahua Longzhuo Fishery, edible fungi planting base, and black pig feed processing industry have been gradually emerging. The production lines of Chengcheng County cherry industry deep processing, modern grain industry park, and farmers' professional cooperatives have been busy every day. The "Solar Power Project for Farm and Ranch" in Xilinhot has seen herds of cattle and sheep, and the living conditions of the villagers have undergone tremendous changes.



- Dynamically optimize existing assistance projects to enhance comprehensive benefits

The buzzing spinning wheels in Tangyou Clothing Factory and Ningxia Hongde Village Textile Workshop have enabled the poverty-stricken people become industrial workers at their doorstep. The small oil mill in Jiefang Village, Jilin Province kept releasing a burst of fragrance. The characteristic industries such as fungus, matsutake, and medicinal herbs have been thriving, and the Korean style "Mitang Courtyard" boutique homestays have attracted tourists to visit.



- Raise awareness and stimulate new driving forces for modernization of agriculture and rural areas

CDT has jointly established a "Science Courtyard" in Dahua County in combination with the Department of Moral Education under the Ministry of Education and China Agricultural University, guided the construction of courtyard economy with regional characteristics, and form a new driving force for promoting the modernization of agriculture and rural areas.



People's livelihood assistance, drawing a blueprint of common prosperity

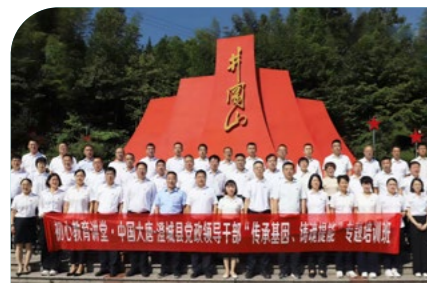
- Invested an unconditional assistance fund of RMB 21.86 million for people's livelihoods. Drinking water safety projects have been conducted. Employees were organized to participate in local voluntary tree planting and public ecological release activities, helping to continuously improve the living environment in rural areas and enhance the happiness and sense of gain of people.
- As the 11th batch of National Demonstration Villages for Ethnic Unity and Progress and the 3rd batch of National Demonstration Villages for Rural Governance, Hongde Village in Ningxia received the Syrian-Chinese Government Assistance Policy Training Class for observation and investigation, and continuously contributed the wisdom of CDT's rural revitalization through exchanges and cooperation.
- Purchased and assisted in the procurement of RMB 53.92 million of agricultural products from the assisted areas, with the consumption assistance fund reaching to a historic high level.
- Helped Xinghai County in Qinghai, Changdu County in Xizang and other key assistance areas in western China bringing the best quality agricultural products to the Rural Revitalization Week, setting off an upsurge of agriculture assistance.



Central SOEs "Rural Revitalization Week" CDT Assistance Products Live Streaming Special Session



CDT headquarters and the units in Beijing held a consumer assistance "Food Tasting Event"



Invested RMB 20.37 million to comprehensively train individuals across various fields of expertise in the county, and over 10,000 grassroots officials, leaders, professional and technical personnel were trained and assisted in Dahua County and Chengcheng County.



Throughout the year, 62 graduates from poverty-stricken areas and regions such as Xizang and Xinjiang were recruited for assistance, and 310 service personnel and public welfare positions were recruited to solve employment problems for the poverty-stricken people.

Employment assistance, towards a future of common prosperity

Collaborated with Ulanqab Vocational College to establish a new energy industry college, promoting deep and multi-field strategic cooperation in the new energy industry of Inner Mongolia.

Party building assistance, contributing joint efforts for common prosperity



- The Party building brands of "Pioneer Guiguan, Warm the Dahua Yao Autonomous County" and "the Voluntary Datang, the Infinite Power" in Chengcheng County had been recognized locally, with 27 grassroots Party organizations established and strengthened, allowing the Party flag to fly in the mountains and villages.
- The "National Unity" bus from Qianjin Village, Wensu County in Xinjiang drove to the Aksu Red Education Base to carry out Party history learning and education. The Mandarin training courses and youth forums of the "Cultural Enrichment Project in Xinjiang" promoted deep ethnic integration.
- Held a series of new era civilization practice activities, such as the "Endeavor Cup" badminton competition in Chengcheng County, the selection of "Six-Excellence Villagers" and "Poverty Alleviation Leaders", and enriched the cultural life of villagers.

Devoting to Public Welfare and Charity

CDT adheres to the principle of sharing development achievements with the society, actively participates in public welfare and charity undertakings, and vigorously carries out volunteer service events. We have organized employees to go deep into communities and schools, spread love to every corner of society, and responded to social expectations with practical actions.

Emergency rescue for disasters

Urgent Action with Emergency Rescue for the Earthquake Relief in Gansu Province

After the earthquake in Jishishan County, Gansu, the Party Leadership Group of CDT immediately deployed post-earthquake investigation, energy supply guarantee, and rescue measures. CDT effectively shouldered the mission and responsibility of central SOEs in Gansu and Qinghai, and provide immediate assistance to the disaster stricken areas. 52 Party members from Gansu Company in Lanzhou voluntarily registered to establish an emergency rescue team, which urgently delivered daily rescue supplies such as quilts, winter clothes, tents, instant noodles and milk to the disaster area to ensure the basic livelihood of the people in the disaster area. CDT donated RMB 10 million to the disaster stricken areas in Gansu and Qinghai to support earthquake relief and post-disaster reconstruction work.



The CPC Gansu Provincial Committee and Gansu Provincial People's Government, as well as the CPC Qinghai Provincial Committee and Qinghai Provincial People's Government sent letters of thanks to CDT, expressing their sincere gratitude for the strong support and assistance provided by CDT for the earthquake relief work in the two provinces.

Volunteer services

- Carried out the "Datang Youth Hand in Hand" volunteer service month activity, focusing on youth volunteer services such as charity for education, respect for the elderly and disabled, public welfare and environmental protection, as well as services for major competitions, and organized 1,813 service activities.
- Carried out public welfare activities such as construction assistance, charity work, repairing bridges and roads, donating funds for education, cooperating in the fight against the epidemic, and benefiting the local people.
- The "Three-color Flower" volunteer service was awarded the title of the best volunteer service organization in China.



CDT's 2023 Highlights

396
youth volunteer organizations

17,555
youth volunteers

Carried out
1,813
times of youth volunteer service events

Ganzi Hydropower Development Co., Ltd. launched volunteer service event of "Learning from Lei Feng and Cultivating New Trends"



Fuzhou Power Generation Co., Ltd. organized Youth League members to carry out volunteer service events to commemorate the 60th Anniversary of Learning from Lei Feng

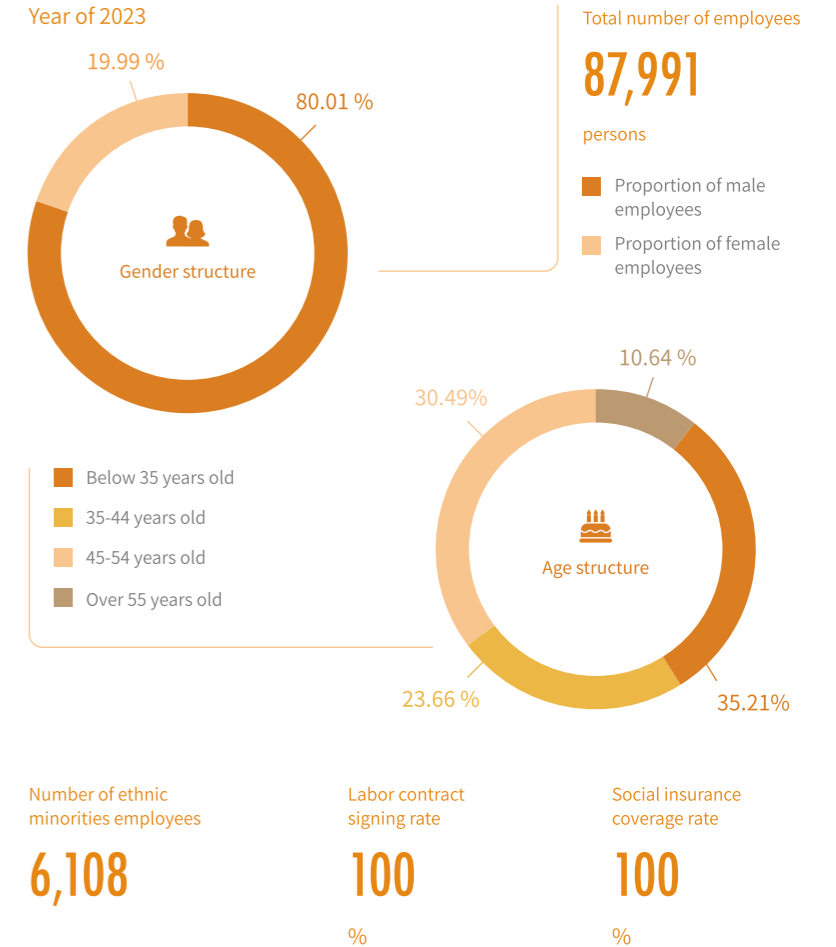


The Youth League Committee of Shanxi New Energy Power Generation Co., Ltd. organized the "Kind and Beautiful Shanxi - Blood Donation" volunteer event

Paying Attention to Employee Care

Protecting rights and interests

CDT adheres to the people-oriented concept, follows laws and regulations such as the *Labor Law of the People's Republic of China* and the *Labor Contract Law of the People's Republic of China*, and safeguards the legitimate rights and interests of employees. We ensure the equal opportunities for employees in recruitment, salary, benefits, promotion and other employment areas, and effectively protect the rights and interests of employees.

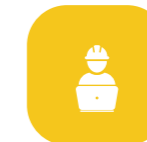


Compliance employment

- We implement a market-oriented recruitment system that is open, transparent, fair, and based on merit. We comprehensively regulate labor employment management, staunchly oppose any form of employment discrimination, eliminate forced labor and harassment, respect employee's privacy, and effectively safeguard all legitimate rights and interests of employees.

Compensation and benefits

- Established a sound long-term management mechanism for compensation distribution, revised six systems including *the Management Measures for Total Wages of Secondary-level Enterprises*, and created a good atmosphere that encouraged and motivated employees to contribute to innovation and entrepreneurship.
- Implemented special rewards to support high-quality development, such as labor competitions, power project development and construction, and energy supply guarantee.
- Gave full play to the incentive and guarantee role of compensation distribution, and stimulated the endogenous motivation of leaders at all levels to strive for excellence. Guided companies to strive for efficiency and increase wages, and leveraged the guarantee incentive and leverage effect of total wages.



Democratic governance

- Carried out activities of "Star-rated Enterprises of Publicizing Factory Affairs", selected and named the first batch of 29 "Five-star Enterprises of Publicizing Factory Affairs", and promoted the standardized management of democratic governance and factory affairs publicizing.
- Promoted achievement of the "threefold hundred percent" (in the establishment of the employees' congress system, the creation for star-rated enterprises of publicizing factory affairs and the coverage of collective contract negotiations) within enterprises which already established labor union organizations.
- Carried out activities to receive sensible suggestions from employees, collected employee suggestions and opinions, and mobilized the enthusiasm, initiative, and creativity of officials and employees in the new journey of "Second Startup".

Facilitating development and growth

100 newly graduated college students from Datang Heilongjiang Power Generation Co., Ltd., Datang Jilin Power Generation Co., Ltd., and Liaoning Branch of CDT received onboarding skills training at CDT Harbin No.1 Thermal Power Plant



Ren Jiajiong (female), a professional relay protection engineer in the Equipment Department of Guangdong Datang International Leizhou Power Generation Co., Ltd., was elected as a deputy to the 14th National People's Congress and made suggestions to the Congress around "accelerating the construction of carbon cycle and clean energy island"

Official team construction

CDT advocates the concept of "talented individuals take positions", promotes the implementation of systems such as competition for leadership position, adjustment of the bottom position, and withdrawal of incompetence, increases efforts to cultivate and utilize young officials, and builds a high-quality official team.

From January to December of 2023, the "talent training rate" within the Group reached 99.45%, the "average training hours per person" reached 100.46 hours, and the "training hours for deputy managers level and above in headquarter" reached 148.02 hours. The "education and training funds" already used was RMB 285.8381 million.

Employee development

CDT has deeply implemented the strategy of strengthening the enterprise through talents, increased training efforts, and expanded the platform for employee growth and development. We have established platforms for employees to enhance their skills, learn abilities, and showcase their talents,

accelerated the construction of the Company's "Ten-Hundred-Thousand" talent program, encouraged employees to strengthen self-learning, enhance personal abilities, and achieve common development between employees and the Company.

<ul style="list-style-type: none"> Participated in skill competitions organized by the China Energy, Chemistry and Geology Trade Union, including cable installation and operation, solar power operation and maintenance, wind power operation and maintenance, and fuel testing, and won 15 team awards and 37 individual awards. Seven employees were awarded gold and silver medals as skilled workers. 	<ul style="list-style-type: none"> Trained courses for professional practical engineering and 2023 will be held for 1,860 students in the form of "main class + separate class", so as to promote young talents to change their roles as soon as possible, improve their quality and ability, and accelerate their growth and talents.
<ul style="list-style-type: none"> Carried out "Dual-skill" training for thermal power and new energy, adopted the training mode of "comparison, learning, teaching, application, practice, and examination", strengthened the Tuoketuo Power Generation Company Electric Maintenance and Repair Training Platform and the Zhangjiakou Thermal Power Co., Ltd. Abrasion Resistance and Explosion-proof Training Base, and built a professional and high-quality talent team. 	<ul style="list-style-type: none"> Convened the 2023 International Business Training Course to enhance the capabilities of foreign affairs personnel and international business talents.
	<ul style="list-style-type: none"> 728 employees were organized for 10,462 working days of maintenance training, with 284 new personnel capable of leading shifts and 418 new personnel possessing basic maintenance skills, laying a solid foundation for independent

CDT Continues to Strengthen the Training of Cadres and Build a High-Quality Cadres Team

- To implement the *Leadership Team and Cadres Construction Plan of CDT (2021-2023)*, nominated a total complementary of 13 senior positions in subsidiaries and branch companies, and basically fill the positions of Discipline Inspection Commission Secretary and Chief Accountant in secondary units.
- Nominated Chief Compliance Officers to conduct the selection of deputy general managers in charge of development in grassroots companies.
- Strengthened site training efforts, optimized the mechanisms of multi-level and multi-position exchanges, selected outstanding cadres with comprehensive qualities and potential to participate in the exchange programs organized by the government for assistance of the western regions, old industrial bases, old revolutionary base areas, Tibet, Qinghai, and Xinjiang.
- Developed the *Criteria for Assessing Political Quality of Cadres* and the Political Quality Assessment Form, and established assessable and testable political quality evaluation methods.
- Organized spring and autumn training sessions for young cadres in 2023, as well as themed seminars on learning and implementing President Xi Jinping's ideology of socialism with Chinese characteristics in the new era, to further consolidate the theoretical foundation of officials, enhance the Party spirit, and improve the leadership abilities. CDT Party School was rated as the exemplary unit of systematic teaching work in the Central Party School SASAC Branch in 2023.
- Revised the *Assessment and Evaluation Method for Leadership Teams and Leaders*, improved the assessment and evaluation system, and enhanced the comprehensive evaluation level of leaders.

Heart-warming care

CDT has upheld a people-oriented approach, promoted the construction of the "Happiness in Datang", deeply integrated the construction of a harmonious company and the sharing of development achievements, and focused on tackling the "difficult and painful points" faced by employees. We advocate serving employee needs orientation, give full play to the "service guarantee" function, and enhance the solidarity and centripetal force of the company.

Work-life balance

CDT has actively advocated "Joyful Work, Healthy Life". We have enriched employees' cultural life through employee artistic performances, holiday care and condolences, as well as other forms to help employees achieve work-life balance, convey warm care through practical actions, create a happy atmosphere, and effectively enhance employees' sense of happiness and belonging.

- Carried out the "Tangyun Cup" series of artistic and sports activities for employees, with the goal of "Health Promotion, Style Showcasing". Organized badminton competitions and artistic works competitions for employees, broadcasted excellent works of "Singing for the Motherland and Displaying Striving Style" on the Group's WeChat platform, and held the "Tangyun Cup" gymnastics competition in headquarter.



Organized badminton competitions for employees

- Participated in the 1st National Micro-film Festival of Employees and won 10 awards for micro-films and videos.



Authors of the micro-films *Spark in "Liaoyuan"* and *Red Relay* selected by CDT, as well as the micro-video *Dream Builder of a Great Nation*, attended the award ceremony

- Strengthened the construction of cultural venues such as staff bookstores and staff activity rooms, advocated that units at all levels should adapt to local conditions, and carry out artistic and sports activities for employees according to the nature of work and actual situation of the workplace.



Datang Zhangjiakou New Energy Business Division distributed the "Electronic Employee Bookstore Reading Card" to all employees



Scan to view excellent literary and artistic works by employees

Employee care

CDT adheres to the concept of humanistic care, enhances employee well-being, and cares for female employees. We implement employee assistance, attach importance to employee mental health, and are committed to creating a warm and harmonious working environment.



Vice Chairman of the National Committee of the Chinese People's Political Consultative Conference, Shen Yueyue, and his delegation visited Chinese and Cambodian workers at Cambodian Hydropower Development Co., Ltd.



Achievements

- 560 "Six Most" livelihood projects were implemented and completed throughout the year, solving the urgent and difficult problems faced by a group of employees
- The construction of the "Happiness Datang" was fully recognized and promoted by the All-China Federation of Trade Unions, with its work experience being widely adopted

On the first day of the Mid-Autumn Festival and National Day holiday, Secretary of Party Leadership Group and Chairman Zou Lei made a video call to express condolences to the officials and workers fighting on the front line of power supply and key project construction for the Asian Games



CDT held the first Honor Retirement Ceremony and Symposium for Retired Officials to reminisce about past glory, cherish retirement friendship, and discuss development plans together



The trade unions at all levels of the group had taken multiple measures to care for employees. The picture showed the collective wedding of employees held by Datang Yunnan Power Generation Co., Ltd.



The work experience of "Happiness Datang" was reported in the Workers' Daily

Occupational health management

CDT has firmly implemented the State Council's Healthy China Action Guidelines, seized the implementation of the "Six Most" livelihood projects, and focused on safeguarding the legitimate rights and interests of employees. We have improved the production and working conditions, strengthened employee living security, enriched employee cultural life, and built a platform for growth and development. We have also strengthened health management, built a solid occupational health defense line, regularly cared for the physical and mental health of employees, and painted a harmonious picture of company prosperity and employee happiness.

- Focused on the working environment and health status of employees in remote areas, supported Tibet Company to carry out the activity of "Guarding Health, Sending Medical Care", and invested RMB 100,000 to send urgently needed drugs and materials to employees working in the plateau.
- Wangtan Power Generation Company regularly invited experts from local hospital to deliver health lectures and consultations at the Company.
- Bikou Hydropower Plant held health lectures.
- The "Employee Health Station" of Datang Shandong Maintenance and Operation Company was officially put into use.
- Shantou New Energy Company launched the Spring Day Action to care for the health of its employees.



CDT's 2023 Highlights

- Invested RMB **174.03** million in occupational disease prevention and control
- Employee health record coverage rate reached to **100** %
- Representatives of employees at all levels of the organization system carried out special inspections on occupational health and safety management for employees, with more than **5,000** representatives participated



Advancing Together with Our Partners

Exchanges and cooperation

CDT has strengthened mutually beneficial cooperation with governments, companies, colleges and other partners, actively participated in industry forums and exhibitions, and achieved mutual benefit and win-win results. We have enhanced industry discourse power and influence, and worked together with partners to achieve a prosperous and sustainable future.



CDT's 2023 Highlights

Held cordial meetings with over

40

provincial (regional, municipal) government leaders

Discussed with old and new friends from

14

peer companies

Signed strategic cooperation agreements with more than

10

central SOEs, governments and universities, etc.

Signed cooperation agreement with the Government of Heilongjiang Province to promote investment in strategic emerging industries



Signed deepening strategic cooperation agreement with the Qinghai Provincial Government



Signed strategic cooperation framework agreement with Sinopec



Work exchange with Tsinghua University



CWEME held its first supplier liaison meeting, with attendance from 171 senior representatives from 55 leading companies in the energy and power related industries. 33 cooperation agreements were signed on site, with a total amount of RMB 1.2 billion.

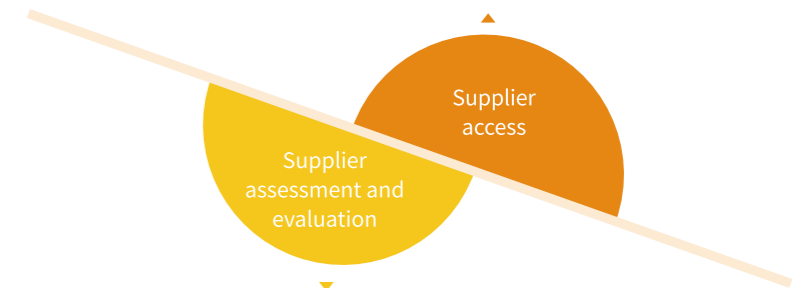
CDT Strengthens Supplier Management and Builds a Responsible Supply Chain

Supply chain management

CDT adheres to the principles of "openness, fairness, and justice" and the work principles of "Integrity and trustworthiness, centralized management, implementation at different levels, dynamic evaluation, and nurturing the superior and eliminating the inferior". Suppliers are categorized and managed according to these principles. We strengthen the supplier management of companies within the system and seriously punish unqualified suppliers in accordance with the *Supplier Management Regulations of China Datang Corporation Ltd.* and the *Material Management Provisions of China Datang Corporation Ltd.*

Accessed supplier must be a registered supplier with the necessary production and business licenses required by the nation, industry, or the Group with good reputation, and demonstrate a track record of good performance and after-sales service capabilities over the past three years. The supplier should not bear history of legal violations or major legal disputes in its business activities and should not have exhibited issues like non-performance or severe contract breaches after winning bids in the past three years.

The supplier must submit qualification materials and complete registration and network access on the designated e-commerce platform of the Group as required. The Group implements an access system for suppliers of key category procurement projects, which is divided into first and second levels according to the procurement managerial level.



Regularly organize relevant units to conduct dynamic comprehensive evaluations of supplier performance, following the principle of "who uses, who evaluates". Each procurement demand unit will conduct comprehensive evaluations of suppliers based on their participation in procurement and contract performance. The scores will be weighted and summarized for final review to determine the supplier's comprehensive evaluation level. The evaluation results will provide necessary references for subsequent procurement and contract terms.

Supply chain upgrade

CDT has deepened the upgrading of its supply chain, strengthened supervision and regulation, innovated and created efficient services. The supply chain has achieved effective improvement in regulatory "quality", significant increase in procurement "rate", stable growth in service "quantity", continuous extension of standard "surface", and rapid construction of digital "chain", providing strong support for the high-quality development of the Group.



Centralized procurement

- Centralized procurement covered the main equipment of wind, solar and new energy storage, and all partners were high-quality suppliers.
- The annual bidding achieved a savings rate of 15.53% and 25.30% compared to the first and second level bidding in the investment plan.



Procurement supervision

- Published 12 supervision notices, implemented rectification and accountability, formulated "Eight Prohibitions", and established a bottom line of discipline.
- Increased the public disclosure of procurement results, smoothed supervision channels, significantly reduced procurement objections and complaints, with a year-on-year reduction in the first level by 47%.



Procurement digitization

- Established a procurement warning indicator system, which was embed into the information system, thus improved the platform's warning accuracy from 59% to 93%.
- Optimized the functionality of e-commerce platforms and promoted the online operation of big data assisted bid evaluation and procurement benchmarking assessment.
- The construction of smart warehousing achieved initial results, and technologies such as scanning codes for inbound and outbound storage and sorting robots were applied for the first time in the Group's system.



Supply chain collaboration

- In response to the SASAC's "Joint Chain Action" for central SOEs, effectively promoted the upgrading of the Group's supply chain and laid a foundation for the transformation from traditional procurement management to supply chain management.
- Established an information sharing mechanism for upstream and downstream partners to assist in resource development cooperation for projects such as the Southeast Tibet Base.
- Drew a supply chain map for wind hosts and solar power modules, clarified measures to stabilize and strengthen the supply chain, and prevent procurement risks.



Building Overseas Communities

CDT focuses on the "the Belt and Road" initiative and strive to build a world-class energy supplier.

Market exploration

CDT has integrated resources to explore overseas markets. It continues to deepen the efforts in Southeast Asia, expands exploration of the energy markets in Central Asia, the Middle East and Central and Eastern Europe, and carried out overseas investment, technical services, international trade and other businesses in the countries jointly building the "Belt and Road", covering 10 countries and regions, including Myanmar, Cambodia, Laos, Indonesia. The overseas market development has been fast and steady.



Overseas risk prevention of CDT

Security risk prevention	Overseas integrity and compliance risk prevention	Macro risk judgment
<p>CDT has paid attention to the security situation around the power plant, guided the power plant to improve relevant plans and emergency plans, and ensured the safety of projects and personnel. We have organized daily security risk assessments, investigations, prevention training, and emergency drills for overseas institutions to ensure the safety of overseas assets and personnel.</p>	<p>CDT has organized relevant departments and foreign-related units to carry out integrity operation and compliance work overseas, effectively prevent and resolve compliance business risks.</p>	<p>CDT has hired external consulting firms to conduct country risk research on countries that the Group focuses on, and improved the <i>Country Investment Guidelines</i>. We have properly handled existing project risks, and prevented incremental project risks.</p>

CDT's first "Belt and Road" Green Land Project - Meulaboh Project in Indonesia achieved "Double Operation"

Pilot Practice of CDT

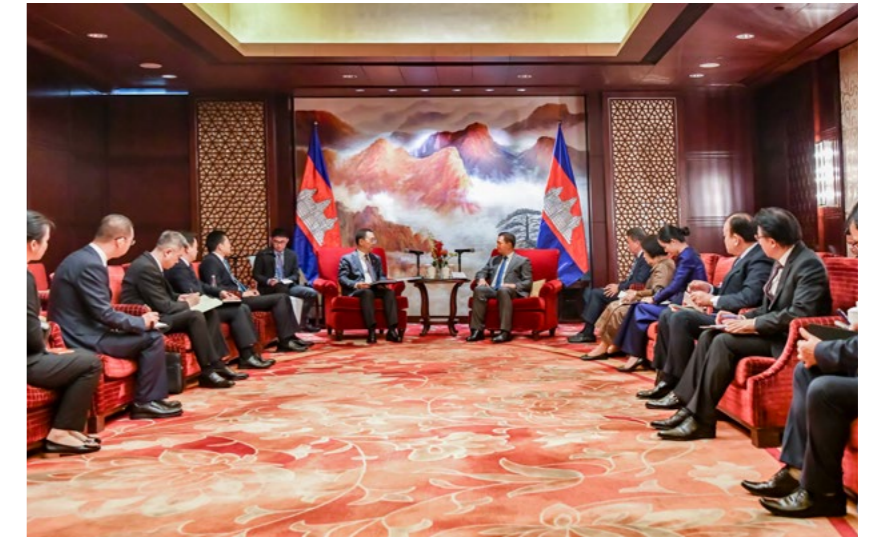
On September 29, 2023, the successful 96-hour full load test run of Unit 4 of Meulaboh Project in Indonesia, signified the two units of the first "Belt and Road" green land project of the Group put into operation. On December 22, the Project obtained qualification for commercial operation.

The Meulaboh Project in Indonesia is located in Aceh Province, northwest Indonesia, with an installed capacity of 2 × 225MW. It is an important infrastructure as a power grid supporting station in North Sumatra, ensuring the stability of the local power grid and power supply, promoting industrial development, and improving local livelihood. On the 10th anniversary of the "Belt and Road" initiative, the completion and commissioning of the Project is a vivid practice of the Group's high-quality joint construction of the "Belt and Road", which will contribute to local taxes in Aceh Province, Indonesia, promote employment of local residents, help the economic and social sustainable development of Aceh Province, Indonesia, and promote friendship between China and Indonesia.



Overseas exchanges

CDT has deepened overseas exchanges and cooperation. We have targeted key national markets and partners, expanded strategic cooperation networks, and further expanded the "Circle of Friends" for international energy cooperation.



Chairman Zou Lei meets Prime Minister Hun Manet of the Kingdom of Cambodia



CDT signed HOT Agreement of PPA of 300 MW photovoltaic project with the Uzbekistan Ministry of Energy in Beijing



Chairman Zou Lei meets Chairman Thongloun Sisoulith, General Secretary of the Central Committee of the Lao People's Revolutionary Party



Chairman Zou Lei holds talks with Dr. Angela Wilkinson, Secretary General and CEO of the World Energy Council

CDT has actively participated in **regional economic and trade cooperation organizations and business industry associations**, joined in the formulation of international rules and industry standards, and enhanced the international discourse power and rule making power of central SOEs. Major leaders have successively put forward CDT's solution on hot issues such as green, low-carbon and sustainable development in the post epidemic era at the **APEC CEO Summit**, the **AESIEAP CEO Conference**, the **"Belt and Road" Energy Partnership Forum**, and the **Lushan Conference for Global Business Leaders**, highlighting the mission of central SOEs to jointly build a clean and beautiful world.

CDT has actively discussed with the **World Energy Council** to establish a long-term cooperative relationship. We have planned to establish diverse discourse channels and expand international discourse space in the global energy industry for central SOEs in the energy and power industries.

CDT has continued strategic cooperation with world-class enterprises such as **Electricite De France, GE Vernova, Hitachi Energy, ThyssenKrupp and Siemens Energy**, and regularly carried out business activities such as technical exchanges, to jointly seek opportunities for the development of domestic and foreign energy markets.

The leaders of the Group have led teams to conduct research and negotiations with **world-class energy enterprises in multiple countries**, and carry out exchanges and discussions focusing on topics such as green and low-carbon transformation development, technology cooperation of strategic emerging industries.

CDT has sorted out the list of **Fortune Global 500 energy companies, pan energy companies, large companies with business intersections, overseas project cooperative companies, and regulatory agencies**, to study and formulate cooperation promotion plans.

Local operation

CDT actively fulfills its overseas social responsibilities, fully promotes localized operations, and creates employment opportunities for local people while providing clean energy for the economic and social development of the host country. By 2023, the localization rate of the Cambodian Hydropower Project and power transmission project increased from 26% to 49%, and the localization rate of the Meulaboh Project in Indonesia exceeded 80%.



PT Meulaboh Power Generation in Indonesia conducted skills training for local employees

The localization rate of the Cambodian Hydropower Development Project increased from

26

%

to

49

%



Localization rate of the Meulaboh Project in Indonesia exceeded

80

%



Dream Building in Ten Years , Achievements Along the Way

Since the "Belt and Road" initiative was put forward 10 years ago, CDT has adhered to the concept of "Multi-cooperation, Innovation and Investment for the Future" and actively engaged in the construction of the "Belt and Road". At present, the total amount of overseas assets of CDT is about RMB 27.5 billion, with more than 1,600 Chinese and foreign employees. Seven overseas projects have been put into operation, including one power grid project, two hydropower projects, and four thermal power projects. The total capacity of the generator units is 1.502 million kW, with an approved capacity of 1.212 million kW. There are also three substations and 294 kilometers of transmission lines in the power grid project, thus achieving a win-win cooperation and high-quality economic development.

Suppliers of Clean Energy

The Dapein I Hydropower Project in Myanmar is a model project for energy and power cooperation between China and Myanmar signed in December 2009 under the witness of the Vice President Xi Jinping, which is also the first overseas investment project of the Group. The Project won the "Best Practice Case of International Energy Cooperation" at the Second "Belt and Road" Energy Ministerial Conference held in October 2021.

Since its operation, the Khétt Purthisat Substation has generated over 2.7 billion kWh of clean electricity from the Cambodia Stung Atay Hydropower Plant. CDT has transmitted over 21.4 billion kWh of electricity to the Cambodian Power Grid, accounting for 30% of Cambodia's total electricity consumption.



Since the arrival of CDT in Cambodia, it is no longer difficult for us to use electricity as before. ”

—Mey Vila, Cambodian villager

Guardian of the Friendly Environment

At the Cambodia Stung Atay Hydropower Plant, CDT took the initiative to convert a 6-kilometer open channel into an underground culvert, which effectively protected the local primitive forest ecology and maintained local ecological balance.

Kendari Power Plant has launched multiple long-term ecological protection plans in the nearby waters, including "Mangrove Planting," "Coral Reef Restoration," and "Cage Aquaculture in the Sea", to purify seawater, prevent wind and waves, and guide local residents to establish sustainable development concepts such as replacing violent fishing with aquaculture.

Hainan International Carbon Emissions Exchange, jointly established by CDT in October 2023, is the first intersection and connection point between the domestic and foreign carbon markets with internationalization as the main feature. It will make positive contributions in exploring the introduction of foreign investors and interconnection with the international carbon market, enhancing high-level opening up and international cooperation, and implementing the "Dual Carbon" goals.

Guardian of People's Livelihood and Well-being

CDT actively integrates into the construction of the "Belt and Road", serves and feeds back the local economic and social development through project investment and social welfare undertakings. We have undertaken all the four phases of power assistance project in the Democratic Republic of Sao Tome and Principe in Africa, and made important contributions to the improvement of local people's livelihood. We have implemented the localized talent policy, strengthened talent training, enhanced localized management, and promoted a new chapter of the "Belt and Road" with the local people. CDT won the "Overseas Integrity Award" of the 2023 "Responsibility Golden Bull" at "the 6th Beijing Responsibility Exhibition" initiated by the China Social Responsibility 100 Forum.



When I went on blind date, I wore my work uniform. My mother-in-law heard that I am an employee of CDT and permitted her daughter to marry me without even asking for a dowry. Right now, I earn \$500 a month and the CDT also provides daily necessities such as rice and peanut oil during holidays. My neighbors are green with envy. ”

—Zeng Yongjie, Cambodian employee

Disseminator of Cultural Integration

Every year, Chinese employees of CDT will celebrate the Water-Sprinkling Festival and Eid al Fitr with their employees in the host country, while foreign employees will celebrate the Spring Festival, Dragon Boat Festival and Mid-Autumn Festival with Chinese employees. Over the years, foreign employees have learned how to stick Spring Festival couplets, make dumplings, and make moon cakes. Even the foreign chefs in the canteen can prepare several Chinese dishes. Many foreign employees have chosen Chinese names and studied Chinese history. Nei Miusan from the Dapein I Hydropower Project in Myanmar chose a Chinese name "Dianxing" for himself because he liked the character Dian Wei in the *Romance of the Three Kingdoms*... The cultural integration has truly promoted the people-to-people contacts.



My great-grandfather is Chinese. He came to Myanmar when he was young. My grandfather was born in Myanmar, but we have always maintained some Chinese lifestyle and cultural traditions. ”

—Ao Ming, Myanmar employee



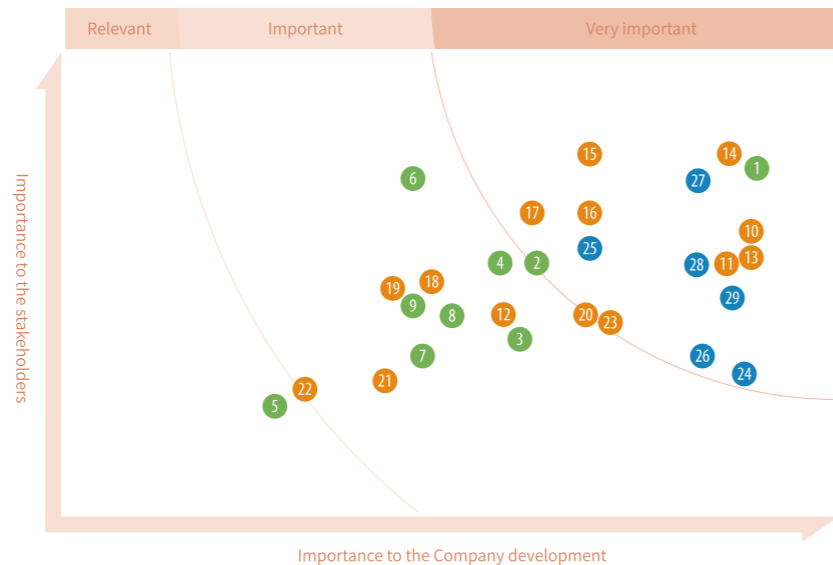
Sustainable Development Management

Sustainable Development Strategy

CDT actively builds an ESG governance structure and system in line with the Company's current situation, and establishes a four-tier ESG governance system of "Decision-making Level – Overall-planning Level - Coordination Level - Execution Level". Each level of department performs its duties and assumes its own responsibilities to ensure ESG work direction is clear and can be implemented. We incorporate ESG work into the daily work management of the Shareholders' Meeting, Board of Directors and its specialized committees, the Board of Supervisors and the Management, and promote the integration of ESG concepts into the entire process of the Company's development strategies and daily operations. At the same time, by carrying out ESG special training, incorporating ESG into the Company's key performance indicator assessment, and participating in external ESG excellent selections, etc., we can improve our own ESG construction capabilities, identify and judge possible ESG opportunities and formulate targeted coping strategies. Accordingly, we are able to drive long-term development, and continuously expand the prospect value of sustainable development.

Management of Substantive Issues

CDT has actively carried out the identification and management of substantive issues, focused on the concerns and expectations of internal and external stakeholders, and continued to improve the pertinence and responsiveness of information disclosure. At the same time, we will build and implement relevant systems, set goals and performance appraisal systems according to the results of the analysis of the importance of issues, to ensure that the ESG management system has rules to comply and follow.



Environment

1. Environmental management
2. Clean energy
3. Energy and resource conservation
4. Pollution prevention and control
5. Biodiversity
6. Environment protection services
7. Climate change
8. Green procurement
9. Green office

Social

10. Technological innovation
11. Digital transformation
12. Intellectual property protection
13. Safe production
14. Product quality
15. High quality services
16. Rural revitalization
17. Public welfare and charity
18. Supply chain management
19. Cooperation and exchange
20. Employee rights
21. Development and training
22. Employee care
23. Occupational health and safety

Governance

24. Party building
25. Corporate governance
26. Board building
27. Compliance operation
28. Anti-corruption
29. Deepening reform

Communication with Stakeholders

CDT has attached great importance to communication with internal and external stakeholders, paid attention to their expectations and demands, and listened to their voices through diverse communication channels and methods. We have established official

website, WeChat official account and other communication platforms, to consciously accept public supervision. As of the end of 2023, CDT has publicly released social responsibility/sustainable development reports for 17 consecutive years.

Stakeholders	Expectations and demands	Communication methods	Responsibility practice
Government	<ul style="list-style-type: none"> Comply with laws and regulations Ensure energy security Pay taxes in full according to law Optimize the energy structure Drive social employment 	<ul style="list-style-type: none"> High level conference Communication and exchange meeting Information submission Participate the meeting Company Announcement 	<ul style="list-style-type: none"> Provide job opportunities Proactively pay taxes Social wealth creation Drive the development of local related industries Steady operation and development
Shareholder	<ul style="list-style-type: none"> Legal compliance Steady operation Risks control 	<ul style="list-style-type: none"> Company report Periodic report 	<ul style="list-style-type: none"> Performance growth Information disclosure Protection of investor rights
Partner	<ul style="list-style-type: none"> Fair and transparent Integrity in performance Win-win cooperation 	<ul style="list-style-type: none"> Industry exchange Strategic cooperation Contract and agreement 	<ul style="list-style-type: none"> Integrity level Contract performance rate Responsible procurement
Employee	<ul style="list-style-type: none"> Protecting employee rights and interests Caring for the health and safety of employees Support employee development Provide humanistic care 	<ul style="list-style-type: none"> Workers' Congress Enterprise petition Publicizing factory affairs 	<ul style="list-style-type: none"> Provide labor protection equipment and facilities Smooth career development channels Provide competitive compensation Employee care
Customer	<ul style="list-style-type: none"> Keeping promises Safe and stable supply of electricity and heating High quality and affordable products and services Smooth communication channels 	<ul style="list-style-type: none"> Contract and agreement Electricity, heating and other products Related technical services Business communication meeting Service hotline Business visits 	<ul style="list-style-type: none"> Contract performance Provide high-quality products and services Improve service system
Community	<ul style="list-style-type: none"> Participate in community building Support public welfare undertakings Maintain public safety 	<ul style="list-style-type: none"> Public welfare activities Public Open Day Community public services Panels 	<ul style="list-style-type: none"> Participate in community building Social welfare actions
NGOs	<ul style="list-style-type: none"> Communication and interaction Contribute to the associations and society Promote sustainable development 	<ul style="list-style-type: none"> Meetings and events Work suggestions 	<ul style="list-style-type: none"> Social welfare actions Provide financial support Provide work suggestions
Environment	<ul style="list-style-type: none"> Responding to climate change Energy conservation and emission reduction Biodiversity conservation Environmental protection and public welfare 	<ul style="list-style-type: none"> Environmental impact assessment Environmental information disclosure Regularly report energy conservation and emission reduction information to regulatory authorities Environmental protection activities 	<ul style="list-style-type: none"> Green environment management Green products Green engineering
Media/Medium	<ul style="list-style-type: none"> Information disclosure and transparency 	<ul style="list-style-type: none"> Information disclosure and transparency Company website Social responsibility report Newspapers and magazines Accept interviews and press conferences 	<ul style="list-style-type: none"> Set up a spokesperson Timely disclosure of information Themed planning

Prospect

As the 75th anniversary of the founding of the People's Republic of China, 2024 is a crucial year to realize the "14th Five Year Plan", and also an important year for the high-quality development of CDT's "Second Startup". We will always adhere to the guidance of the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, implement the spirit of the 20th National Congress of the Communist Party of China and the spirit of the Central Economic Work Conference, and grasp the opportunity period of high quality development, the window period of transformation development, the critical period of overcoming difficulties, and the cultivation period of world-class enterprises. We will do a better job in the coordination of energy supply, quality and efficiency enhancement, high-quality development and high-level safety, as well as the cultivation of core competitiveness and construction of Happiness Datang. At the same time, we will firmly play a good role in improving the supply ability, enhancing and stabilizing growth of quality and efficiency, developing new strategic industries, optimizing and upgrading coal power, and expanding the capacity and efficiency of the coal chemical industry. In addition, we will strive to achieve effective improvement in quality and reasonable growth in quantity to open a new era of embarking on a new journey of high-quality development, demonstrate our responsibility and make contributions as a central SOE in the great cause of promoting the construction of a powerful country and national rejuvenation through the Chinese modernization.

Key Performance

Indicator		Unit	2021	2022	2023
Economic Performance	Total assets	RMB 100 million	8301.64	8494	8686.43
	Revenue	RMB 100 million	2235.65	2526.74	2564.40
	Economic contract performance rate	%	100	100	100
	Total installed capacity	10 MW	16398.18	17015.46	18074.22
	Power generation volume	100 GWh	5920.91	5884.62	5967
	Heat supply	10,000 GJ	30129.93	30896.35	31998
	Technological investment	RMB 100 million	53.94	76.23	77.95
	Accumulated number of patents	Patent	10482	11637	12503
	Accumulated number of invention patents	Patent	995	1150	1351
	Number of new authorized patents	Patent	1050	1155	866
Number of new authorized invention patents	Patent	140	155	201	
Number of promoted technological innovations	Innovations	83	95	120	
Number of new standards above industry level	Standards	35	27	24	
Environmental Performance	Investment in environmental protection	RMB 100 million	13.72	15.88	15.89
	Proportion of clean energy	%	35.35	42	46.24
	Coal consumption for power supply	gce/kWh	295.92	294.93	294.17
	Total SO ₂ emission volume	10,000 tons	5.18	3.01	3.03
	SO ₂ emission reduction volume	10,000 tons	-0.24	2.17	-0.02
	YoY decrease of SO ₂ emission volume	%	-4.86	41.8	-0.66
	SO ₂ emission rate	g/kWh	0.11	0.095	0.085
	Total NO _x emission volume	10,000 tons	7.39	5.42	5.51
	NO _x emission reduction volume	10,000 tons	-0.39	1.97	-0.09
	YoY decrease of NO _x emission volume	%	-5.57	6.55	-1.66

Indicator		Unit	2021	2022	2023
Environmental Performance	NO _x emission rate	g/kWh	0.16	0.145	0.139
	Total fly ash emission volume	10,000 tons	0.356	0.444	0.453
	Fly ash emission rate	g/kWh	0.014	0.013	0.0128
	Total wastewater discharge volume	10,000 tons	1012.26	1080.09	654.36
	Wastewater discharge rate	kg/kWh	42	39	35
	Number of negative environmental events	Event	0	0	0
	Social Performance	Number of on-site employees	Person	93874	91272
Number of female employees		Person	19596	18599	17590
Number of ethnic minorities employees		Person	6235	6207	6108
Overall labor productivity		RMB 10,000/ person	49.62	96.83	107.76
Trade union membership rate		%	100	100	100
Social insurance coverage		%	100	100	100
Total fees paid for social insurance		RMB 10,000	487360.37	491893.05	492565.38
Number of trained employees		Person-time	—	110000	2977915
Employee training coverage		%	—	99.15	99.45
Investment on employee training		RMB 100 million	—	1.39	2.9
Investment on safe production		RMB 100 million	—	—	26.18
Number of employees in safety training		Person-time	296827	796734	808925
Major personal accident and above		Time	1	0	0
Major equipment accident and above		Time	0	0	0
General personal accident		Time	5	3	1
General equipment accident	Time	0	0	0	
Total amount of social donation	RMB 10,000	9193	10768	12105	

Indicator Index

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Responsibility Special Report	Energy Supply Guarantee, Overcoming Challenges and Shouldering Responsibilities	102-11	P3.1
Value Prioritization to Stimulate Indigenous Motivation	Upholding Safety Redlines	203-2,416	S3.4-3.10
	Strengthening Reform and Advancing Initiatives	-	V1.1-1.4
	Focusing on Improving Efficiency and Effectiveness	102-11	V1.1-1.4
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Building a Beautiful China by Going Green	Committing to Green Development	303-1,306-1	E1.1,E1.7
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Win-win Cooperation to Create a Better Life	Facilitating Rural Revitalization	203,413-1	V1.2、V3.3-3.7
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Rating Report

Entrusted by China Datang Corporation Ltd., Chinese Expert Committee on CSR Report Rating selected experts to form a rating group to rate the CDT Sustainable Development Report 2023 (hereinafter referred to as the "Report").

I . Rating Criteria

Guidelines on China's Corporate Social Responsibility Reports (CASS-CSR 4.0) by Chinese Academy of Social Sciences, and *Rating Standards on China's Corporate CSR Reports (2020)* by the Chinese Expert Committee on CSR Report Rating.

II . Rating Process

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

III . Rating Results

Process (★★★★☆)

The company established a social responsibility working group, with the Chairman serving as the group leaders. Its Party Building Department takes the lead in compiling the Report. All functional departments and secondary units are responsible for providing materials and participating in preparation and review. The Report is submitted to the Party Committee and Board of Directors for final approval. The Report is positioned as an important tool for compliance with regulatory requirements, improvement of responsibility management, strengthening of communication with stakeholders, and promotion of corporate image. This indicates a clear functional value positioning. The material issues are identified subject to domestic and foreign CSR standards, benchmarking analysis in the industry, and stakeholders' opinions. The company also actively propels its subordinates to compile the Report, enhances communication of responsibilities and plans to present it in Chinese and English electronic form, printed form and long-image form. This indicates a leading performance in process.

Substantive (★★★★☆)

The Report discloses key issues in the industry, such as implementing macro policies, ensuring power supply, safe production, developing green power, compiling environmental assessment system for projects, saving resources and energy, developing circular economy, reducing "three wastes" emissions, and environmental governance of plants and surroundings. This indicates an excellent performance in materiality.

Integrity (★★★★☆)

The majority of the Report discloses 85% of the industry's core indicators from the perspectives of "Value Prioritization to Stimulate Indigenous Motivation", "Building a Beautiful China by Going Green", "Innovation for Success to Pursue Excellent Development" and "Win-win Cooperation to Create a Better Life". This indicates a leading performance in integrity.

Balance (★★★★☆)

The Report discloses negative data such as "negative environmental events", "major personal accidents and above", "major equipment accidents and above", "general personal accidents", "general equipment accidents", etc. It also introduces the problems and rectifications of safety hazards. This indicates a leading performance in balance.

Comparability (★★★★☆)

The Report discloses the comparative data of 42 key indicators for three consecutive years, including "revenue", "total installed capacity", "proportion of clean energy", "number of female employees", "investment in safety production", "total amount of social donation", among others. It also discloses the horizontal comparison of the data such as "ranking 396th in the Fortune Global 500 in 2023". This indicates an excellent performance in comparability.

Readability (★★★★★)

The Report is organized in an issue-based structure, systematically specifying the Company's actions on responsibility and relevant achievements in energy supply, safety production, green development, technological innovation, charity and overseas operations, with all-around responses to stakeholders' requests. The chapters adopted the columns of "Opportunities and challenges-Calling of the nation-CDT action-Value creation in 2023-SDGs contributions", providing an outline for readers to quickly grasp the key points. On the cover, inner pages, and chapter pages, the Report mostly uses high-resolution cross-page images, which integrate the primary business elements of the company, thereby highlighting its industrial characteristics. The Report features an attractive design, exquisite pictures, and colorful set of elements, making the report more pleasant to read. All of these indicate an excellent performance in readability.

Innovativeness (★★★★☆)

The Report sets up special topics of "Themed Education, Genuine Learning and Practical Work to Promote Development" and "Energy Supply Guarantee, Overcoming Challenges and Shouldering Responsibilities", focusing on the leading role of party building and energy supply. It is considered a way of responding to national major principles and policies as well as highlighting its corporate responsibility. The column "If the rare animals could speak: 2023" in humanized expression brings interest to the Report. The key cases and data have been presented collectively through columns "Pilot Practice of CDT" and "CDT's 2023 Highlights", which is easy for readers to read and understand. This indicates a leading performance in innovativeness.

Comprehensive rating (★★★★★)

According to the evaluation of the rating group, the CDT Sustainable Development Report 2023 is a five-star report, which is an excellent corporate social responsibility report.



The CDT Sustainable Development Report received a five-star rating for the second consecutive year

IV. Suggestions:

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

Signature

Vice Chairman of the Chinese Expert Committee on CSR Report Rating

Signature

Rating Group Leader

Signature

Rating Group Expert



Scan the QR code to view the rating files

Date: July 30, 2024

Feedback

Thank you for reading the *CDT Sustainable Development Report 2022*. Please give us your opinions and suggestions here for us to improve our future reports.

1. What's your overall impression of the Report?

Good Poor Average

2. Do you think the Report covers all aspects of social responsibility performance of CDT?

Good Poor Average

3. Can you easily find the topics you are interested in the Report?

Good Poor Average

4. Do you think the layout of the Report is reader-friendly?

Good Poor Average

5. Which part of the Report do you like the most?

6. What other information do you expect to know in the Report?

7. Is there any suggestion on our CSR performance and future reports?

Which type of stakeholder do you belong to?

- Government/regulator Investor Community resident Customer Financial institution
 Research institution/university Supplier Media Social organization Others

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