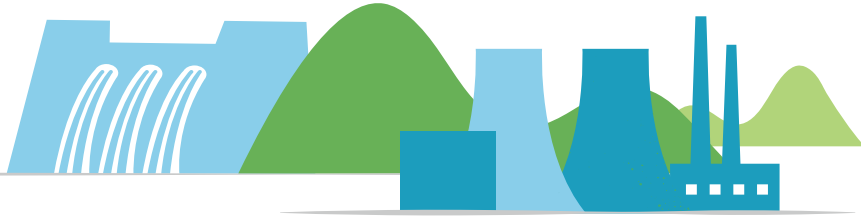


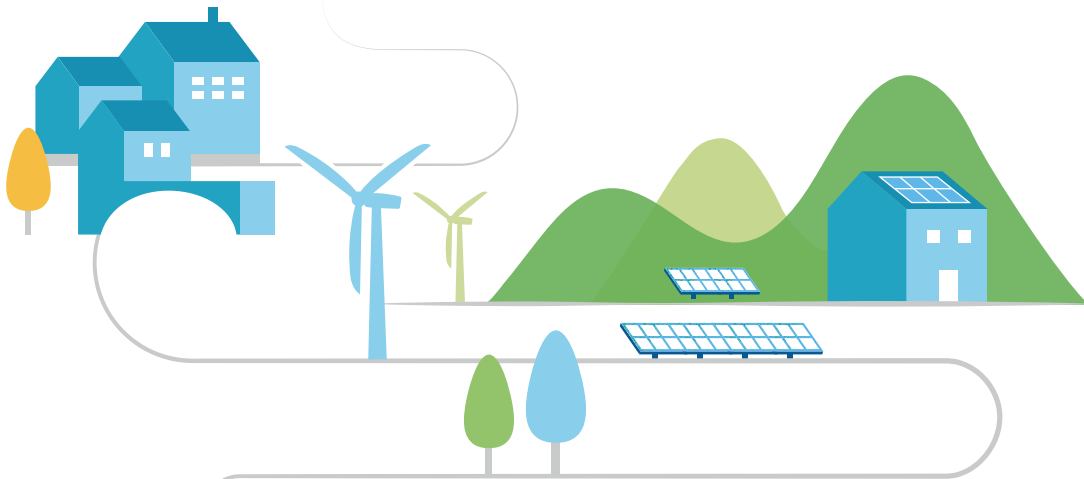


China Datang Corporation Ltd.



2020

Social Responsibility Report





To build CDT into a world-class energy supplier featured by green,
low-carbon, multi-energy integration, efficiency, synergy and digital intelligence

Datang Saihanba Wind Farm

Put into operation in 2017 with an installed capacity of 1.51 GW
The world's largest wind farm invested, controlled and operated by the
same entity in the same region
In 2020, the wind farm generated 3.944 TWh of electric power



Inner Mongolia Tuoketuo Power Plant

The largest in-service thermal power plant in the world with a total installed capacity of 6.72 GW

A key project in China Western Development Program and West-East Electricity Transmission Project

Annual volume of power generation accounts for approximately 25% of the total power consumption in Beijing

12 generating units realize ultra-low emission in stable operation

In 2020, the power plant generated 30.672 TWh of electric power



Datang Longtan Hydropower Station

Owning several world records, including the highest roller-compacted concrete gravity dam and the largest underground power station

Owning the 4.9 GW hydropower station, the highest installed capacity among CDT hydropower stations

Playing an irreplaceable role in the process of water regulation, reducing saltwater and supplying fresh water in the Pearl River Basin

In 2020, the station generated 14.122 TWh of electric power



Datang Guoxin Binhai Offshore Wind Power Generation Co., Ltd.

The first offshore wind power project independently developed and
constructed by CDT

It has a total installed capacity of 300 MW

In 2020, it generated 885 GWh of electric power



Datang Dongying Power Generation Co., Ltd.

In 2020, 2x1000MW ultra-supercritical coal-fired generator units of the first phase of the project were put into use

The project was built with several innovative technologies that were used for the first time in China and even the world

The No. 1 unit is the world's first six-cylinder six-row 1000MW generator unit

In 2020, it generated 810 GWh of electric power



Datang Nanjing Power Plant

The first state-owned power plant in China with 110 years of history, the longest for CDT coal-fired units

It has two 660 MW ultra-supercritical coal-fired units

It is the first ultra-low emission ecological renovation project of CDT and one of the first in Jiangsu Province

It is the first coal-fired power plant in China to complete "smart power plant" construction

In 2020, it produced 6.725 TWh of electric power

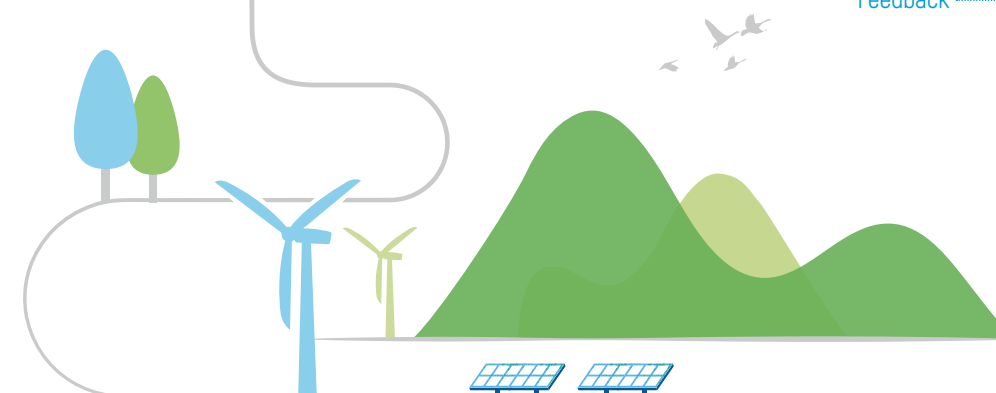
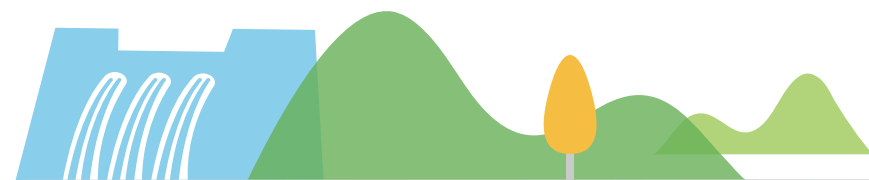


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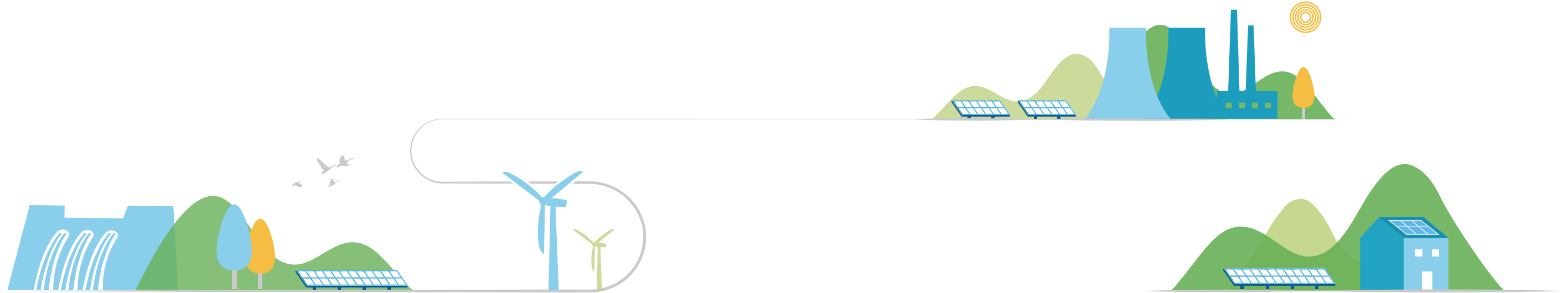


Message from the Leadership	02
Overview	04
About CDT	04
Vision	06
Company Leaders	07
Management	08
Stable Operation	08
CSR Management	10
Features	14
Feature I: Contributing to the Decisive Victory Against Poverty	14
Feature II: CDT's Contributions to the Fight Against COVID-19	20

Practices	26	Innovation · Development Momentum	48
Value · High-quality Development	26	Deepening Innovation in Management	50
Optimizing the Energy Mix	28	Promoting Technological Innovation	51
Expanding the Power Market	31	Openness · Win-win Cooperation	54
Safety · Solid Foundation for Development	32	Contributing to the Belt and Road Initiative	56
Enhancing Safety Management	34	Enhancing Exchanges and Cooperation	58
Ensuring Equipment Safety	36	Serving Local Development	59
Nurturing a Safety Culture	39	Sharing · A Better Life	60
Eco-Friendliness · Green Homeland	40	Caring for Employee Growth	62
Promoting Energy Saving and Emission Reduction	42	Implementing Responsible Procurement	67
Contributing to Carbon Neutrality	44	Building Harmonious Communities	68
Protecting Biodiversity	46	Performance	70
		CSR Performance	70
		Outlook 2021	71
		Expert Opinion	72
		Content Index	73
		Preparation Description	74
		Feedback	75



Message from the Leadership



The year 2020 was such an extraordinary year. Facing the sudden outbreak of COVID-19 as well as the complicated and grim business environment at home and abroad, we resolutely fulfilled our responsibility and mission as a central SOE, and strove to ensure "stability on the six fronts" and "security in the six areas." We continued to pursue progress while ensuring stability, implemented the new development philosophy, and worked hard to fulfill the targets and tasks for reform and development on the premise of effective COVID-19 response. We made progress in the "three tough battles" of preventing financial risks, reducing poverty and tackling pollution, seized opportunities while responding to challenges, and acted proactively to surmount difficulties. We achieved the "double zero" goal - zero infections and zero suspected cases - for COVID-19 containment, maintained the safe, stable, and reliable supply of electricity and heat, and kept our operations stable for more improvement, thus achieving positive results in all aspects.

We resolutely fight COVID-19 to ensure safe supply of electricity and heat. Putting the people's lives and health first, we ensure that regular coronavirus control and emergency response are implemented down to every detail, so as to guarantee normal production and operation. We fully support the epidemic control and

economic recovery of Hubei and other places and have successfully completed two batches of tasks at the concentrated observation points for inbound flights to Beijing. We strengthen accountability for work safety, and carry out special rectification to ensure the safe and stable supply of electricity and heat.

We continue to deepen the reform and aspire to be the "stabilizer" and the "ballast stone" of the national economy with good business performance. To strengthen, expand, and increase the returns on state capital and enhance the strength, quality, and size of SOEs is our mission. While deepening the reform, we focus on priorities, address inadequacies, shore up points of weakness, and take targeted measures. We continue to implement the *Three-year Action Plan for the SOE reform* to modernize the management system and management capabilities, and create new drivers for high-quality development. Targeting key performance indicators, we make every effort to increase revenue and create benefits. In 2020, bucking the trend of decline in global trade, we achieved growth in both operating income and total profit.

We push forward the adjustment of the power structure for green and low-carbon development. The new energy

security strategy has been further implemented to develop new energy sources, such as wind power and photovoltaic. In 2020, new energy projects with a total installed capacity of 8.2 GW were put into production, among which a total installed capacity of 5.46 GW were under construction. Both figures hit record highs. By far, CDT's total installed electricity generating capacity has reached 159 GW, with the contribution of clean energy reaching the highest level in history. In addition, we vigorously promote innovation-driven development. In 2020, two six-cylinder six-row 1000MW generating units were put into operation in Dongying, Shandong Province, and the world's tallest roller-compacted-concrete (RCC) double-curvature arch dam was built at the Wanjiakouzi Hydropower Plant in Yunnan Province.

We fight the three tough battles with continuous efforts for further progress. In response to the major policies and plans made by the CPC Central Committee on eradicating poverty across China, we have successfully completed all key tasks in this regard. All of the 339 targeted villages have been lifted out of poverty. For example, with our support, all impoverished people in Chengcheng County, Shaanxi Province, and in Dahua County, Guangxi Zhuang Autonomous Region, get rid of poverty. All members of the Lisu people in Yunnan, an ethnic minority inhabiting

mountainous regions of Yunnan Province, have emerged from poverty, too. To strengthen environmental management, we have increased the proportion of ultra-low emission generating units to 98.8% of all coal-fired units, and completed the *Three-Year Task of Reducing Energy Consumption*. We coordinate development and security by strengthening risk management in areas such as debt management, overseas business, investment, and legal compliance.

Standing at a critical juncture where the timeframes of the two centenary goals converge, CDT will continue to pursue progress while ensuring stability, apply the new development philosophy in the new development stage, and integrate into the new development paradigm. With the support of more stable operations, better services, and higher-quality development, we will strive to become a green, low-carbon, intelligent, and efficiently coordinated world-class energy supplier based on a multi-energy complementary layout, contributing much more to the sustainable and healthy development of the national economy.

Zou Lei

Chairman, China Datang Corporation

Overview

About CDT

RMB **796.563** billion
Total assets

RMB **192.706** billion
Total operating income

RMB **13.869** billion
Total profit

158.5972 GW
Total installed capacity

Established on December 29, 2002, China Datang Corporation Ltd. (CDT) is an extra-large state-owned power generation enterprise group in China with a registered capital of RMB 37 billion. China Datang Corporation Ltd. has six major business segments, including electricity, coal, finance, overseas business, coal chemical and energy services. As of the end of 2020, CDT's total assets had reached RMB 796.563 billion with five listed companies. Its assets distribute in 31 provinces, autonomous regions and municipalities directly under the Central Government and the Hong Kong Special Administrative Region, as well as some foreign countries and regions such as Myanmar, Cambodia, Indonesia, etc. CDT has about 100,000 employees and a total installed power generation capacity of 158.5972 GW. Since 2010, CDT has been listed as a Fortune Global 500 Company for 11 consecutive years. Since 2012, it has been rated as an A-level enterprise in the management assessment of central enterprises by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) for 8 consecutive years.

CDT owns Inner Mongolia Datang International Tuoketuo Power Generation Company, the world's largest operating thermal power plant; Datang Saihanba Wind Farm, the world's largest operating wind farm invested and operated by the same entity within the same area; Datang Longtan Hydropower Station, a large hydropower enterprise with multiple world records; and China National Water Resources & Electric Power Materials & Equipment Group Co., Ltd. with a nationwide logistics network.

CDT has more than 400 affiliated companies, of which 15 power companies located around Beijing supply two-thirds of the electricity the capital needs, and 56 thermal power plants supply heat to more than 650 million m² of residential buildings in ten provinces, regions and municipalities in North China.



Structure of Power Generation Assets

Unit: MW

Region	Total installed capacity	Thermal power	Hydropower	Wind Power	Photovoltaic
Total	158,597.2	103,483.4	27,057.3	23,764.4	4,292.1
Beijing	1,434.6	1,380.0	--	49.5	5.1
Tianjin	1,210.0	1,200.0	--	--	10.0
Hebei	10,928.4	9,530.0	38.5	1,235.0	124.9
Shanxi	8,989.3	7,205.0	--	1,614.3	170.0
Inner Mongolia	10,970.3	6,720.0	90.0	3,960.3	200.0
Shandong	7,717.8	5,625.0	--	2,037.0	55.8
Liaoning	3,544.2	2,000.0	--	1,500.2	44.0
Jilin	4,708.1	4,060.0	--	648.1	--
Heilongjiang	5,331.5	4,450.0	33.0	848.5	--
Shanghai	236.2	--	--	204.2	32.0
Jiangsu	7,381.7	6,821.6	--	510.9	49.3
Zhejiang	4,101.0	3,544.0	--	28.0	529.0
Anhui	6,149.5	5,770.0	184.0	195.5	--
Fujian	2,793.1	2,520.0	--	273.1	--
Jiangxi	3,663.5	2,440.0	--	763.5	460.0
Henan	11,319.1	9,510.0	--	1,809.1	--
Hubei	343.3	--	100.0	123.3	120.0
Hunan	5,867.9	5,240.0	161.9	366.0	100.0
Chongqing	3,823.0	700.0	2,844.6	278.4	--
Sichuan	7,329.4	--	6,640.9	638.5	50.0
Guangdong	6,476.3	6,380.8	--	49.5	46.0
Guangxi	11,199.4	1,330.0	9,180.4	589.0	100.0
Hainan	12.0	--	--	--	12.0
Guizhou	3,805.1	2,400.0	310.0	485.1	610.0
Yunnan	6,336.8	--	5,403.6	833.3	100.0
Shaanxi	8,896.5	7,070.0	675.0	848.0	303.5
Gansu	5,461.3	3,655.0	739.0	1,040.8	26.5
Qinghai	1,190.0	--	190.0	400.0	600.0
Ningxia	2,766.5	1,320.0	--	1,142.5	304.0
Xinjiang	3,548.0	1,920.0	95.0	1,293.0	240.0
Tibet	11.5	--	11.5	--	--
Overseas	1,052.0	692.0	360.0	--	--

(Information is collected by December 2020)

Vision

"1244"

"1": Our Goal

To build CDT into a world-class energy supplier featured by green, low-carbon, multi-energy integration, efficiency, synergy and digital intelligence.

"2": "Two transformations"

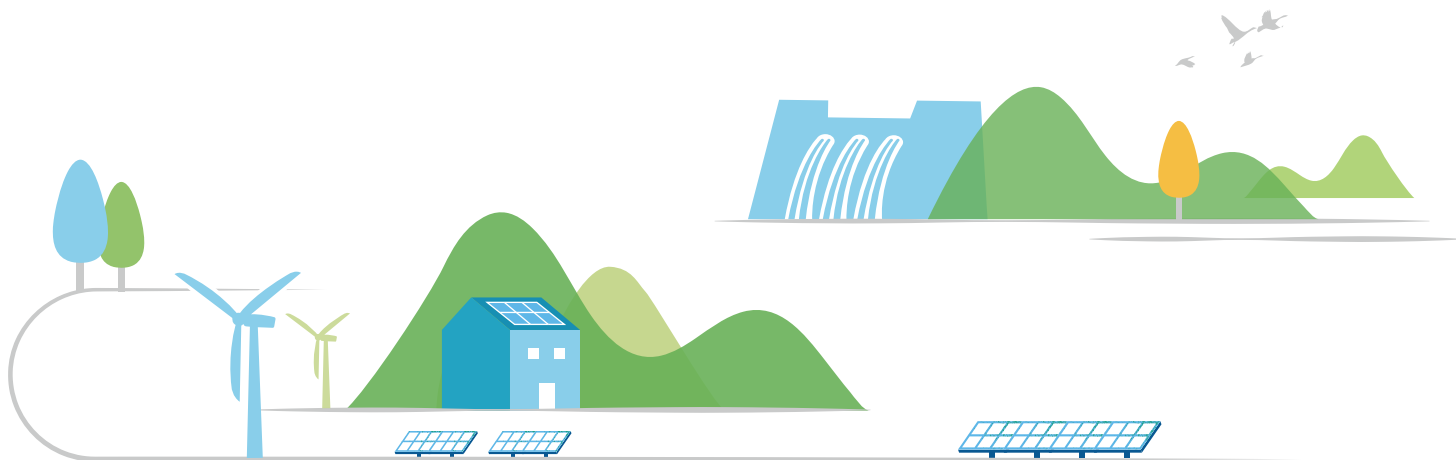
Transformation from a traditional power company to a green and low-carbon energy company.
Transformation from a traditional power company to a state-owned capital investment company which has a modern state-owned enterprise system with Chinese characteristics.

"44": "Four strengths Four excellences"

Four strengths: Strong innovation, strong competitiveness, strong development, and strong risk resistance.
Four excellences: Excellent market layout, excellent industrial structure, excellent asset quality, and excellent talent team.

"Two Steps" Strategy

The first step is to make significant progress by 2025 in building a world-class energy supplier, achieving "two transformations", "four strengths" and "four excellences".
The second step is to become a leading enterprise in the construction of beautiful China and a world-class energy supplier by 2035.



Company Leaders



Zou Lei
Chairman



Kou Wei
Director of the Board, President



Shi Jialin
Director of the Board



Liu Guangying
Vice President



Wang Ying
Team Leader of Discipline
Inspection and Supervision



Qu Bo
Vice President



Zhang Chuanjiang
Vice President



Peng Yong
Vice President



Tao Yunpeng
CFO

Management

Stable Operation

While deepening the reform of systems and mechanisms, CDT continues to improve its corporate governance in accordance with the rule of law. We strengthen the risk prevention and control system by improving the integrated management mechanism covering risk management, internal control, and compliance with regulations and laws, in an effort to guarantee the sustainable development of the Corporation.

Corporate Governance

We aim to build a strong board of directors to operate steadily and make more scientific and precise decisions. In 2020, the Board had nine directors in total, including four internal directors and five external ones.

By carrying out the integration and sharing of the Corporation's management and control information system, we have basically realized the application of information technology to human resources, finance, materials, fuel management, etc., thus realizing a continuous improvement of digital and intelligent management.

Law-based Corporate Governance

Focusing on the goal of building central SOEs under the rule of law that is characterized by "sound governance, compliant operation, normative management, and strong integrity," we promote the law-based system and consolidate its guarantees. At the same time, we strengthen online contract management, legal review, and authorization management, and deepen the legal protection of trademarks. By organizing training on the rule of law, risk control, and compliance management, we aim to enhance employees' abilities in related areas. In 2020, nearly 400 employees participated in such training.



▲ Hebei Datang International Wangtan Power Generation Company Limited organizes employees to study the *Civil Code of the People's Republic of China*.

To strengthen compliance management and internal audits, we have compiled the *Compliance Management Manual*, improved the compliance restriction mechanism, strengthened the early warning of compliance risks in key areas, and improved the effectiveness of audit supervision. In 2020, we carried out 264 audits of various types and put forward 725 audit recommendations.



Case The Inner Mongolia Branch of CDT launches the Constitution Publicity Week campaign

The Inner Mongolia Branch of CDT launched the Constitution Publicity Week campaign under the theme of "studying and implementing President Xi Jinping's thoughts on the rule of law to publicize the spirit of the Constitution." By launching quizzes on the Constitution, designing and making publicity boards, and distributing leaflets about the Constitution, employees acquired and exchanged constitutional knowledge. The campaign strengthened employees' determination to maintain the authority of the Constitution and advocate the spirit of the Constitution, and further contributed to an atmosphere for law-based governance so that employees can learn about, understand, abide by, and use the laws.

Risk Management

We have compiled the *Guiding Opinions on Building an Integrated Supervision System to Enhance Risk Management* to promote resource sharing and efficient coordination among all levels of legal, internal control, audit, discipline inspection, and supervision departments. The working mechanism for detecting, intercepting, preventing, and diffusing risks has been improved to integrate all risk control forces. In addition, the *List of Risk Management Evaluation Tasks for Branches and Subsidiaries* is released to strengthen the management of risks list and resolve major risks.

We tighten risk management in key areas, and strictly control risks in investment, bonds, finance, and overseas business. We have issued the *Notice on Continuously Enhancing the Prevention and Control of Risks in Making Investment Decisions* to guide the implementation of risk prevention and control measures. Contracts for overseas projects have been sorted out comprehensively and risk assessment and review have been conducted.

Deepening the Reform

We fully undertake key tasks of the SOE reform to bolster the momentum and vitality of development. While promoting the regional integration of coal and electricity, we have completed the reception and transfer of the management power of the first batch of pilot enterprises. Moreover, we have managed to reduce accounts receivable and the capital occupied by inventories and made greater efforts to vitalize idle assets. The rectification of problems found in the transformation of the headquarters into a government department has been furthered to accelerate the transformation of management functions. In 2020, we completed the separation and handover of water supply, power supply, heat supply, and property management businesses and completed the reform of collectively owned factories.



Scan to learn about CDT's efforts in deepening the reform

CSR Management



Scan to know more about CDT's Social Responsibility Report 2019

CDT actively fulfills its social responsibility and integrates the sustainability philosophy into all businesses. To improve our social responsibility management system, we have set up a CSR work leading group with the core leadership of the Corporation as the group leader. The group studies and deliberates major CSR issues and matters of CDT, and formulates CSR system measures. As the leading department for CSR affairs, the Business Cooperation and Public Relations Department (International Cooperation Department), is in charge of CSR routine of the Corporation.



▲ CDT's CSR cases are selected into the *Research Report on Corporate Social Responsibility of Central State-Owned Enterprises*, *Research Report on Overseas Social Responsibility of Central State-Owned Enterprises* and *Cases of the Fight Against COVID-19 by Central State-Owned Enterprises*.

Management of Material Topics

The Corporation continues to improve the identification, evaluation, and analysis process of material topics. In 2020, combined with the global sustainable development trend and the development strategy of CDT, we actively benchmarked the relevant international and domestic standards of social responsibility, and followed the principles of materiality, completeness, and stakeholder inclusiveness to comprehensively collect social responsibility topics in various forms, such as seeking suggestions from the management, organizing internal and external expert analysis, and obtaining information from daily business work. Then we determined the material topics of social responsibility from two dimensions, i.e. "value creation" (assessing the relevance, importance, and feasibility of the topics to comprehensive value creation) and "social concern" (assessing the concern of stakeholders and society for the topics) after comprehensive analysis and identification.

Material topics of social responsibility in 2020

CSR area	Material topics	Contribution to UN SDGs
Value · high quality development	<ul style="list-style-type: none"> Improving asset quality Developing clean energy Expanding the power market 	
Safety · solid foundation for development	<ul style="list-style-type: none"> Strengthening safety management Preventing and controlling COVID-19 	
Eco-Friendliness · green homeland	<ul style="list-style-type: none"> Saving resources and energy Reducing pollution emissions Coping with climate change Protecting biodiversity 	
Innovation · development momentum	<ul style="list-style-type: none"> R&D of innovation technology Training innovative talents 	
Openness · win-win cooperation	<ul style="list-style-type: none"> Promoting win-win partnership Contributing to the development of overseas communities Localized operation Strengthening international management 	
Sharing · a better life	<ul style="list-style-type: none"> Protecting the rights and interests of employees Improving community livelihood 	

Stakeholder Management

CDT pays attention to the expectations and demands of stakeholders, and listens to the voices of stakeholders through diversified communication channels. We have built communication platforms such as CDT official website and WeChat official account to consciously accept public supervision. By the end of 2020, we have released social responsibility reports for 14 consecutive years.



CDT Official Website (Chinese)



CDT WeChat Official Account



CDT Sina Weibo Official Account

Stakeholders	Expectations and demands	Communication Approaches	Performance Indicators
 The Government	<ul style="list-style-type: none"> Complying with laws and regulations Ensuring energy security Paying taxes in full according to law Optimizing energy structure Driving social employment 	<ul style="list-style-type: none"> Work meeting and reports Statistics report Information delivery 	<ul style="list-style-type: none"> Power generation volume Tax payment EVA Ratio of clean energy to total installed capacity Providing jobs
 Shareholders	<ul style="list-style-type: none"> Legal compliance Stable operation Risk management 	<ul style="list-style-type: none"> Shareholders' Meeting Announcements of the Corporation Regular reports 	<ul style="list-style-type: none"> Sales revenue Market share Corporate profits Investment income
 Partners	<ul style="list-style-type: none"> Fairness and transparency Honoring contract with integrity Win-win cooperation 	<ul style="list-style-type: none"> Industry communication Strategic cooperation Contract and agreement 	<ul style="list-style-type: none"> Integrity Contract performance rate Period of cooperation Responsible procurement
 Employees	<ul style="list-style-type: none"> Protecting the rights and interests of employees Compensation and benefits Health and safety Staff training and development Providing humanistic care COVID-19 response 	<ul style="list-style-type: none"> Workers Representative Congress Letters and visits Disclosure of corporate affairs 	<ul style="list-style-type: none"> Labor contract coverage rate Level of salary Working environment Accident rate Staff training investment Labor union membership rate

Stakeholders	Expectations and demands	Communication Approaches	Performance Indicators
 Customers	<ul style="list-style-type: none"> Safe and stable supply of electricity and heat Products and services with high quality and low price Technical service quality 	<ul style="list-style-type: none"> Contracts and agreements Electricity, heat and coal products Related technical service 	<ul style="list-style-type: none"> Customer satisfaction
 Communities	<ul style="list-style-type: none"> Engaging in community development Supporting public welfare cause Safeguarding public security 	<ul style="list-style-type: none"> Public welfare activities Open day 	<ul style="list-style-type: none"> Investment in community development Investment in public welfare Public security complaints
 The Environment	<ul style="list-style-type: none"> Climate change Energy conservation and emission reduction Biodiversity conservation Charity on environmental protection 	<ul style="list-style-type: none"> Environmental impact assessment Open day Fish proliferation and release activities 	<ul style="list-style-type: none"> Ratio of clean energy to total installed capacity Energy saving target Emission reduction target Pollution complaints
 Non-governmental Organization (NGO)	<ul style="list-style-type: none"> Positive interaction Contributions to institutes and associations Improving sustainability 	<ul style="list-style-type: none"> Conferences and activities Suggestions 	<ul style="list-style-type: none"> Frequency and profundness of activity engagement Membership fees
 Media	<ul style="list-style-type: none"> Information disclosure and transparency 	<ul style="list-style-type: none"> Press conference Media interview and communication 	<ul style="list-style-type: none"> Number of press conferences Number of core media reports

Feature I Contributing to the Decisive Victory Against Poverty

In 2020, China accomplished the targets and tasks for winning the battle against poverty and completed the building of a moderately prosperous society in all respects. With a sense of responsibility as a member of the "national team," a will to unite as one, do our best, set targets, adopt a pragmatic approach, be pioneers, innovate, tackle tough issues head-on, and live up to our people's trust, has formed in CDT in the great endeavors of poverty alleviation. We took concrete measures to contribute to the complete victory against poverty.



Scan to find more about the complete success of CDT's endeavors of poverty alleviation

CDT's poverty alleviation performance during the 13th Five-Year Plan period(2016-2020)



As of the end of 2020



For three consecutive years, CDT has been rated "GOOD" in the assessment of targeted poverty alleviation work by the State Council Leading Group for Poverty Alleviation and Development.

The Poverty Alleviation Office of CDT won the honorary title of **National Outstanding Collective in Poverty Alleviation**.

Top-level design

We resolutely implement the policies and plans made by the CPC Central Committee on poverty alleviation, strengthen the top-level design. The leadership team takes the lead in giving guidance during investigation in the front line of poverty alleviation. Meanwhile, the headquarters of CDT has established a leading group to steadily promote the poverty alleviation tasks. The head of each subsidiary "not only assumes command but also fight against poverty in the front line" to ensure the effective poverty alleviation measures.



Kou Lei (first from the right), Chairman of the Board, inspects and guides the endeavors of poverty alleviation in the Corporation's poverty alleviation office



Kou Wei (front row, first from the right), President of CDT, inspects the Corporation's poverty alleviation work in Chengcheng County, Shaanxi Province

Targeted efforts

In order to realize the century-long aspiration of the Chinese people, we have never stopped until we secure a complete victory in the battle against extreme poverty. Over the past years, we carried out targeted poverty alleviation in Dahua County in Guangxi Province and Chengcheng County in Shaanxi Province, provided assistance for Xinghai County in Qinghai Province, and supported 339 impoverished villages in 27 provinces, autonomous regions and municipalities across China in an effort to ensure adequate food and clothing, and have access to compulsory education, basic medical services and safe housing for impoverished rural residents.

Dahua County, Guangxi Zhuang Autonomous Region

104,000

Impoverished people benefited

32

Poverty alleviation officials assigned

Dahua County, Guangxi, was officially lifted out of poverty in November 2020

We select officials to station in villages, helping local people get rid of poverty. We promote efficient operation of all poverty alleviation programs to ensure that our efforts coordinated with the local governments effectively.

We focus on the development of local industries, infrastructure construction, and renovation of dilapidated houses among other poverty alleviation programs. Over the past years, we have constructed or repaired 15.7 km of roads, built 1,012 water tanks, and renovated 177 dilapidated houses.

We have developed the "2-4-1-2" industry value chain for Anlan Village and Banlan Village, which includes two major planting industries, four major breeding industries, a processing and transfer station, and two major sales platforms." We launched the innovative "poverty alleviation relocation + farmer collectives + poor households" model for local animal breeding bases.



▲ Shi Jialin (left in the front row), Director of CDT, inspects the Corporation's poverty alleviation work in Dahua County, Guangxi.



▲ CDT helps build the goat and meat pigeon breeding base located in Anlan Village, Beijing Town, Dahua County, Guangxi.

Case Guangxi Branch establishes the seven-pronged assistance system, creating a CDT model for targeted poverty alleviation

Dahua Yao Autonomous County in Guangxi used to be one of the extremely poor counties in China. It was also a key county included in the national plan for poverty alleviation and a county that still retained the poverty label. As the mainstay of the Corporation to assist Dahua County as well as Banlan Village and Anlan Village in reducing poverty, Guangxi Branch fully leveraged its strengths, and adopted categorized and targeted measures to reduce poverty, based on the situation of individual households, local conditions, and the causes for and types of poverty. It has established the seven-pronged assistance system which integrates the "seven core elements" in poverty alleviation, including focus, strategy, path, mechanism, system, key point and feature, and realized the closed-loop management of projects, systems, processes, covering the process from planning to action and from management to implementation.



▲ The Tang Run Building of Dahua Minzu Xincheng Middle School - a teaching building assisted by CDT

Chengcheng County, Shaanxi Province

42,000

Impoverished people benefited

5

Poverty alleviation officials assigned

Chengcheng County was officially lifted out of poverty in May 2019

CDT supports the county with the development of modern agriculture by supporting the construction of a number of projects, such as housing projects for resettled residents, greenhouses, rice noodle factories, and cherry tissue culture laboratories, etc.

CDT fully exploits the potential of local resources and supports Chengcheng County in developing wind farms to promote local economic development.

CDT vigorously creates jobs for the county. We provide jobs for poor college students from the county; besides, we support our long-term work clothes providers to establish garment factories for poverty alleviation and provide clothing orders for them, helping solve the employment difficulties.

To lift the county out of poverty, CDT works hard to boost the consumption of products from Chengcheng County. For example, we have mobilized employees to purchase agricultural products from the county, and formed a poverty alleviation model that combines "procurement by labor unions + procurement by canteens + purchase-to-order procurement + procurement through platforms + labor union activities."

Case Datang Shaanxi Power Generation Co., Ltd. overcomes challenges in poverty alleviation by rolling out innovative measures

Chengcheng County, located in the northeast of the Guanzhong Plain in Shaanxi Province, is a large agricultural county. It is also a key county included in the national plan for poverty alleviation. Datang Shaanxi Power Generation Co., Ltd. adopted a series of innovative poverty alleviation measures to develop local industries, boost employment, improve local livelihoods, implement projects that stimulate local development and facilitate reforms. A package of measures integrating "employment + technology + consumption + projects" continues to improve the well-being of the people and has laid a solid foundation for poverty alleviation.



▲ An agricultural products market in Chengcheng County, Shaanxi Province

Areas in Yunnan Province inhabited by the Lisu people

192,200

Impoverished people benefited

17

Poverty alleviation officials assigned

All members of the Lisu people in Yunnan Province were **lifted out of poverty in July 2020**

In the inhabited areas of the Lisu people located in six counties and cities in Nujiang Prefecture, including Lushui, Fugong, and Lanping, CDT advances six projects of affordable housing, improvement of local people's skills, labor service export, development of industries with local characteristics, infrastructure improvement, and environment protection. The efforts have helped related areas effectively solve the difficulties for the Lisu people in accommodation, transportation, income, and welfare guarantee.

CDT have renovated residences for 9,367 households, and built 50 teaching buildings and dormitories, 26 health clinics in towns and townships, and 260 km of rural roads.

CDT supports the development of crops and animal husbandry with local characteristics. By the end of 2020, there had been 4,140 hectares of cash crop farms and fruit plantations, 97,700 domestic animals, and 15 farmer cooperatives in local areas.

In order to eradicate poverty from local villages, CDT has set up the CDT Class in partnership with Yunnan Water Resources and Hydropower Vocational College to support the vocational education and talent training.



▲ Three elderly people who have moved to their new homes in the Yongfu Community bask in the sunshine.

"Not a single person should be left behind in the building of a moderately prosperous society in all respects." By the end of 2020, 380,000 people from 339 poverty-stricken villages in 90 counties, cities and districts in 27 provinces, autonomous regions and municipalities across the country have been lifted out of poverty with the assistance of our subsidiaries and branches, delivering the care of CDT to local communities.



▲ An eight-hectare organic tea plantation supported by CDT in Cheyang Village, Fujian Province



▲ Villagers in Rongyu Village, Zayu County, Nyingchi, Tibet, operate harvesters donated by the Tibet Branch of CDT.



▲ Employees of Datang Sichuan Power Generation Co., Ltd. visit the Xiahuodi Village during the Datang Winter Visit campaign.



▲ An village-stationed employee of Datang Xinjiang Power Generation Co., Ltd. discusses scientific walnut cultivation techniques with the villagers.

Feature II CDT's Contributions to the Fight Against COVID-19

In 2020, facing the COVID-19 outbreak, CDT acted promptly and took immediate action under the unified command of the government in line with the principle of "uniting as one to take science-based and targeted measures to fight COVID-19 with confidence," and the general goal of "containing the spread of the virus to win the battle against COVID-19" put forward by the CPC Central Committee. CDT contributed its strength to winning the tough battle.



Scan to learn about CDT's anti-COVID-19 actions

Two employees of CDT were honored **Outstanding Central SOE Employees in Fighting COVID-19**

Gaojing Thermal Power Plant of Datang International in Beijing won the honorary title of **Outstanding Central SOEs in Fighting COVID-19**

6 groups of CDT were honored provincial- or municipal-level **Outstanding Groups in Fighting COVID-19**

11 employees were honored provincial- or municipal-level **Outstanding Individuals in Fighting COVID-19**

Safeguarding employees with every effort

Go where there is an epidemic and fight it till it perishes. At CDT, the safety and health of employees rank among our top priorities. We have established a leading group, a corporation-wide supervision mechanism, and a stand-by and reporting system for COVID-19 response in the first place. According to the latest COVID-19 updates, we have formulated new work plans and contingency plans and made timely revision, detailed preventive measures at production sites and residential areas, and guaranteed production and preventive supplies as well as daily necessities. In 2020, we developed more than 350 preventive measures, which guaranteed "zero infections and zero suspected cases" for CDT's employees at home and abroad.



▲ CDT Xiangtan Power Generation Company scans body temperature of employees.



▲ Disinfection of the office area by professionals

Ensuring energy and power supply

Since the outbreak of COVID-19, CDT has been strengthened the safety management of power generation, heating, and coal mining enterprises, tightened inspections and rectification of safety hazards, and developed science-based overhaul plans to ensure safe and stable energy supply. Besides, we have made every effort to guarantee sufficient power supply to facilitate the epidemic prevention and control, and completed all power supply tasks during the special period.



▲ CDT enhances equipment inspections during COVID-19 to ensure the supply of clean energy.



▲ A maintenance staff from CDT's Zhejiang Branch carefully inspects the equipment.

Case Gaojing Thermal Power Plant goes all out to guarantee energy supply for the capital

During the epidemic, the Gaojing Thermal Power Plant of Datang International in Beijing strictly implemented the Corporation's requirements for COVID-19 response. Based on a comprehensive analysis of the latest COVID-19 updates, the power plant made every effort to prevent the spread of the virus from all aspects with preventive measures. It tightened equipment inspections and inventory monitoring, enhanced the maintenance and troubleshooting of generating units and public facilities, and appointed professionals to watch key parts and important equipment to ensure safe and stable operation of equipment. Amid COVID-19, two gas-steam combined cycle units of CDT operated stably and efficiently, ensuring steady supply of clean electricity and heat to thousands of households in the capital.



▲ An employee from Changfeng Wind Farm under Datang Hubei Energy Development Co., Ltd. carries out a repair task in the wind turbine cabin.

Promoting the resumption of work and production

In early March 2020
90 power infrastructure
projects of CDT
**Resumed work and
production**

All coal enterprises
affiliated to CDT
**Resumed work and
production**

Against the complex COVID-19 situation, we promote the resumption of work and production by ensuring "stability on the six fronts" and "security in the six areas" thus advancing the high-quality economic and social development. According to the local government's requirements of COVID-19 response based on local risk levels, we have developed targeted plans for each CDT company to help the comprehensive resumption of work and production, and strictly implemented all work safety and technology-based guarantee measures, creating a favorable atmosphere. In early March 2020, all the 90 power infrastructure projects and all coal enterprises affiliated to CDT resumed work and production.

Case Supporting enterprises in resuming work and production

Huafeng Fiber (Jiangsu) Co., Ltd. is a producer of ultra-fine fibers in composite materials, which are key raw materials for downstream enterprises to produce preventive supplies. Amid COVID-19, the fiber company's ultra-fine fiber products went out of stock, and it demanded more heat supply urgently to ensure material production. To solve the problem, in January 2020, Jiangsu Datang International Lusigang Power Generation Co., Ltd. quickly established a heat supply guarantee team to assist the unit operation crew in guaranteeing sufficient heat supply for Huafeng Fiber (Jiangsu) Co., Ltd. and managed to meet the demand of the fiber company for 160 tons of steam per hour.

Case Defending the frontline of the COVID-19 fight to guarantee the supply of steam and hot water for hospitals

During the epidemic prevention and control period, Baqiao Thermal Power Plant of Datang Shaanxi Power Generation Co., Ltd. regarded it as a top priority to guarantee heat sources for Tangdu Hospital, which was one of the first provincial-level designated COVID-19 hospitals in Shaanxi Province. It developed a contingency plan, put management and control measures in detail, and guaranteed the supply of 10 tons of steam and 260 tons of hot water per hour for Tangdu Hospital. The Power Plant ensured sufficient and stable supply of steam and hot water for heating in the hospital, providing energy support for COVID-19 response.

Datang Xuchang Longgang Power
Generation Co. Ltd. sticks to their
posts during COVID-19.



▲ Guangdong Datang International Zhaoqing Thermal Power Co., Ltd. makes every effort to ensure power supply for industrial parks.

Striving to be a heart-warming enterprise

In response to COVID-19, CDT has donated cash and in-kind worth about RMB 50 million to Wuhan, Chongqing, Hainan, Guangxi, Shaanxi, Zhejiang, and other regions, and purchased RMB 11.95 million of agricultural products and provided 216 jobs for graduates from Hubei. 13,800 youth volunteers engaged in COVID-19 screening, body temperature tests in public spaces, disinfection of key areas, purchases of preventive supplies, etc., warming the hearts of the public with their devotion and great love.

Amid COVID-19
RMB **50** million
CDT made cash and in-kind
donations

Case Organizing a voluntary non-remunerated blood donation to support the COVID-19 fight

Affected by the COVID-19 outbreak, Taiyuan Blood Center faced a tight blood stock as blood collection was reduced, which caused a major challenge for medical institutions. In the face of the urgent situation, Taiyuan No. 2 Thermal Power Plant of Datang Shanxi Power Generation Co., Ltd. organized 71 employees to participate in a voluntary non-remunerated blood donation campaign. 28,400ml of blood was collected to help enhance local response to public health emergencies, demonstrating the volunteer spirit of the company.



▲ A voluntary non-remunerated blood donation campaign during COVID-19

▲ CDT donates preventive supplies to Hainan Province to contribute to the local fight against COVID-19.

Contributing to overseas COVID-19 response

To ensure effective COVID-19 prevention and control, an overseas leading group is set up with an express communication channel established. The overseas COVID-19 contingency plans and work guidelines has been developed to advance the screening of COVID-19 cases in overseas regions. In addition, we ramp up efforts to ensure the health and safety of overseas employees, and have donated preventive supplies to the governments of and our partners in Cambodia, Myanmar, Laos, Indonesia, and so on. During the special period, our overseas employees stuck to their posts and performed their duties conscientiously, which ensured excellent work safety performance, and smooth resumption of work and production, thus guaranteeing the stable and reliable power supply for local communities.

Employees at CDT's Taipingjiang River Hydropower Station in Myanmar are fully committed to work.



The Indonesian representative office of China Datang Overseas Investment Co., Ltd. donates 100,000 medical masks to the Indonesian Presidential Advisory Committee.



Scan to know more about CDT's "Spring Comes to All Corners of the World" activity



Employees at CDT's overseas branches show their support for Wuhan's COVID-19 response under the theme of "Spring Comes to All Corners of the World."

Case Carrying out meticulous pandemic prevention through grid-based management

The Meulaboh power plant project under CDT, which was under construction, launched integrated anti-COVID-19 measures for major construction tasks of its 13 constructors. Based on grid management, the project divided the construction site into six first-level and 27 second-level grids, with each grid separated from the other grids by enclosures. This minimized the risk of infection within a single grid and helped avoid the large-scale spread of the virus. At every entrance and exit of the grids, there was a checkpoint responsible for testing the body temperatures and recording the information of people entering and exiting the grid and conducting disinfection. Once a person detected abnormal body temperature, the contingency plan would be immediately activated and all personnel within the same grid would be quickly detected on the spot to ensure the safety of the workplace.



Employees at Pursat Substation of Cambodian Power Grid Co., Ltd. work in front of the monitors.



CDT's Meulaboh power plant in Indonesia provides employees with preventive medicines and supplies for the staff.



Datang (Lao) Sanakham Hydropower Co. Ltd in Pak Beng sends preventive supplies, daily necessities, and allowance to Laos employees under home quarantine.



Practices 01

Value·High-quality Development

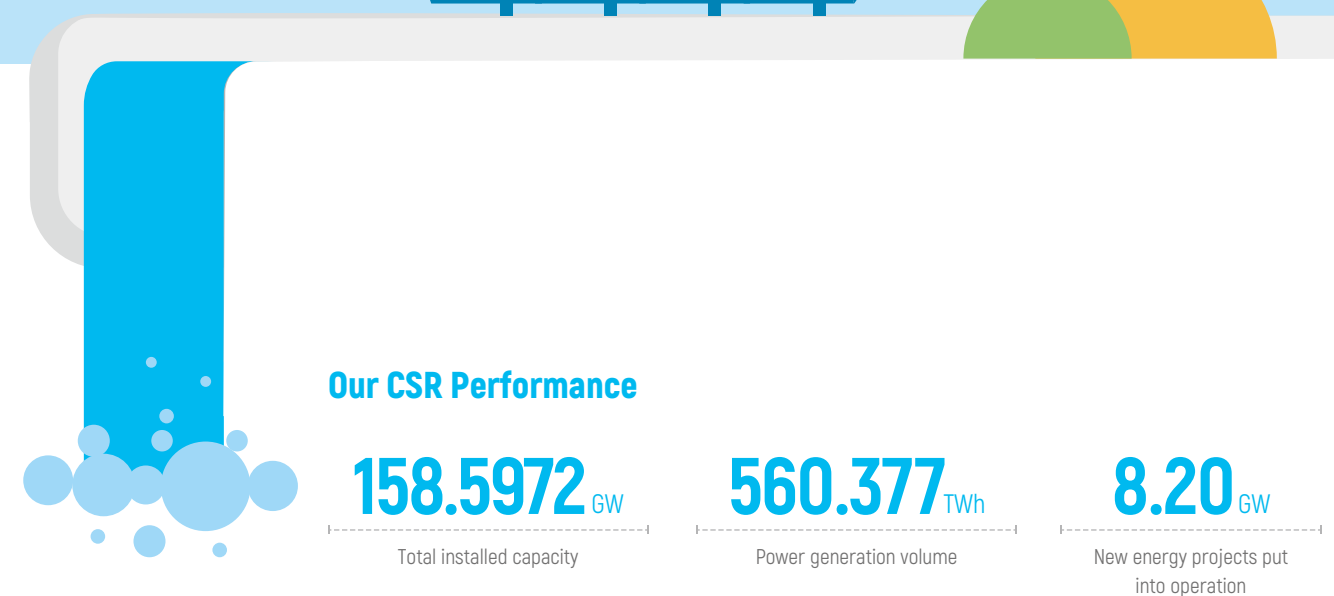
Contribution to SDGs



Our CSR Practice

- Optimizing the energy mix
- Expanding the power market

Our CSR Performance



Optimizing the Energy Mix

In 2020

560.377 TWh
Power generation volume

38.6 billion RMB
Investment in new energy sector

5.46 GW
New energy projects start construction

8.20 GW
New energy projects put into operation

In line with the new energy security strategy of "Four Revolutions and One Cooperation," CDT upholds the new development philosophy and vigorously improves the energy mix to facilitate green and low-carbon transformation. In 2020, we generated 560.377 TWh of electricity, of which 104.873 TWh was from hydropower, 414.135 TWh was from thermal power, 39.247 TWh was from wind power, and 2.122 TWh was from solar power.

Accelerating the development of clean energy

To develop more clean energy projects, CDT plans to build large-scale green energy base projects that conform to the national energy development strategy, and continues to improve the quality and efficiency of wind power projects, thus accelerating the green development of the Corporation. In 2020, CDT invested RMB 38.6 billion in the new energy sector, and got approved to construct 8.52 GW of new energy projects, including 2.8 GW of wind power projects and 5.72 GW of PV projects. Among new energy projects, 5.46 GW started construction and 8.2 GW was put into operation, creating new highs in new energy development.

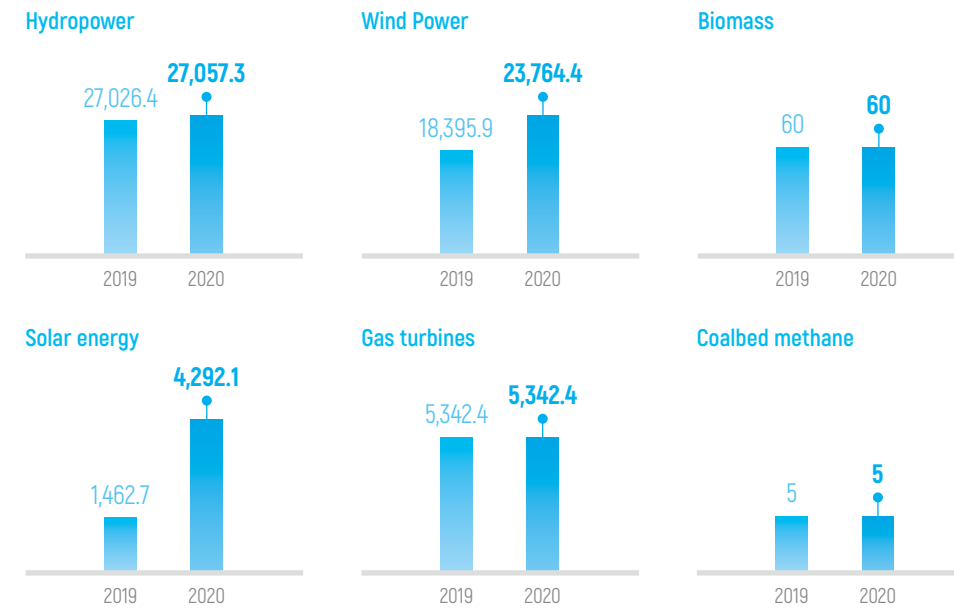
Case The first wind turbine of the largest plain wind farm in eastern Henan hoisted and installed

On September 7, 2020, the first wind turbine of the Yingdong Wind Power Project under Datang Henan Clean Energy Co., Ltd., which was the largest plain wind farm in eastern Henan, was successfully hoisted and installed. Since the resumption of work and production in March, the company had been making every effort to accelerate construction. On April 26, the foundation of the first wind turbine was excavated. The hoisting and installation of the turbine started on September 4 and was completed after over 80 hours of hardworking. The Yingdong Wind Power Project has a planned installed capacity of 240 MW, of which 100 MW is contributed by the first phase. After put into operation, the wind turbine can generate 260 GWh of electricity, save 83,000 tons of standard coal equivalent, cut CO₂ emissions by 183,000 tons, and cut the emissions of other waste gases, including SO₂ and NO₂, by 995.4 tons.



▲ Gaoan photovoltaic project of Jiangxi Datang International Renewable Power Co., Ltd.

Total installed capacity of clean energy (MW)



Case Tibet's first Datang Zala Hydropower Station with an installed capacity of over one million kilowatts approved for construction

On December 3, 2020, Datang Zala Hydropower Station in Tibet, the project with China's first "large-capacity, impulse-type" water turbine generator unit, was approved by the Development and Reform Commission of the Tibet Autonomous Region, marking a step forward for CDT in promoting Tibet's high-quality development. The project has a total installed capacity of 1.015 GW. It poses many technical difficulties because of the high head, deep shafts, and multiple fault zones. After completion, it will save 1.3 million tons of standard coal equivalent, reduce CO₂ emissions by 3.42 million tons, and reduce SO₂ emissions by 11,000 tons per year, thus contributing to the goals of "peaking CO₂ emissions and realizing carbon neutrality (carbon peak and carbon neutrality)."



▲ The Bailongshan Qishe Wind Farm of Datang Guizhou Renewable Energy Co., Ltd.



▲ Zhuozi No.1 Wind Farm of the Inner Mongolia Branch of CDT

Building clean and efficient thermal power plants

CDT is committed to green, low-carbon and innovation-driven development by optimizing the structure of thermal power generating units and promoting the ultra-low emission transformation of coal-fired power units. In 2020, the total installed capacity of the Corporation's coal-fired power units reached 98.076 GW, and all units were equipped with efficient desulfurization, denitrification, and dust removal facilities. Meanwhile, the ultra-low emission coal-fired units accounted for 98.8% of the total coal-fired units, leading the whole industry. In the 2020 National Thermal Power Unit Energy Efficiency Competition held by the China Electricity Council, CDT was ahead of most competitors with 61 award-winning units.

Case The world's first six-cylinder six-row 1000MW generating unit put into operation

In November 2020, the No. 1 generating unit of Datang Dongying Power Generation Co., Ltd, a subsidiary of China Datang Corporation Ltd. in Shandong province, went into service after a 168-hour full-load trial operation. The unit is the world's first ultra-supercritical 1000MW double reheat generating unit with six cylinders and six rows. The six-cylinder six-row steam turbine used in the plant, the world's first of its kind, has an ultra-long shaft of 59.627 meters. The project has a designed net coal consumption rate of 258.72 g/kWh, and the plant thermal efficiency stands at 49.4 percent, making the plant a model of clean and eco-friendly thermal power plants, and leading international cutting-edge technology in the power generation industry.



In January 2020, the newly installed No. 2 Unit of Guangdong Datang International Leizhou Power Plant completed 168 hours of trial operation in 22 days, hitting a record of the fastest trial operation of 1000MW double reheat generating units in China.



Expanding the Power Market

In response to the market-based reforms, CDT takes multiple measures to conduct market expansion. The Corporation always puts customers first, and strives to improve customer service by improving the marketing management system and consolidating the foundation of marketing operations.

In 2020

307.364^{TWh}

Market-based electricity transactions

Contributing to market-oriented reforms in the power sector

CDT keeps abreast of the latest development in the market-oriented reforms of the power industry, and actively engages in this process. The Corporation has set up a team of experts to study policies on the reforms, compiled the *Electricity Spot Market Guidelines*, and participated in the research project of the *Electricity Spot Market Basic Rules*. We continue to develop management systems and mechanisms, and have established 26 provincial-level marketing companies to expand our electricity sales business. In 2020, we completed market-based transactions of 307.364 TWh of electricity.

26

Newly established provincial-level marketing companies

Improving services

Being customer-centric, CDT tracks the needs of customers, and plays an active role in publicizing policies, analyzing electricity demands, and promoting energy conservation. The Corporation advances value-added electricity sale services by launching pilot service projects in accordance with local conditions. In addition, we build marketing teams and nurture talents through marketing training programs and actual transactions. The marketing information system has been improved and its trial operation has covered the entire process and all elements of the headquarters, subsidiaries and branches, and third-level power generation and sales companies. In 2020, a total of 5,100 participants received the video marketing trainings offered by CDT.

Case Liaoning Huludao Heat Supply Company offers smart service platforms to the elderly

In order to provide convenient heating service for the elderly, Liaoning Huludao Heat Supply Company built the smart system on fee collection, repair service, and complaint by virtue of artificial intelligence, big data and other technologies. With versions of large fonts, voice commands, and concise interface, the system saves the elderly the trouble of visiting in person. To solve the difficulties of some elderly people in access to the systems by using smartphones, the company's customer service staff provides guidance for them.





Practices 02

Safety-Solid Foundation for Development

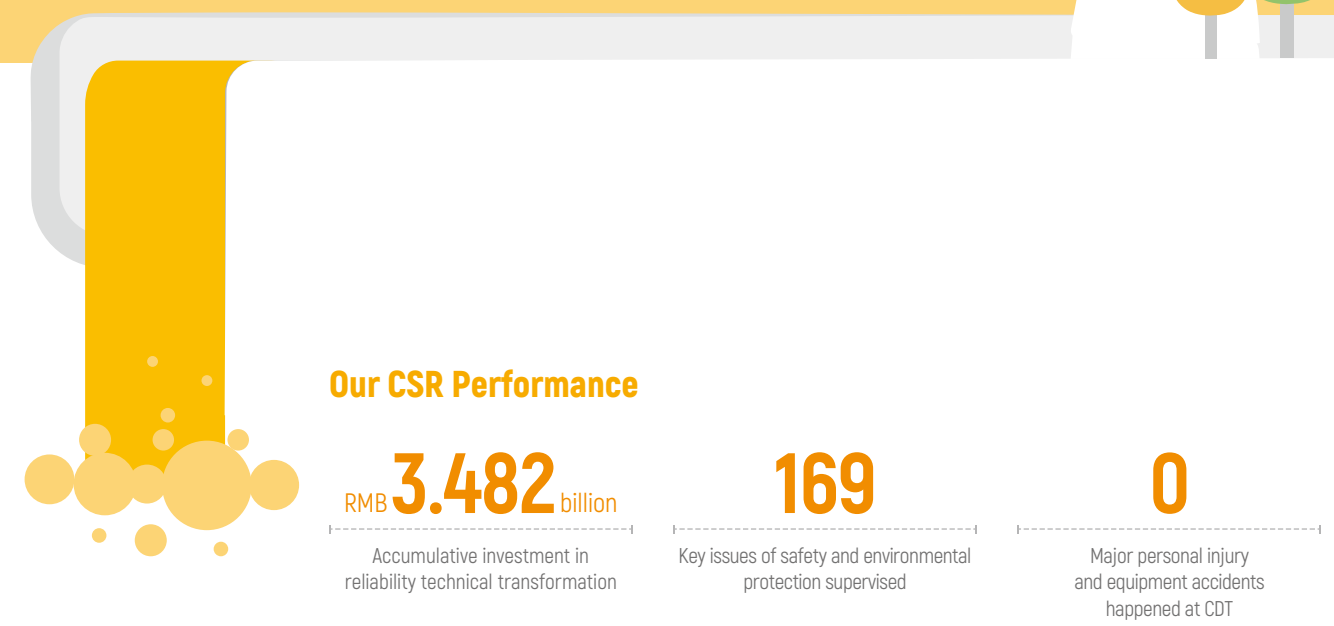
Contribution to SDGs



Our CSR Practice

- Enhancing safety management
- Ensuring equipment safety
- Nurturing a safety culture

Our CSR Performance



In 2020

0

Major personal injury and equipment accidents happened at CDT

Enhancing Safety Management

CDT believes that "safety is the prerequisite for development, and development is the guarantee of safety." Work safety and disaster prevention and mitigation are one of our top priorities. We strengthen bottom-line thinking and red line awareness while building safety and environmental systems and capabilities to resolutely prevent major accidents and ensure long-term safety. In 2020, no major personal injury and equipment accidents happened at CDT.

Safety Risk Management Measures

Safety and environmental protection inspections

To enhance regular inspections, we have printed and released documents such as the *Notice on Further Strengthening Safety and Environmental Inspections*, *Notice on Strengthening Work Safety on the Premise of Regular COVID-19 Control*, etc., to continue to strengthen safety and environmental protection inspections and ensure that problems found in remote and on-site inspections are rectified efficiently. In 2020, CDT issued eight inspection reports, developed 23 trouble checklists, and supervised the rectification of 169 key environmental problems.

Hazard investigation and rectification

According to the principle that "the root cause of accidents should be found, responsible personnel should be held accountable, rectification should be implemented properly, and relevant personnel should be educated," we investigate accidents according to the standard procedure and strict requirements. Through troubleshooting loopholes, we ensure the safe storage and use of hazardous chemicals. In addition, we prevent accidents in the wind power sector with intensive efforts, and integrate network security risk investigation and hazard management into our daily work through drills, risk assessments, and other approaches.

Safety risk management

To advance the Three-year Action Plan on Work Safety, we have formulated the "1+2+6" *Three-Year Action Plan on Work Safety* to sort out prominent problems, risks, and weaknesses. To make our work safety work more standardized, we deepen safety risk control assessments and major hazard source assessments in the whole process of risk prevention and control covering risk identification, evaluation, monitoring, control, and so on.

The long-term reward and assessment mechanism

We have compiled the *Accountability Measures for Safety and Environmental Protection* to clarify the punishments for violations without consequences. Besides, we incorporate work safety rewards into the *Corporation's Regulations for Work Safety Rewards and Punishments* to clarify the criteria for work safety rewards in terms of safety, environmental protection, and reliability.

Emergency response

Targeting natural disasters, accidents, and public health events, we strive to build an emergency command center with an emergency management system featuring unified command, responsiveness and close collaboration. We have improved our contingency plans, strengthened trainings on emergency response, and carried out emergency drills, effectively enhancing our emergency handling capabilities. In 2020, 9,510 drills and training sessions were held.



▲ The flood control drill of Jiangxi Datang International Fuzhou Power Generation Co., Ltd.



▲ The flood control drill of Jiangsu Datang International Jintan Thermal Power Company Limited



▲ The joint counter-terrorism drill of Datang International Douhe Power Plant and the Counter-Terrorism Office of Kaiping District, Tangshan

Case The helicopter emergency drill for offshore wind power projects

To cope with the complex and changeable maritime environment, CDT enhances collaboration for maritime rescues and strengthen emergency response of employees engaged in the operation and maintenance of offshore wind power facilities. Under the theme of safe construction, operation, and maintenance of offshore wind power projects, we conducted the special emergency rescue drill for offshore wind power projects in 2020. The drill familiarized employees with boarding and evacuation procedures of helicopters, and incorporated helicopter emergency rescue into daily safety management, effectively protecting the safety offshore wind power projects.



▲ A helicopter emergency drill

Ensuring Equipment Safety

CDT attaches great importance to energy supply security. We have strengthened reliability management of equipment to better respond to sudden disasters and power peaks and guarantee power supply for major events.

Improving the equipment reliability

We strive to eliminate hazards that may cause electrical fires and damages to high-temperature fasteners, and strengthen examinations, repairs, and technical transformations of equipment. In 2020, CDT invested RMB 3.482 billion in technological transformations of equipment reliability and realized a year-on-year decrease in the number of unplanned shutdowns, better than ever. In the national long-term reliability evaluation of generating units, CDT's 14 units were awarded, accounting for 28% of the total nationwide.

In 2020

RMB **3.482** billion

Total investment in technological transformations of equipment reliability



▲ Emergency repair staff from Chengde New Energy Business Division of CDT climb the tower on a windy and snowy day for an emergency repair mission.

CDT's generating units with excellent reliability performance in 2020

Company Name	Generating Unit
Guangdong Datang International Chaozhou Power Generation Co., Ltd.	No. 4 Unit
Guangdong Datang International Chaozhou Power Generation Co., Ltd.	No. 2 Unit
Hebei Datang International Wangtan Power Generation Co., Ltd.	No. 2 Unit
Datang Xiangtan Power Generation Co., Ltd.	No. 3 Unit
Inner Mongolia Tuoketuo Power Generation Co.,Ltd.	No. 1 Unit
Inner Mongolia Tuoketuo Power Generation Co.,Ltd.	No. 3 Unit
Datang Nanjing Power Generation Co., Ltd.	No. 1 Unit
Jiangsu Datang International Lvsi Port Power Generation Co., Ltd.	No. 1 Unit
Tianjin Datang International Panshan Power Generation Co., Ltd.	No. 4 Unit
Leiyang Branch of Datang Huayin Power Company	No. 3 Unit
Datang International Zhangjiakou Power Plant	No. 7 Unit
Datang Yangcheng Power Generation Co., Ltd.	No. 3 Unit
Datang Shandong Lubei Power Generation Co., Ltd.	No. 2 Unit
Matou Thermal Power Branch of Datang Hebei Power Generation Co., Ltd.	No. 10 Unit

Effectively responding to natural disasters and peak seasons of electricity and heat consumption

By comprehensively applying informatization technology and IT platforms, we strengthen risk warning, early warning, management and control, and have effectively responded to many emergencies, such as Tropical Storm Higos, Typhoon Bavi, heavy rains, severe floods, freezing rain, etc., ensuring safe and stable operations of power plants and winning high praises by the local governments. We also actively respond to regional shortages of energy supply during the peak season, and make every effort to meet users' electricity demand in summer and heat in winter.

Case Datang Jilin Power Generation Co., Ltd. goes all out to cope with extreme weather conditions

On November 18, 2020, Jilin Province was hit by a rarely seen extreme weather involving rain, snow, and freezing damage. Heat and water supply in some areas of urban Changchun were affected. At that time, Datang Jilin Power Generation Co., Ltd. made a contingency plan and deployed the crew to stand by in advance, and set up emergency repair teams. Corporate leaders took command of emergency response efforts, sufficient water was prepared for emergency supply, and the heating system was in good condition. The company guaranteed safe operation of the grid and stable heat supply, making citizens feel the warmth secured by CDT under extreme weather conditions. Photos of the company's employees "fighting in the snow" were shortlisted for the Top 10 Most Touching Moments of Central SOEs selection, and its efforts were spoken highly of by the government.



▲ Datang Jilin Power Generation Co., Ltd. makes every effort to cope with the extreme weather involving rain, snow, and freezing damage to ensure safe and stable heat and power supply in winter.



▲ A wind farm under the New Energy Business Division, Fujian Branch of CDT

Guaranteeing electricity supply for major events

As the main electricity provider in the capital, CDT fully assumes its political responsibility of guaranteeing work safety and makes meticulous electricity supply plans. In 2020, we completed our major tasks to guarantee power supply for the Chinese People's Political Consultative Conference and the National People's Congress ("two sessions"), the Fifth Plenary Session of the 19th CPC Central Committee, the 70th anniversary of the Chinese People's Volunteers entering the Democratic People's Republic of Korea to fight in the War to Resist US Aggression and Aid Korea, among many other major events.

Case CDT guarantees power supply for the "two sessions"

As a super-large power generation company directly under the central government that meets two-thirds of the power demand of Beijing, CDT undertakes the political tasks to stabilize the work safety situation during the "two sessions" and ensure zero infected cases and zero suspected cases for COVID-19 response. In 2020, we formulated the *Overall Work Plan and Special Plan on Safety and Stability During the "two sessions" in 2020* to clarify requirements from nine aspects, including work safety, pandemic prevention, and fuel supply. We assigned specific tasks to our subsidiaries and branches to guarantee power supply, and delegated inspection teams to supervise their power supply performance, ensuring safe and stable production as well as reliable power supply during the "two sessions".



▲ Datang Beijing Tianjin Hebei Energy Development Co. Ltd. takes prompt action to guarantee power supply for the "two sessions".

Nurturing a Safety Culture

We fully implement the safety training system to ensure that all types of personnel at all levels are trained before taking their positions. Pre-work and post-work meetings are held regularly. In addition, we clarify tasks, risks, and measures, and impellent all risk control measures earnestly, giving full play to the team management. The Work Safety Month campaign also is organized to promote the safety awareness and skills of grassroots employees.



▲ The signing during the Work Safety Month campaign of Datang Huainan Luohe Power Plant



▲ Datang Xi'an Thermal Power Plant holds the kick-off meeting for the Work Safety Month campaign.



Scan the QR code to learn more about CDT's Work Safety Month campaign.



Practices 03

Eco-Friendliness·Green Homeland

Contribution to SDGs



Our CSR Practice

- Promoting energy conservation and emission reduction
- Contributing to carbon neutrality
- Protecting biodiversity

Our CSR Performance



Promoting Energy Saving and Emission Reduction

In 2020

0

Environmental incidents happened in CDT

RMB 1.322 billion

Investment in environmental protection facilities and environmental treatment

296.30 g/kWh

Coal consumption for power supply

2.01 g/kWh

Year-on-year decrease

CTD has continued to improve the environmental management system, and revised the regulations on accountability for environmental protection as well as environmental management measures to strengthen the full lifecycle management of projects. We have formulated the *List of Priorities for Environmental Protection Inspections*. Among the regular inspections, the on-site inspections are required for key companies. These efforts ensure effective prevention and control of environmental risks. In 2020, there was no environmental incident in CDT.

We have advanced the Three-Year Action Plan for Defending the Blue Sky and achieved all the targets of the Three-Year Energy Consumption Reduction Campaign. We have carried out the boiler dynamic combustion adjustment tests and optimized the sliding-pressure curve of steam turbines, making every effort to solve obstacles hindering energy consumption. Besides, we step up efforts on energy-saving transformation with a focus on projects such as installing low-temperature coal economizers, which have effectively improved the flexibility of peak shaving and heat supply of power generating units.

To reduce the discharge of pollutants, we have improved data management through the Continuous Emissions Monitoring Systems (CEMS) and enhanced solid waste and hazardous waste storage and disposal, further standardizing the environmental management. Based on the environmental data monitoring platform, we strengthen the online monitoring, real-time alarm, and status evaluation of environmental data, and ensure the stable and up-to-standard discharge of major pollutants. In 2020, we completed the ultra-low emission transformation of four generating units, implemented 11 enclosed coal yard transformation projects, optimized the flue gas emissions of six generating units, and finished two waste-water treatment projects. In 2020, SO₂ and NO_x emissions of CDT dropped by 6.78% and 7.92% year on year, respectively.



Case Two ultra-supercritical power and heat generating units reduce air pollution in Tangshan

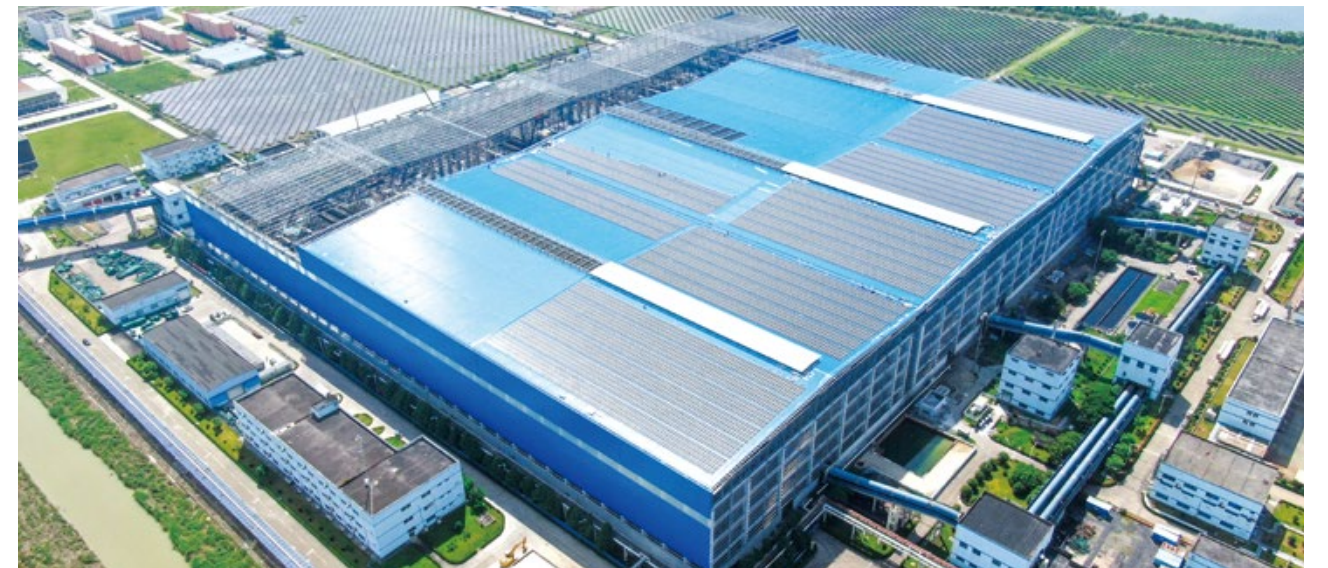
In May 2020, 2x350MW ultra-supercritical power and heat generating units of Tangshan Thermal Power Co., Ltd., a subsidiary of Datang International Power in Hebei Province, went into operation. As a key project in Hebei for phasing out outdated capacity, the project supplies heat for nearly a quarter of the residents in urban Tangshan. It has replaced 75 small coal-fired boilers in the city, and can reduce 175,000 tons of coal consumption, 2,234.5 tons of SO₂ emissions, 1,506.7 tons of NO_x emissions, and 1,757.9 tons of soot emissions annually. It will play an important role in improving the air quality of Tangshan City.



▲ 2 x 350MW ultra-supercritical power and heat generating units of Tangshan Thermal Power Co., Ltd. put into operation.



▲ Promoting the construction of the Wanning natural gas power generation project of Datang Hainan Energy Development Co., Ltd.



▲ Wushashan Power Generation Company, a subsidiary of Datang International Power in Zhejiang Province, installs photovoltaic panels on the roof of the new-type, eco-friendly enclosed coal yard.

Pollutant emission rates over the past five years (g/kWh)



Contributing to Carbon Neutrality

In 2020

1.91%

Year-on-year decrease in CO₂ emissions

1.18%

Year-on-year decrease in overall carbon emission intensity

In response to climate change, China has made its solemn commitment to the international community to scale up its nationally determined contributions by peaking CO₂ emissions before 2030 and achieving carbon neutrality before 2060. CDT has developed its carbon assets management system in an all-around way, and completed carbon emission accounting and verification. We conduct standardized management of carbon data such as emission factors, and actively promote the development of the carbon market. In June 2021, CDT issued the *Action Plan for Carbon Peak and Carbon Neutrality*, and established a green and low-carbon development company.

Proportion of clean energy power generation capacity of CDT (2016-2020)

Indicator	2016	2017	2018	2019	2020
Proportion of clean energy power generation capacity	29.27%	33.90%	35.57%	36.26%	38.16%

Further reading

CDT's services to achieving carbon neutrality

Carbon neutrality means that enterprises, groups, or individuals calculate the total amount of greenhouse gas emissions directly or indirectly generated within a certain period of time, and then offset the emissions through tree planting, energy conservation and emission reduction, etc., to achieve zero carbon dioxide emissions.

CDT has been working hard to provide services for carbon neutrality. Since 2005, Datang Carbon Assets Co., Ltd. has developed hundreds of CDM projects. Since 2014, CDT has directly provided carbon neutrality services for multiple industries.

- In October 2014, CDT offered carbon neutrality services to the Mission Hills Star Trophy, an annual, pro-celebrity golf tournament held in Hainan Province.
- In November 2014, CDT offered carbon neutrality services to the China Circular Economy Development Forum.
- For five consecutive years from 2015 to 2019, CDT offered carbon neutrality services to 21 factories affiliated with Shanghai Pacific Millennium Packaging & Paper Industries Co., Ltd., and completed the first CCER project on carbon neutrality in China's packaging industry.

As a central state-owned energy provider directly under the central government, CDT keeps in mind the broad picture to implementing the goals and tasks of tackling climate change, and contribute to the goal of peaking CO₂ emissions before 2030 and achieving carbon neutrality before 2060.



Scan the QR code to learn more about CDT's green production



Case The world's first demonstration project of coal-fired carbon capture, storage and utilization production line contributes to carbon peak and neutrality

Shanxi Datang Yungang Thermal Power Co., Ltd. and Shanxi Clean Carbon Economic Industry Research Institute have jointly built the world's first demonstration project of coal-fired carbon capture, storage and utilization production line. The project, with a total investment of more than RMB 40 million, is equipped with the world's first industrialized system for capturing, converting and utilizing CO₂ in flue gas from the power plant. By means of capturing, liquefying, and purifying carbon dioxide, the system is able to capture 1,280 tons of CO₂ emissions from the No.3 and No.4 units of the power plant each year, and turn the captured carbon into raw materials of carbon nanotubes and composite materials. The project has become a new engine driving the rapid development of the carbon circular economy.

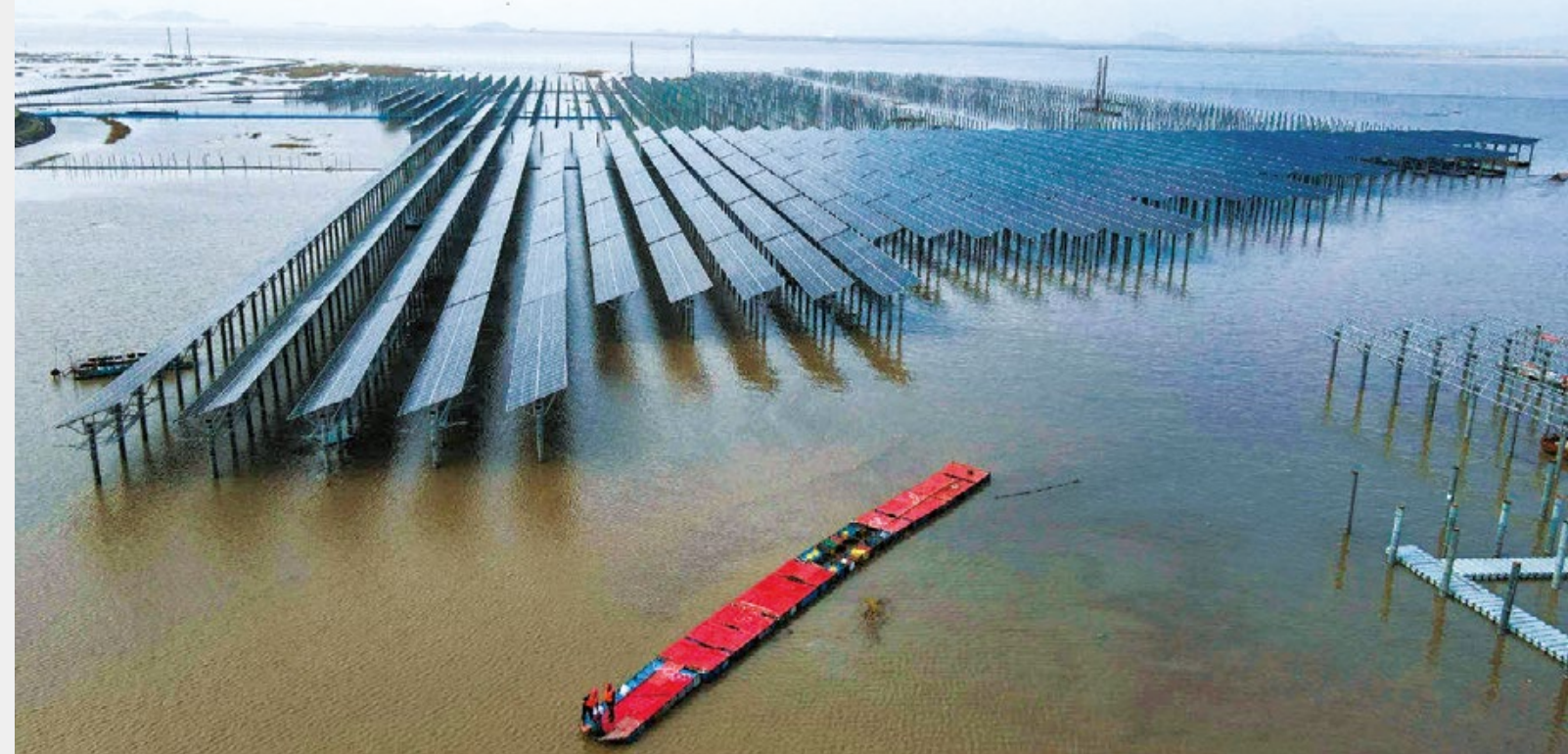


Case China's largest tidal flat PV project contributes to carbon neutrality

The Datang Changdatu photovoltaic project in Ningbo, Zhejiang Province, has a total installed capacity of 300 MW, and it is the largest of its kind built on a coastal tidal flat in China. With a focus on both development and ecological protection, the project is designed to combine aquaculture and PV power generation. Once put into operation, the project is expected to provide an average of about 330 GWh of power annually. This is equivalent to a reduction of 100,000 tons of standard coal equivalent and an emissions reduction of 270,000 tons of carbon dioxide, 2,300 tons of sulfur dioxide and 1,000 tons of oxynitride during the same timeframe. In addition to meeting local power demands, the project will also play a positive role in the adjustment of the energy structure and energy conservation, as well as contribute to the local emissions reductions and sustainable economic and social development.



Scan the QR code to learn more about the Datang Changdatu PV project



Protecting Biodiversity

CDT continues to improve the accountability for environmental protection, and has revised the *List of Environmental Protection Priorities*. By formulating the *Management Measures for Environmental Protection of Construction Projects* and *"Three Simultaneous" for Water and Soil Conservation*, we ensure that related facilities and earthwork engineering are designed, constructed and put into use at the same time. To guard the red line for environmental protection, we conduct project construction, acceptance and operation in strict accordance with the approvals for environmental protection. In 2020, no environmental or water protection incidents occurred in CDT power projects.



▲ The Baiyutan Hydropower Plant of Datang Hengyang Power Generation Company is awarded the title of an exemplary green small hydropower plant.



▲ The cascade breeding station of rare and endangered fish species in the middle reaches of the Hongshui River (Dahua) invested and constructed by Guangxi Guiguan Electric Power Co., Ltd.

Case Building green coal mines to protect ecology

On June 30, 2020, the first 10-million-ton super-large coal mining project independently developed and constructed by CDT, also known as the Longwanggou coal mine and coal preparation plant project owned by Erdos Guoyuan Mining Development Co. Ltd., went into production. Based in Erdos, the company strives for green mines to achieve improvements in safety, smart technology application, and environmental protection. In 2020, the company greened approximately 18 hectares of industrial sites and surrounding roads by planting 7,260 trees such as weeping willows and Chinese scholar trees, and sowing alfalfa grass. The company also took a series of measures to manage mine subsidence areas, such as covering the soil in landfills, protecting slopes and restoring vegetation. With more efforts on work safety, smart and environmentally friendly mining, and green development, it strives to build a "safe, smart, and green" mine.



▲ Egrets inhabit the lower reaches of the dam due to Datang Longtan Hydropower Station's efforts on environmental protection in the reservoir area.

Case Protecting fishes in the reservoir area

Chongqing Datang International Pengshui Hydropower Development Co., Ltd. devotes to wildlife conservation by building two fish proliferation and release stations for the Pengshui-Yinpan Hydropower Plant and the Pengshui Hydropower Plant. As of the end of 2020, the two stations had released a total of 5.12 million national protected fish, including Chinese high-fin banded sharks, rock carps, cyprinid fish, Chinese barbed carps, and white turtles, ensuring fish diversity of the Wujiang River.



▲ Employees of Chongqing Datang International Wulong Hydropower Development Co., Ltd. release captive-bred fish to the wild.



Practices 04

Innovation · Development Momentum

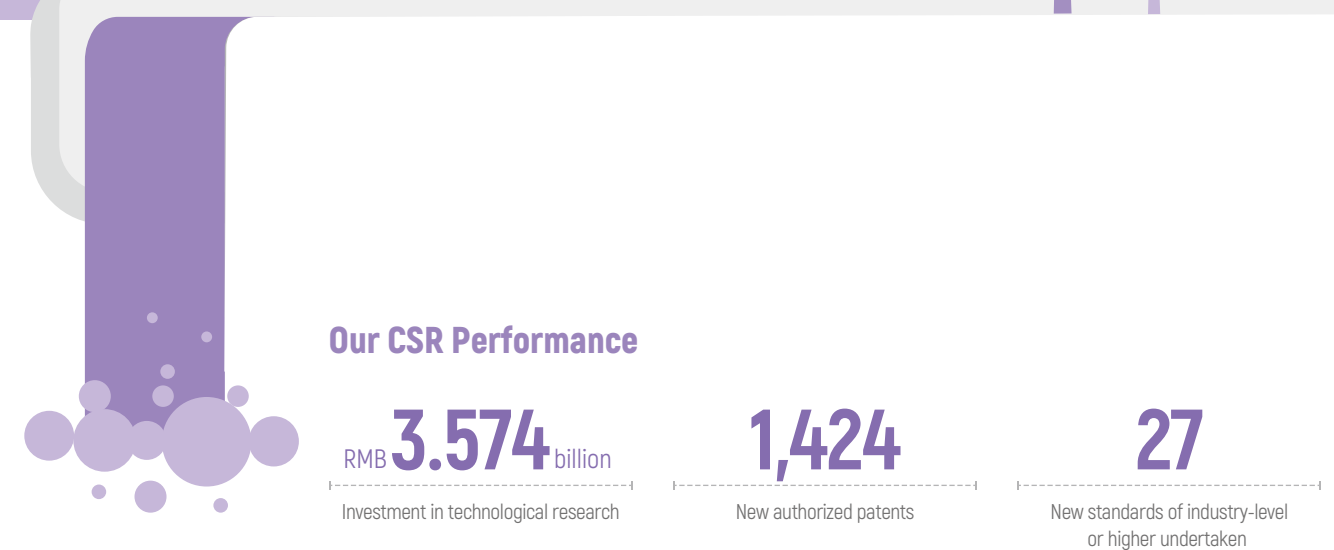
Contribution to SDGs



Our CSR Practice

- Deepening innovation in management
- Promoting technological innovation

Our CSR Performance



Deepening Innovation in Management



Scan the QR code to learn how CTD promotes development through technological innovation



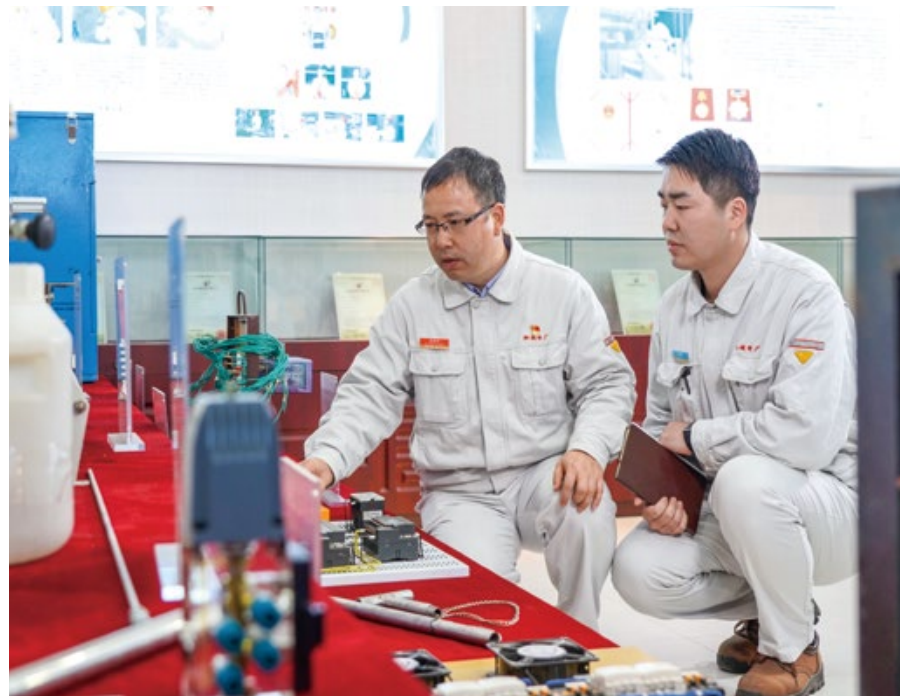
Scan the QR code to learn about CTD's digital transformation

CDT continues to improve the technological innovation system and integrate technological innovation resources. Focusing on green and low-carbon development, building a multi-energy complementary layout, efficient collaboration, and digital intelligence, we have accelerated the building of the Smart Energy Innovation Center, the Gas-steam Combined-cycle Power Generation Technology R&D Engineering Center, the Wind and Solar Power Generation Intelligent Operation Technology Center, and the Tropical Photovoltaic Demonstration Research Base, thus forming a strong technology R&D platform. Oriented towards assessment results, we encourage scientific research institutes and power generation companies to seek innovation opportunities and stimulate vigor. By integrating technological innovation with production and business development, we strengthen technological transformations of production processes to empower infrastructure projects with technologies, and promote the commercialization of technological achievements.

In an effort to nurture innovative talents, we have revised and released the *Regulations on Technological Innovation Awards (Trial)* to raise our incentives for enterprises and frontline technological staff with important contributions. In 2020, we granted RMB six million for technological innovation awards. 1,260 labor competitions and 1,790 skills competitions were organized among CDT subsidiaries at all levels, which attracted 70,000 participants.

Case The Wu Xusheng Labor Model Innovation Workshop nominated among the national demonstration craftsmanship innovation workshops

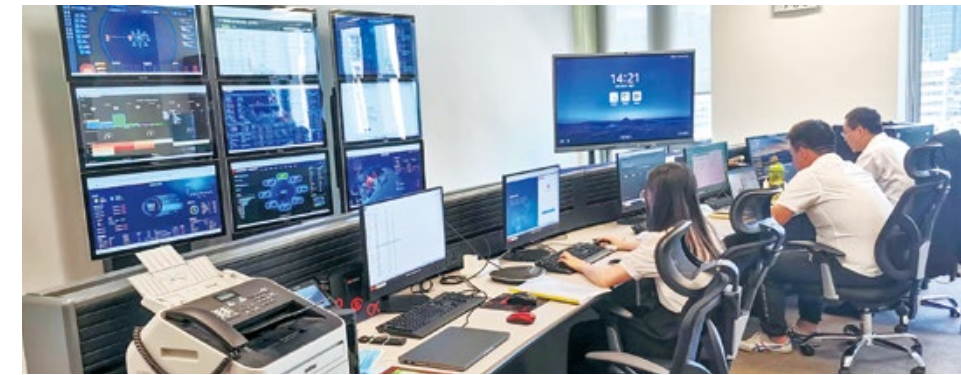
The Wu Xusheng Labor Model Innovation Workshop of Datang Yangcheng Power Generation Co., Ltd. has been nominated as one of the national demonstration craftsmanship innovation workshops. As of the end of 2020, the workshop had made 125 "five small" (small inventions, small creations, small innovations, small designs and small suggestions) achievements, obtained five national patents for inventions and 50 utility patents, and built more than 30 innovation studios and operation sites, including simulation machine operation rooms and thermal control operation rooms, creating more drivers for corporate innovation.



▲ Wu Shengxu (first from left), director of the Wu Xusheng Labor Model Innovation Workshop, cooperates with his members in innovations.

Case CTD's new energy monitoring and big data platform put into operation

In 2020, the Corporation built an industry-leading new energy monitoring and big data center. We took the lead in proposing simultaneous construction of the monitoring zone and the functional zone, established a new energy data cloud, and developed a three-level data management structure that covers the full industrial chain of new energy from early-stage development, engineering and infrastructure, to production and operation, realizing high integration of management and technology. All the data of in-service wind turbines are fed into the center to empower the precise control of each wind turbine. The comprehensive and full-process digital intelligent control platform has effectively enhanced the Corporation's core new energy management and control.



▲ In 2020, CDT built a digital room for its power generation business and developed a system framework for intelligent decision-making, digital management, and intelligent production, which was selected as a typical case of digital transformation of SOEs by the SASAC in 2020.

Promoting Technological Innovation

CDT actively responds to the national innovation-driven development strategy, and continues to increase investment in technological innovation to achieve breakthroughs in core technologies and promote the application of technological achievements, thereby leading high-quality development with technological innovation.

Achieving breakthroughs in core technologies

We are committed to the research and development of innovative and cutting-edge technologies, shore up points of weakness in technical equipment of national significance, and make progress in implementing demonstration projects entrusted by the National Energy Administration. We continue to promote the formulation of standards and improve our capacity for independent innovation. In 2020, we invested RMB 3.574 billion in technological research, and won seven first prizes for industry-level technological innovation, including achievements in wind power, hydropower, thermal power, information technology and standard formulation. We were granted 1,424 new patents and 172 patents for inventions, a record high in the history of the Corporation.

Case The smart denitration technology with optimized precise ammonia injection in ultra-low-emission thermal power generating units reaches a world-class level

The smart precise ammonia injection optimization technology developed by Datang Environment Industry Group Co., Ltd. is a new technology applied to the SCR denitration system, and a world-class technology that has been authenticated by the Chinese Society of Electrical Engineering. It has received a number of awards, including the technical achievement award of the China Electricity Technology Market Associated, the excellent staff technological innovation award of the National Energy Chemical and Geological System, the staff technological innovation award of the China Electricity Council, and the energy innovation award of the China Energy Research Society.

In 2020
1,424
Newly authorized patents

172
Newly authorized patents for inventions

27
New standards of industry-level or higher undertaken

First prizes of technological innovations won by CDT in 2020

No.	Name of award	Prize-winning project	Field
1	Science and Technology Progress Award of the Chinese National Committee on Large Dams	R&D and application of key technologies in the construction of the roller-compacted-concrete (RCC) double-curvature arch dam at the Wanjiakouzi Hydropower Plant	Hydropower technology
2	Innovation Award of the China Electricity Council	Water-saving and zero liquid discharge (ZLD) technology based on source treatment of key water and gas systems of coal power units	Coal-fired power generation technology
3	Innovation Award of the China Electricity Council	Dynamic collaborative optimization technology of environmental protection equipment adapted to changes in working conditions	Coal-fired power generation technology
4	Innovation Award of the China Electricity Council	Key technologies to intelligent diagnosis and service life extension assessment of key equipment in hydropower stations and its application	Hydropower technology
5	Innovation Award of the China Electricity Council	Research and engineering application of key technology of biomass straw circulating fluidized bed micro-positive pressure gasification coupled power generation	Coal-fired power generation technology
6	Innovation Award of the China Electricity Council	Research and engineering application of early warning and diagnosis technology for sealing system failure of heavy gas turbine	Information technology
7	Innovation Award of the China Electricity Council	A series of standards for waste heat boilers of gas-steam combined cycle units	Standards

Patents granted to CDT

Indicators	2019	2020
Accumulative patents	8,008	9,432
Accumulative invention patents	709	881
New patents authorized	1,366	1,424
New invention patents authorized	127	172
Technological innovation achievements promoted (patents)	40	64



▲ Employees of Hebei Datang International Wuan Power Generation Co., Ltd. participate in the innovation activities of small inventions, small creations, small innovations, small designs and small suggestions.

Promoting the application of technological achievements

In 2020, the Corporation issued the Catalogue of CDT Technological Achievements (2020), which classified all innovations into several categories, including thermal power, hydropower, wind power, photovoltaics, environmental protection, and electrical engineering. We selected 64 technological achievements (patents) to promote their application among subsidiaries at all levels.

In 2020

64

Innovation achievements (patents) applied in subsidiaries

Case Wanjiakouzi Hydropower Station applies key innovations

The world's tallest roller-compacted-concrete (RCC) double-curvature arch dam has been built at the Wanjiakouzi Hydropower Station in Yunnan Province. The geological conditions and structures of the river section where the dam was built are complicated. Prior to its construction, there was no similar engineering practice to learn from at home and abroad. Datang Xuanwei Hydropower Development Co., Ltd. studied the comprehensive optimization of the performance of dam construction materials, the real-time temperature control technology, etc., and achieved a series of technological innovations, which have been identified as the world-class level by the Chinese National Committee on Large Dams. The success of the Wanjiakouzi Hydropower Station marks a new leap in the construction of RCC double-curvature arch dams that are at least 150 meters tall, and has comprehensively improved the key technologies for tall RCC arch dam construction in China.



▲ The No. 2 Unit of the 630°C ultra-supercritical, double reheat project of Datang Yuncheng, a national power generation demonstration project, has been approved.



Practices 05

Openness·Win-win Cooperation

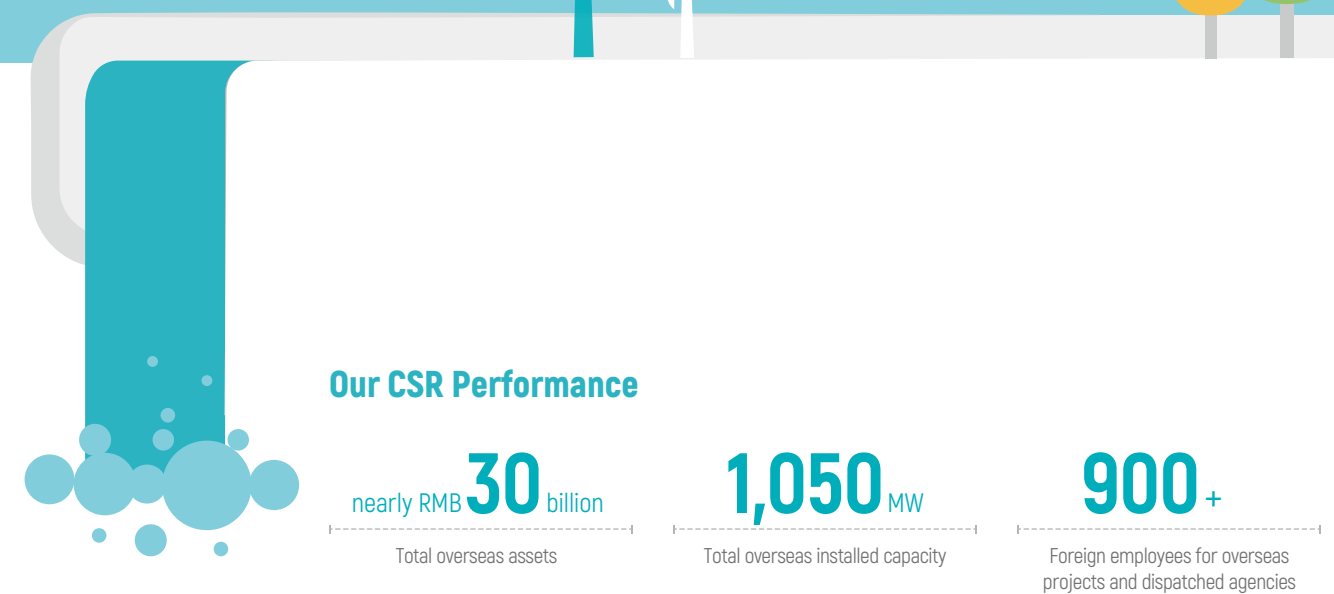
Contribution to SDGs



Our CSR Practice

- Contributing to the Belt and Road Initiative
- Enhancing exchanges and cooperation
- Serving local development

Our CSR Performance



Contributing to the Belt and Road Initiative

We take the initiative to integrate into the new development paradigm featuring dual circulation, in which domestic and overseas markets reinforce each other, with the domestic market as the mainstay. To actively engage in the Belt and Road development, we expand overseas markets and improve our international operation to accelerate the pace of "going global".

Power projects "going global"

We expand international business on an ongoing basis and actively participate in the energy projects with partner countries and regions along the Belt and Road to promote local economic and social development. By the end of 2020, our total overseas assets had reached nearly RMB 30 billion and we had put 6 overseas projects into operation, with a total overseas installed capacity of 1,050 MW.

Case CDT's first overseas acquisition project completed, opening a new chapter in international business

In December 2020, we acquired 75% equities of Indonesia's Sinar Mas PMU Company, and established Indonesia Datang Sinar Mas Power Co., Ltd. Its three power generation plants have a total installed capacity of 692 MW. The overseas installed power capacity of CDT exceeded 1,000 MW.



▲ Sumsel Power Plant of Indonesia Datang Sinar Mas Power Co. Ltd.

Case Taiping River Hydropower Station in Myanmar successfully tackles the dual challenges of COVID-19 and flood season

In 2020, the employees of the Taiping River Hydropower Station in Myanmar successfully coped with the largest flood ever since it was put into operation, and effectively addressed the power supply problem in Bhamo, Myanmar, which was highly recognized and praised by the Ministry of Electricity and Energy of Myanmar. Through careful deployment, the Taiping River Hydropower Station overcame the dual challenges of COVID-19 and flood season and completed its annual power generation task 66 days ahead of schedule. The power generation volume in the year reached a new record high since it was put into operation.



▲ The Taiping River Hydropower Station is the first hydropower project invested and constructed by CDT in Myanmar.



Scan the QR code for more information about the new record high created by Taiping River Hydropower Station

Technical standards "going global"

We give full play to our technological advantages and carry out high-end technology export and power project operation & maintenance to promote safe, stable and high-quality development of overseas projects.

Case Contributing "China Power" to the Payra Project in Bangladesh

The Payra Ultra Supercritical Coal-fired Power Project is the largest thermal power project in Bangladesh and the second coal-fired power plant in the country. The staff of Payra Power Plant Project Department, Datang Anhui Power Generation Co., Ltd. devoted to ensuring the project safety, quality and progress, and made concerted efforts to complete the operation and maintenance of Unit 2. In August 2020, the Unit 2 was successfully connected to the grid for the first time, marking the completion of the main part of the Phase I Project with high quality.



Case Building the image of CDT with technical assistance

The San Amaro Power Station Technical Assistance Project, in the Democratic Republic of Sao Tome and Principe, undertaken by CDT, provides stable electricity to local people and plays an important role in driving local economic development. Our technical service was highly praised by the local government and widely recognized by the Ministry of Foreign Affairs and the Ministry of Commerce of China.



▲ CDT undertakes the operation, maintenance and overhaul of 2x135MW coal-fired units of Jeneponto, Indonesia, which has been highly recognized by Perusahaan Listrik Negara (PLN) and Indonesian proprietors.

Enhancing Exchanges and Cooperation

We pool the advantages of our circle of friends both inside and outside the industry, at home and abroad, to step up opening-up and cooperation. We actively engage in international exchanges and cooperation, and have launched the English website of CDT to enhance communication with people from all over the world. We have participated in major events such as the China International Import Expo and China-ASEAN Expo, and taken an active part in international cooperation and exchange activities, such as the events of United Nations Global Compact, the World Economic Forum and the Asia-Pacific Economic Cooperation (APEC).



▲ Fu Kaide, vice president of EDF Group and president of EDF Group in China, and his delegation visited Fuzhou Power Generation Co., Ltd. to learn more about the company's unit operation, safety management and fuel storage, and have an informal discussion.

Case The English website of CDT launched to create a new window for international exchanges

On June 30, 2020, CDT held the launch ceremony of the English website via an online meeting. Domestic and foreign employees engaged in international business participated in and witnessed the official launch of the English website. Fully respecting the mental habits, communication modes, life style & customs and discourse system of overseas audiences, the website will tell the stories of CDT, and display the brand image of CDT.



▲ Employees of Cambodian Power Grid Co., Ltd. participated in the launch ceremony of the English website.

Case Building a high-end circle of friends to promote high-quality development of overseas projects

In 2020, COVID-19 had a great impact on the economy and imposed many difficulties and challenges to the business development. To overcome the adverse impact of COVID-19, China Datang Overseas Investment Co., Ltd. enhanced cooperation with upstream and downstream enterprises of the power industry to build a high-end circle of friends. It signed strategic cooperation agreements with five enterprises online, namely Yangtze Institute for Conservation and Green Development, CNNEC, CMEC, GCL Group and GPSC of Petroleum Authority of Thailand, and established a work promotion mechanism to fuel CDT's efforts for overseas development.

Serving Local Development

Always bearing its responsibility in mind, CDT serves local economic and social development through project investment & construction and charity. In 2020, the total volume of power generation of CDT overseas system increased by 255 GWh year on year. Overseas projects and dispatched agencies employed more than 900 foreign employees and provided more than 2,000 jobs.

Case Vigorously promoting localized employment to build a China-Cambodia friendship bridge

Cambodian Hydropower Development Co., Ltd. and Cambodian Power Grid Co., Ltd. strive to promote employment localization. They recruit local talents for the production and management of Cambodian Hydropower Development Co., Ltd., aiming to promote people-to-people exchange and integration and foster family ties between employees of China and Cambodia. Since the localized employment, a total of 32 Cambodian college students have been recruited to work in production technology. After more than one year of professional training, most of them have been hired by EDC for important posts. This model has been well recognized by many parties, thus helping build the responsible and reliable image of CDT and China's central SOEs.

In 2020
900+
Foreign employees for overseas projects and dispatched agencies

2,000+
Jobs provided



▲ China Datang Overseas Investment Co., Ltd. and Electricity of Vietnam (EVN) held a video seminar on environmental technology.



Practices 06

Sharing-A Better Life

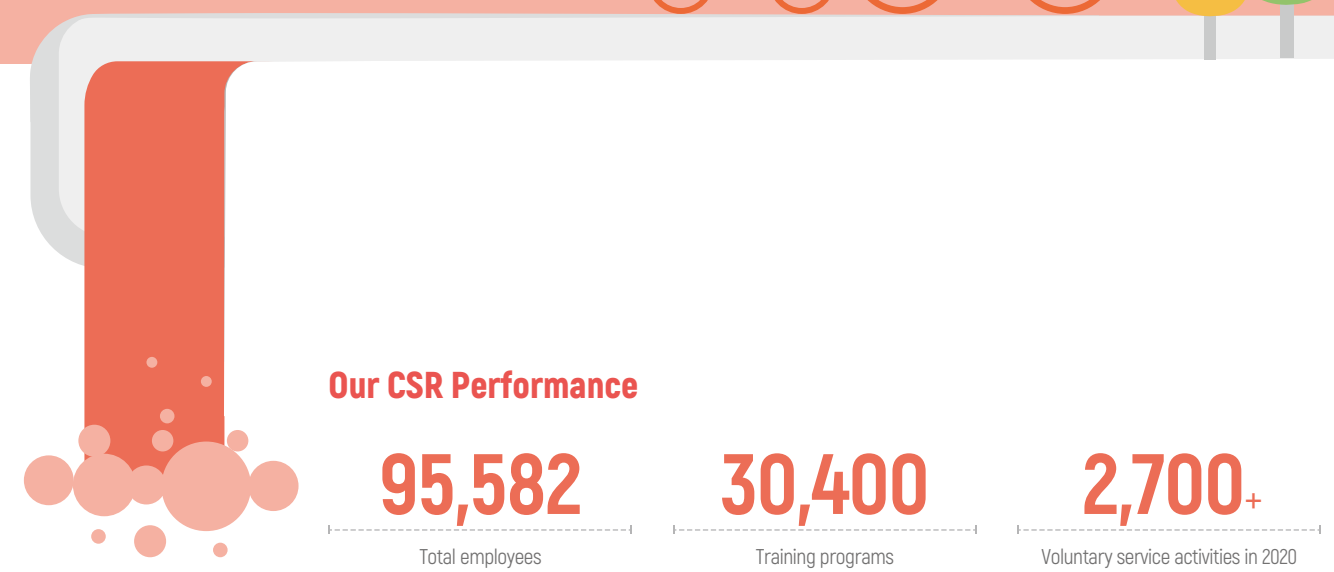
Contribution to SDGs



Our CSR Practice

- Caring for employee growth
- Implementing responsible procurement
- Building harmonious communities

Our CSR Performance



Caring for Employee Growth

Being people-oriented, CDT fully respects and guarantees the legitimate rights and interests of employees. We have established a sound compensation and benefits system, and care about employees' physical and mental health. We keep improving the staff training mechanism, and provide a broad platform where employees can show their talent and stand out. We make great efforts to address the most concerned and prominent contradictions and problems of employees and strive to meet their needs for a better life, so as to achieve common growth with employees.

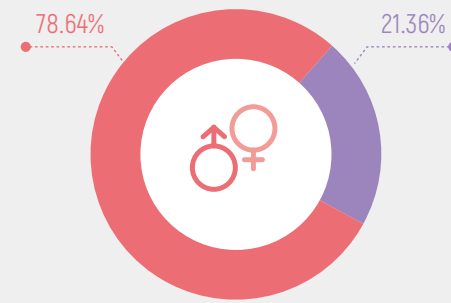
Protecting employees' rights and interests

In 2020
100%
Trade union membership

We strictly abide by the *Labor Law of the People's Republic of China*, the *Law of the People's Republic of China on Employment Contracts* and other laws and regulations to protect the basic rights and interests of employees. We take the initiative to build a harmonious and stable labor relationship by adhering to the principle of equal employment, improving compensation and benefits, and strengthening democratic management. In 2020, we had a total number of 95,582 employees, of which 75,162 were male and 20,420 were female who accounted for 21.36%. There were 6,394 ethnic minority employees, accounting for 6.69%.

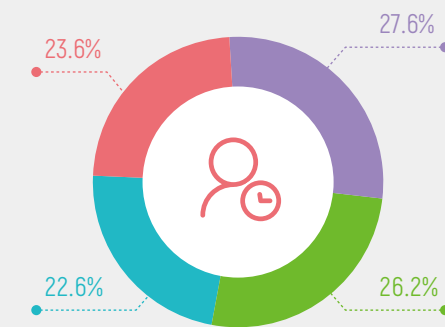
Employee structure

Gender



■ Proportion of male employees
■ Proportion of female employees

Age group



■ Over 50 years old ■ 40-50 years old
■ 30-40 years old ■ Under 30 years old

Equal employment

To protect employees' legitimate rights and interests in accordance with the law, we insist on equal employment on a fair and open basis, prohibit child labor and forced labor, and have formulated the *Regulations on Equal Consultation and Collective Contracts*. In 2020, CDT's labor contract coverage reached 100%.

Compensation and benefits

We ensure that men and women receive equal pay for equal work, continue to improve salary management regulations, and have formulated subsidies and incentives for COVID-19 response and developed a diverse distribution and incentive system that is both fair internally and competitive externally. A sound welfare system has been built to provide statutory "five social insurances and one housing fund" for employees in full and on time. In 2020, CDT's social insurance coverage was 100%.

Democratic management

We continue to promote the institutionalization, standardization and legalization of the democratic management of factory affairs disclosure, and have established an information disclosure mechanism, to effectively protect employees' rights to participate in management and supervision. We carry out employee satisfaction assessment and hold seminars for employee representatives regularly to listen to employees' voices. In 2020, CDT disclosed more than 30,000 pieces of information to the employees.

Occupational health and safety

We keep improving the health management system, and equip employees with labor protection equipment to improve the safety and protection level of employees. We organize health examination for employees on a regular basis and document employees' health status. To fully protect employees' physical and mental health, we have built mental health counseling rooms to provide psychological counseling services for employees.



▲ The staff mental health counseling room established by Datang Ningde Power Generation Co., Ltd.



▲ Medical experts were invited to provide free clinical treatment during the "caring for employees and their health" activity held by Tianjin Datang International Panshan Power Generation Co., Ltd., thus promoting the building of a happy CDT.

Promoting employee development

To provide equal growth opportunities for employees, we vigorously implement the training and development plan for all employees, and have improved the three-level training system of CDT. The *Guiding Opinions on Establishing Multiple Career Development Channels for Grassroots Employees* has been compiled and issued to create a multi-sequence and multi-channel career development path for employees. In 2020, 30,400 training programs were provided, attracting about 2.2 million participants. One employee won the honorary title of Technical Experts in the Power Industry, and 8 named Excellent Technical Workers in the Power Industry.

Case The 18th CDT Professional Knowledge and Skills Competition concluded successfully

CDT has extensively advanced technical innovation activities for employees. By organizing employees to realize technical transformation, technological invention and innovation in key work steps such as production and operation, cost reduction and efficiency improvement, we have obtained a number of technical achievements with high utility, promotion and application value. The 18th CDT Professional Knowledge and Skills Competition in 2020 provided a platform for skill talents and created a good atmosphere of respecting knowledge and talents. A total of 168 candidates from 18 subsidiaries and branches of CDT participated in the competition, and 17 of them won the honorary title of CDT Technical Experts and 44 of them won the honorary title of CDT Excellent Skill Workers.



▲ Finals of Centralized Control Operation Professionals Group of the 18th CDT Professional Knowledge and Skills Competition



▲ Datang Ningxia Branch held a cable end production skills competition.

Case Combining teaching and learning to promote development in the cloud era

During the COVID-19 epidemic, Datang Northeast Electric Power Test & Research Institute actively changed its thinking mode and provided training through virtual classroom. This mode combined technical support for power generation enterprises with labor competition and improved the lecturers' knowledge reserve. Meanwhile, believing that teaching and learning reinforce each other, Datang Northeast Electric Power Test & Research Institute deepened young lecturers' understanding of the production site through interaction and communication, so as to maximize the value of virtual classroom and truly achieve the goal of "one classroom creates many benefits". The virtual classroom has been launched on online for 29 sessions, attracting more than 8,000 participants inside and outside the system. It received more than 20,000 thumb-ups.



▲ The teaching staff of Datang Northeast Electric Power Test & Research Institute were preparing the teaching plan.



▲ Datang Heilongjiang Power Generation Co., Ltd. held a centralized control operation competition using simulators.

Caring for employee's life



Scan the QR code for more information about CDT's efforts to build a happy CDT

To facilitate the building of a happy CDT, we think for the best interest of employees and address their concerns strive to meet their needs. We have issued the *Action Outline on Building a Happy CDT* and developed six action plans, covering ideology and culture, safety and health, rights and interests protection, growth and accomplishment, care, and service & guarantee, to meet employees' material, spiritual and value needs, and to enhance their sense of security, fulfillment and happiness. In 2020, CDT extensively launched activities to support people in need, visited 50,000 employees and their family members, and helped employees solve more than 5,000 practical difficulties.

Datang Environment Industry Group Co., Ltd. organized an activity to present Spring Festival couplets to the grassroots employees.



Datang Lixian River Hydropower Co., Ltd. held the 11th Endeavour Cup Staff Sports Meeting.



Datang (Laos) Pak Beng Hydropower Co., Ltd. launched an activity to celebrate the Dragon Boat Festival and promote Friendship.

Datang Chongqing Branch organized a youth fellowship activity.

Implementing Responsible Procurement

CDT attaches great importance to procurement management and insists to standardize operation by sound management and support management with good operation. We have built a responsible supply chain in line with the principle of "unified plan, unified procedure, unified standard, unified platform and unified implementation". In 2020, we completed 2,072 tendering projects with a total value of RMB 40.4 billion. The centralized procurement rate, E-bidding rate, open procurement rate and online procurement rate were all 100%.

Key measures to standardize procurement management



Building Harmonious Communities

The "Datang Star Class" activity was rated as

Typical Case of Central SOEs' Brand Building by the SASAC

Being engaged in public welfare undertakings, CDT advocates employees to actively participate in volunteer activities, delivering warmth and love to society. In 2020, CDT donated RMB 487.17 million, of which RMB 42.66 million was donated to public relief and public welfare undertakings. Focusing on vulnerable groups and targeted poverty alleviation programs, we carried out more than 2,700 volunteer service activities throughout the year, attracting over 29,000 participants, including more than 230 enterprises.



▲ The "Datang Star Class" activity organized by Datang Luoyang Shouyangshan Power Generation Co., Ltd. in Shangwang primary school of Yichuan County



▲ Volunteers of Datang Hunan Branch organized the "Datang Star Class" activity in Wanyang Primary School of Guanghua Village, Tanxia Town.



▲ Datang Qinghai Energy Development Co., Ltd. launched the "Datang Star Class" activity in a boarding primary school of Qushian Town, Xinghai County.

Case Assuming the heavy responsibility to fight against the flood

In August 2020, an unusually continuous heavy rainfall hit Wen County in Longnan City, Gansu Province, which triggered mudslide, landslide, dammed lake and other disasters. Bikou Hydropower Plant of Datang Gansu Power Generation Co., Ltd. took joint measures of "coordination, off-peak flood storage, time-phased flood drainage" to ensure the safety of the dam. Datang Gansu Power Generation Co., Ltd. cooperated with the local government to reinforce riverbanks and evacuate people, set up emergency resettlement sites, provided three meals a day for free, and provided logistics services for the transport team of disaster relief materials. During the fight against the flood, the company sent a kayak to transfer over 140 stranded tourists and people, and evacuated 176 people of 46 households in the assisted village from risky sites.



▲ Bikou Hydropower Plant of Datang Gansu Power Generation Co., Ltd. provides three meals a day for free for the victims in the resettlement site.

Case CDT holds the CDT Open Day campaign for 14 consecutive years

The CDT Open Day is a way for CDT to enhance the public's understanding of its modern energy enterprises and one of the most influential and demonstrative activity brands of CDT as it bridges CDT to the public. Since the first Open Day campaign launched in 2007, CDT has kept interacting with the public for 14 consecutive years. By the end of 2020, 407 open day campaigns had been held. Nearly 80,000 people from all walks of life and nearly 100 media visited CDT, and more than 46 million people watched the live streaming.



▲ The 14th CDT Open Day themed "CDT Power for Poverty Alleviation"



▲ Datang Jiangsu Power Generation Co., Ltd. offered Datang Scholarship to outstanding students from poor families of Nanjing Institute of Technology.



▲ The "Help a little" community volunteer service program of Datang International Tangshan Thermal Power Plant won the bronze award in the 5th China Youth Volunteer Service Project Competition.

Performance

CSR Performance

Economy

Performance Indicator	Unit	2016	2017	2018	2019	2020
Installed Capacity	MW	130,900	137,780	138,910	144,210	158,600
Power Generation Volume	TWh	470	516.9	554.1	545.4	560.4
Total Assets	RMB billion	706.3	720.8	745.8	758.5	796.6
Revenue	RMB billion	158.583	170.987	189.543	189.733	192.706
Total Profits	RMB billion	10.713	6.468	9.598	12.063	13.869
Economic Contract Performance Rate	%	100	100	100	100	100

Environment

Performance Indicator	Unit	2016	2017	2018	2019	2020
Proportion of Clean Energy and Renewable Energy	%	29.27	33.90	35.57	36.26	38.16
Coal Consumption for Power Supply	g/kWh	306.94	305.28	301.85	298.31	296.30
NO _x Emission Rate	g/kWh	0.74	0.26	0.22	0.19	0.17
SO ₂ Emission Rate	g/kWh	0.36	0.21	0.16	0.14	0.12
Flyash Emission Rate	g/kWh	0.09	0.06	0.04	0.025	0.015

Society

Performance Indicator	Unit	2016	2017	2018	2019	2020
Major Personal Accident and Above	Time	1	0	0	0	0
Major Equipment Accident and Above	Time	0	0	0	0	0
General Personal Accident	Time	2	1	2	1	1
General Equipment Accident	Time	0	0	0	0	0
Number of on-the-job Employees	Person	96,777	98,756	96,095	95,748	95,582
Trade Union Membership Rate	%	100	100	100	100	100
Collective Contract Coverage	%	100	100	100	100	100
Number of Female Employees	Person	23,895	23,385	21,967	21,220	20,420
Number of Ethnic Minorities Employees	Person	5,730	5,847	5,807	6,095	6,394

Outlook 2021

The year 2021 marks the first year of the 14th Five-Year Plan, and a key year for CDT to start new undertakings. Following the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, we will pursue progress while ensuring stability. In addition to implementing the new energy security strategy, we will contribute to China's goals of carbon peak and carbon neutrality, focus on high-quality development and pursue deepened supply-side structural reform as our main task. We strive to improve corporate governance and structure restructuring, make breakthroughs in the coal chemical industry, and resolve major risks. Furthermore, we will work to bring our intrinsic safety to a higher level, make greater efforts in technological innovation, improve science-based management for higher quality and efficiency. In this way, we aim to accelerate the transformation, development, and upgrade of CDT's businesses, and become a green, low-carbon, intelligent, and efficiently coordinated world-class energy supplier based on a multi-energy complementary layout.

Value-High-quality Development

- Contribute to the goals of "carbon peak and carbon neutrality"; accelerate the adjustment of the energy structure and the proportion of new energy projects; develop new technologies and new businesses, such as those related to energy storage and hydrogen energy; promote green transformation and development
- Focus on market-based transactions and generate electricity that could yield profits; meet the goal of generating 580 TWh of electricity in 2021
- Deepen lean operation and management; make every effort to build a domestically and internationally leading gigawatt-level benchmark unit

Safety-Solid Foundation for Development

- Improve the safety prevention and control system, responsibility system, supervision system, and technical support guarantee system; continue to improve the dual-prevention mechanism
- Strengthen the building of intrinsically safe enterprises; maintain network security and public opinion, etc.
- Strengthen emergency response and emergency system building
- Fulfill all coronavirus control responsibilities in the workplace, at production sites, and in everyday life to resolutely block the channels for the spread of COVID-19

Eco-Friendliness-Green Homeland

- Maintain the red line of environmental protection; strengthen environmental protection management throughout the whole lifecycle of projects; eradicate environmental accidents
- Improve the environmental risk investigation system; investigate and rectify problems by branching out; prevent negative public opinion on environmental practices of the Corporation and avoid being criticized for environmental violations
- Strengthen the management of emissions of atmospheric pollutants, hazardous waste and unorganized waste discharges to ensure up-to-standard discharges of pollutants

Innovation-Development Momentum

- Establish the Science and Technology Development Committee for building an energy and power innovation ecosystem
- Participate in the demonstrative application of the first equipment; pilot hydrogen energy, energy storage, smart energy, and other technical equipment
- Build a talent work system integrating talent cultivation and pool, talent care, and talent benefits, and improve the S&T talent evaluation system to fully stimulate talents' potential for innovation and creation

Openness-Win-win Cooperation

- Implement national strategies for regional development; optimize the development pattern based on regional resource endowments and economic development characteristics
- Build up presence in countries and regions along the Belt and Road at a faster speed; participate in the construction of energy, power, environmental protection, and logistics infrastructure projects extensively
- Strengthen strategic partnerships with upstream and downstream enterprises at home and abroad; aggregate strengths of domestic and international partners within and outside the power industry

Sharing-A Better Life

- Care for employees at overseas companies or from remote areas as well as their family members with more efforts; ensure the physical and mental health of employees and the team stability
- Improve the corporate information disclosure system; deepen the building of happy CDT to enhance the happiness of employees
- Engage in public welfare activities and volunteer activities to help build a harmonious society

Expert Opinion

As a central SOE in the power sector, CDT has been dedicated to the green transformation of China's energy industry and sustainable economic and social development. I read the *Social Responsibility Report 2020 of China Datang Corporation Ltd.* before it is released, and was deeply impressed by CDT's persistent exploration and innovation in the field of sustainable development.

Standing at a new starting point, CDT vigorously responds to the call of the times. Taking into account the characteristics of the times and in response to major social concerns, the report sets two CSR features of "Contributing to the decisive victory against poverty" and "CDT's Contributions to the Fight Against COVID-19" to reflect CDT's leading role as a central SOE, and a strong sense of responsibility in fighting poverty and COVID-19 in response to the decisions and arrangements of the State Council. The report's content is rich and comprehensive. From the six dimensions of "Value · High-quality Development," "Safety · Solid Foundation for Development," "Eco-Friendliness · Green Homeland," "Innovation · Development Momentum," "Openness · Win-win Cooperation" and "Sharing · A Better Life," the report introduces CDT's new measures and new achievements in implementing the new development philosophy and promoting high-quality development.

CDT strives for new heights and aspires to become a world-class enterprise. Based on CDT's new development vision of becoming a green, low-carbon, intelligent, and efficiently coordinated world-class energy supplier based on a multi-energy complementary layout, the report presents CDT's solemn response in key areas of concern to the international community mainly by the chapters of "Eco-Friendliness- Green Homeland" and "Openness · Win-win Cooperation". The chapter of "Eco-Friendliness- Green Homeland" focuses on the goals of "carbon peak and carbon neutrality" concerned by the international community, and sets a separate column of "carbon neutrality" under the chapter. The chapter of "Openness · Win-win Cooperation" centers on the Belt and Road development and discloses the CSR efforts of CDT's overseas subsidiaries and branches for local development. Both reflect CDT's efforts in serving national strategies and its voice of responsibility issued by the central enterprises to play at the international level.

The report provides platform for effective CSR communication through innovative forms. For more logical and readable content, the report set up five parts: Overview, Management, Features, Practice, and Performance, helping readers to locate the content of their interest more efficiently. In addition, the report has 18 QR codes to provide comprehensive information to the key concerns of stakeholders, making it more interactive and extendable and reflecting CDT's willingness to cooperate with all parties of society.

As a whole, the *Social Responsibility Report 2020 of China Datang Corporation Ltd.* is well-structured, forward-looking, high-quality, and characteristic. I hope that CDT can make new breakthroughs and achievements in fulfilling social responsibility and promoting sustainable development, play a greater role in economic, social, and environmental aspects, and contribute to the high-quality development and the goals of "carbon peak and carbon neutrality."

Yin Gefei

Founder and Chief Expert of GoldenBee
Deputy Secretary-General of ISO 26000 Stakeholder Global Network (SGN)

Content Index

Chapters	Ten Principles of the United Nations Global Compact (UNGC)	GRI Standards	CASS-CSR4.0	
Message from the Leadership		102-14-15	P2,G3.1	
Overview	About CDT	102-1-4,102-6-8,201-1	P4,A3	
	Vision	102-16	P4.1,G1.1	
	Company Leaders	102-18,102-22-23		
Management	Stable Operation	Principle 10	102-11	M1,S1.2
	CSR Management		102-18,102-21,102-27,102-29,102-33,102-40,102-42-44,102-46-47,103-1	P3,G1.2,G2.1,G3.3,G4,G6
Features	Contributing to the Decisive Victory Against Poverty	Principle1/Principle2	203,413-1	P3,S4.1,S4.5,S4.8,S4.10-S4.14
	CDT's Contributions to the Fight Against COVID-19	Principle1/Principle2	203	P3,M2.1,S1.5,S1.6,S2.11,S4.3,S4.8,S4.10,S4.11
Practices	Value-High-quality Development	Principle7/Principle9	201-1,102-7-8,302	M2.12,M2.18,E1.7,E1.9
	Safety-Solid Foundation for Development	Principle1	203-2,416	S3.1-S3.3,S3.6,S3.7
	Eco-Friendliness-Green Homeland	Principle7/Principle8/Principle9	201-2,302-4-5,304-1-2,304-3,305,307	M2.12,E1-E3
	Innovation-Development Momentum	Principle7/Principle9	404	M2.1-2.7
	Openness-Win-win Cooperation	Principle1/Principle2	413	P4.2,M3.4,M3.6,S1.6,S4.2,S4.3
	Sharing-A Better Life	Principle1/Principle2/Principle3/Principle4/Principle5/Principle6	102-8,201-3,203-12,204,401-2,403-1,403-5,403-7,403-10,404,405-1,406,414-1	M3.10,M3.12,S2.1-S2.4,S2.8,S2.10-S2.14,S2.16-S2.19,S4.9-S4.11
Performance	CSR Performance		200,403-9	M3.2,A2
	Outlook 2021			A1
Expert Opinion				A4
Content Index		102-55		A5
Preparation Description		102-45,102-50-53		P1
Feedback				A6

Preparation Description

Reporting Scope

Headquarters of China Datang Corporation Ltd. as well as its subsidiaries.

Reporting Period

The Report covers the period between January 1, 2020 and December 31, 2020, with some dating back to previous years or referring to later years.

Reporting Cycle

This is an annual report and also our 15th CSR report.

Reference

For better readability, "China Datang Corporation Limited" is also referred to as "we", "the Corporation" and "CDT" in the Report.

Data sources

All data in the report are taken from official documents, reports and information platforms of the Corporation in compliance with regulations of the *Accounting Standard for Business Enterprises* and *Accounting System for Business Enterprises* issued by the government.

Compilation Conformance

- *Guidelines to the State-owned Enterprises on Better Fulfilling Corporate Social Responsibilities* released by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC)
- GB/T 36001-2015 *Guidance on Social Responsibility Reporting* issued by the General Administration of Quality Supervision, Inspection and Quarantine of China (AQSIQ) and Standardization Administration of China
- *Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0)* issued by Research Center for Corporate Social Responsibility of the Chinese Academy of Social Sciences
- *GRI Sustainability Reporting Standards* (GRI Standards) issued by Global Sustainability Standard Board (GSSB)
- *Guidance on Social Responsibility* (ISO 26000:2010) issued by International Organization for Standardization (ISO)
- *The UN 2030 Agenda* for Sustainable Development

Access to the Report

The report is available in printed and electronic formats. Welcome to visit the official website to read and download the electronic report at <http://www.china-cdt.com>.

Report preparation team

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Feedback

Thank you for reading the *CDT Social Responsibility Report 2020*. Please give your opinions and suggestions here for us to improve future reports.

1. What is your overall impression of the Report?

Good Poor Fair

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

Yes No Fair

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

Yes No Fair

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

Yes No Fair

5. Which part of the Report do you like 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 university Supplier Media Social organization Others

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environmental-friendly paper